Project/Site: Atlantic Coast Pipelin	ie	City/C	ounty: Northampton		Sampling Date: 5/21/2015		
Applicant/Owner: Dominion		State: NC Sampling Point: Wnr					
	nvestigator(s): GB, CR, TP, SA Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.):							
Subregion (LRR or MLRA): P Lat: 36.5420928 Long: -77.51827863 Datum: WGS 198							
Soil Map Unit Name: Caroline sar	dy loam, 2 to 6 perce	nt slopes		NWI classific	cation: PFO1A		
Are climatic / hydrologic conditions	on the site typical for	r this time of year? Y	es V No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil		-					
Are Vegetation, Soil							
SUMMARY OF FINDINGS							
					, ,		
Hydrophytic Vegetation Present? Hydric Soil Present?		No	Is the Sampled Area				
Wetland Hydrology Present?	Yes 🗸		within a Wetland?	Yes	No		
Remarks:	100	110					
10-15 year old pine plantation. Co		1 11 1201 10 00 1, 1100 10	wedana wiimooo at tiio	ariik iirie corridor			
HYDROLOGY							
Wetland Hydrology Indicators:					ators (minimum of two required)		
Primary Indicators (minimum of o	-			Surface Soil	· ·		
Surface Water (A1)	<u> </u>		getated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Odd	✓ Drainage Pa				
Saturation (A3)		Oxidized Rhizosphere Presence of Reduced	es on Living Roots (C3)	Moss Trim L			
Water Marks (B1) Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bu	Water Table (C2)		
Occurrent Deposits (B2)		Thin Muck Surface (C			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Ren			Stressed Plants (D1)		
Iron Deposits (B5)	_	()	,	✓ Geomorphic	` '		
Inundation Visible on Aerial	Imagery (B7)			Shallow Aquitard (D3)			
✓ Water-Stained Leaves (B9)				<u>✓</u> Microtopogr	aphic Relief (D4)		
Aquatic Fauna (B13)				✓ FAC-Neutra	l Test (D5)		
Field Observations:							
	′es No ′						
Water Table Present?	′es No ′	Depth (inches):					
	′es No ′	Depth (inches):	Wetland H	lydrology Prese	nt? Yes <u>'</u> No		
(includes capillary fringe) Describe Recorded Data (stream	gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:			
	gaage, memering n	on, aona protos, pro	Troub inspections, in are				
Remarks:							

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:30) 1 Acer rubrum	% Cover 20	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)
2. Liquidambar styraciflua	20	Yes	FAC	That Ale OBE, I AOW, OF AO.
3. Liriodendron tulipifera	8	No	FACU	Total Number of Dominant
4. Nyssa biflora	7	No	FACW	Species Across All Strata: O (B)
5. Quercus phellos	4	No	FAC	Percent of Dominant Species
6. Betula nigra	4	No	FACW	That Are OBL, FACW, or FAC: (A/B)
6. <u>Dotain ingra</u>				Prevalence Index worksheet:
1	63			Total % Cover of: Multiply by:
50% of total cover: 31.5		= Total Cove total cover:	er 12.6	OBL species 4 x 1 = 4
15	20% 01	total cover		FACW species 45 x 2 = 90
Sapling/Shrub Stratum (Plot size:) 1 Clethra alnifolia	15	Yes	FAC	FAC species 158 x 3 = 474
2. Carpinus caroliniana	15	Yes	FAC	FACU species 11 x 4 = 44
3. Acer rubrum	10	No	FAC	UPL species 0 x 5 = 0
	8			218 612
4. Liquidambar styraciflua		No No	FAC	Column Totals: (A) (B)
5. Quercus phellos	5	No	FAC	Prevalence Index = B/A = 2.8
6. Carya glabra	3	No	FACU	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.				
	56	= Total Cove	er	✓ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 28		total cover:_	11.2	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)
1. Arundinaria gigantea	20	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Athyrium asplenioides	20	Yes	FAC	
3. Woodwardia areolata	10	No	FACW	¹ Indicators of hydric soil and wetland hydrology must
4 Chasmanthium sessiliflorum	6	No	FAC	be present, unless disturbed or problematic.
5. Carex grayi	4	No	FACW	Definitions of Four Vegetation Strata:
6. Carex comosa	4	No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Galex comosa				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
90		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32	20% of	total cover:_	12.8	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30)				height.
1. Smilax rotundifolia	25	Yes	FAC	
2. Lonicera japonica	10	Yes	FAC	
3				
4				Hydrophytic
5				Vegetation
	35	= Total Cove	er	Present? Yes No
50% of total cover:17.5		total cover:_	7	
Remarks: (Include photo numbers here or on a separate s	heet.)			1
	,			

SOIL

Profile Desc	ription: (Describe t	o the dep	oth needed to docum	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	C Feature:	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
0-4	2.5Y 2.5/1	100					SL	
4-8	2.5Y 3/1	100					SL	
8-14	2.5Y4/1	95	2.5Y 5/8	5	С	PL/M	SL	
14-24	2.5Y 5/1	85	2.5Y 5/8	15	С	PL/M	SCL	
							-	
			-					
			·					· ·
1			De desert Matrix MC				21 1	Di Bara Lisian M Matrix
Hydric Soil		etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ :
-			Dork Surface	(07)				
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		co (SS) (N	II D A 1 <i>1</i> 7		2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)
	stic (A3)		Polyvalue Bel				140) \	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	, ,	•	47, 140)	1	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat	,	,		 '	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)		,	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar		,			Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre	ssions (F	8)			
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (LRR N,		
	A 147, 148)		MLRA 136				2	
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	') ui	nless disturbed or problematic.
	Layer (if observed):							
Type: no								
Depth (in	ches):						Hydric Soi	il Present? Yes No
Remarks:								



Photo 1
Wetland data point wnra002f_w1 facing northwest



Photo 2
Wetland data point wnra002f_w1 facing northeast

Project/Site: Atlantic Coast Pipeline	е	City/C	ounty: Northampton		Sampling Date: <u>5/21/2015</u>		
Applicant/Owner: Dominion		State: NC					
Investigator(s): GB, CR, TP, SA							
Landform (hillslope, terrace, etc.): broad low gradient draw Local relief (concave, convex, none): concave Slope (%):2							
Subregion (LRR or MLRA): P Lat: 36.541184 Long: -77.51408009 Datum: WGS 1984							
Soil Map Unit Name: Wehadkee lo	am, 0 to 2 percent slo	opes, frequently flood	led	NWI classific	ation: PFO1A		
Are climatic / hydrologic conditions	on the site typical for	r this time of year? Y	es <u> </u>	(If no, explain in R	emarks.)		
Are Vegetation, Soil							
Are Vegetation, Soil							
SUMMARY OF FINDINGS	-						
					, , ,		
Hydrophytic Vegetation Present? Hydric Soil Present?		No	Is the Sampled Area				
Wetland Hydrology Present?	Yes 🗸		within a Wetland?	Yes	No		
Remarks:	103	110					
10-15 year old pine plantation. Co	minues westward out	t of tract 16-001, ties	to wettand willhood at tr	ie trunk line cornac	. וכ		
HYDROLOGY							
Wetland Hydrology Indicators:				<u> </u>	tors (minimum of two required)		
Primary Indicators (minimum of o	ne is required; check	all that apply)		Surface Soil	· ·		
Surface Water (A1)	7		getated Concave Surface (B8)				
=	High Water Table (A2) Hydrogen Sulfide Odor (C1) Drain Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss						
Saturation (A3)	Moss Trim Li						
Water Marks (B1)		Presence of Reduced			Water Table (C2)		
Sediment Deposits (B2) Drift Deposits (B3)		Recent Iron Reduction Thin Muck Surface (C		Crayfish Buri	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Ren			tressed Plants (D1)		
Iron Deposits (B5)		oo. (=xp.a r.o	iao,	✓ Geomorphic			
Inundation Visible on Aerial II	magery (B7)			Shallow Aqui			
Water-Stained Leaves (B9)				✓ Microtopogra	phic Relief (D4)		
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present? You	es No	Depth (inches):					
Water Table Present? You	es No	Depth (inches):					
	es No	Depth (inches):	Wetland H	lydrology Presen	t? Yes <u>/</u> No		
(includes capillary fringe) Describe Recorded Data (stream	gauge monitoring w	ell aerial nhotos pre	vious inspections) if ava	ilahle.			
Describe Resorded Bala (Stream	gaage, monitoring w	cii, acriai priotos, pro	viodo iriopeotiorio), ii dve	mable.			
Remarks:							

00	Absolute	Dominant In	dicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	<u>% Cover</u> 15	Species? Yes	Status FAC	Number of Dominant Species
1. Quercus phellos	15	Yes	FAC	That Are OBL, FACW, or FAC:(A)
2. Liquidambar styraciflua	10	Yes	FAC	Total Number of Dominant
3. Acer rubrum	10		FACW	Species Across All Strata: 12 (B)
4. Betula nigra	10	Yes Yes	FACW	Percent of Dominant Species
5. Nyssa sylvatica			FACW	That Are OBL, FACW, or FAC: 100 (A/B)
6. Nyssa biflora	10	Yes	FACW	Prevalence Index worksheet:
7				
		= Total Cover		Total % Cover of: Multiply by:
50% of total cover:35	20% of	total cover:	14	ODL species
Sapling/Shrub Stratum (Plot size: 15				7ACW species
1. Viburnum nudum	10	Yes	OBL	FAC species X 3 = 12
2. Clethra alnifolia	10	Yes	FAC	FACU species X 4 =
3. Carpinus caroliniana	8	Yes	FAC	UPL species X 5 =
4. Quercus phellos	4	No	FAC	Column Totals:(A)(B)
5. Ilex opaca	3	No	FACU	Prevalence Index = B/A = 2.51
6. Lindera benzoin	3	No	FAC	Trevalence mack = B/T =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
	38	= Total Cover		✓ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 19		total cover:	7.6	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)		·		data in Remarks or on a separate sheet)
1 Woodwardia areolata	30	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Carex grayi	6	No	FACW	
3. Microstegium vimineum	5	No	FAC	¹ Indicators of hydric soil and wetland hydrology must
A Saururus cernuus	4	No	OBL	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
1				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 Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 22.5	20% of	total cover:	9	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)	40	V	EAC	height.
1. Smilax rotundifolia		Yes	FAC	
2. Toxicodendron radicans	5	Yes	FAC	
3				
4				Hydrophytic
5				Vegetation
	15	= Total Cover		Present? Yes No
50% of total cover: 7.5	20% of	total cover:	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix			Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	2.5Y 3/1	100					L	
6-11	2.5Y4/1	97	2.5Y 5/8	3	С	PL/M	SL	
11-22	2.5Y 5/1	94	2.5Y 5/8	6	С	PL/M	SL	
	-							
1- 00				 .			2, , ,	
		pletion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil			5	(07)				ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	. ,	- (CO) (I	N D A 447		2 cm Muck (A10) (MLRA 147)
	pipedon (A2) istic (A3)		Polyvalue Bel Thin Dark Su				148) (Coast Prairie Redox (A16) (MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat		۷)		'	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		3)		V	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	ce (A11)	Depleted Dar	•	,			Other (Explain in Remarks)
	ark Surface (A12)	, ,	Redox Depre				<u> </u>	,
Sandy N	Mucky Mineral (S1)	LRR N,	Iron-Mangane	ese Masse	s (F12) (LRR N,		
MLR	A 147, 148)		MLRA 136	5)				
	Gleyed Matrix (S4)		Umbric Surfac					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F2	(1) (MLR	A 127, 147	<u>)</u> un	nless disturbed or problematic.
	Layer (if observed)):						
Type: no	WIIC .							
Depth (in	ches):		<u></u>				Hydric Soil	I Present? Yes No
Remarks:							•	



Photo 1
Wetland data point wnra002f_w2 facing northeast



Photo 2
Wetland data point wnra002f_w2 facing northwest

Project/Site: Atlantic Coast Pipeline	City/County: Northampton	Sampling Date: 5/21/2015						
Applicant/Owner: Dominion		State: NC Sampling Point: wnra002f_w3						
Investigator(s): GB, CR, TP, SA	Section, Township, Range: No	·						
Landform (hillslope, terrace, etc.): broad low gradien								
Subregion (LRR or MLRA): P L	at. 36.54052181	5070866 Detum, WGS 1984						
Soil Map Unit Name: Bonneau loamy sand, 6 to 12	nercent slones	NWI classification: PFO1A						
Are climatic / hydrologic conditions on the site typical	·							
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Norma	l 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 location	ons, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area							
Hydric Soil Present? Yes	, N. Is the Sampled Area							
	No within a Wetland?	Yes No						
Remarks:								
Wetland data point for a saturated to seasonally flooded PFO wetland located in a broad, low gradient draw along stream snrh006; surrounded by a 10-15 year old pine plantation. Ties to wetland wnrh006 at trunkline corridor, ties to wetland wnrh014 at access road 037 corridor.								
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; ch	eck all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)							
	High Water Table (A2) Hydrogen Sulfide Odor (C1)							
Saturation (A3)	Moss Trim Lines (B16)							
	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)						
	Recent Iron Reduction in Tilled Soils (C6)	✓ Crayfish Burrows (C8)						
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)						
	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)						
Iron Deposits (B5)		Geomorphic Position (D2)						
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)						
✓ Water-Stained Leaves (B9)		Microtopographic Relief (D4)						
Aquatic Fauna (B13)		FAC-Neutral Test (D5)						
Field Observations:								
	Depth (inches):							
	Depth (inches):							
Saturation Present? Yes No	Depth (inches): Wetland I	Hydrology Present? Yes _ ✓ No						
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if ava	ailable:						
Remarks:								

•	Absolute	Dominant In	dicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover 20		Status FAC	Number of Dominant Species
1. Liquidambar styraciflua	20	Yes		That Are OBL, FACW, or FAC:9 (A)
2. Acer rubrum		Yes	FAC	Total Number of Dominant
3. Nyssa sylvatica	10	Yes	FAC	Species Across All Strata: 10 (B)
4. Liriodendron tulipifera	10	Yes	FACU	Persont of Dominant Chasins
5. Quercus michauxii	7		FACW	Percent of Dominant Species That Are OBL, FACW, or FAC: 90 (A/B)
6. Fraxinus pennsylvanica	5	No	FACW	,
7. Pinus taeda	5	No	FAC	Prevalence Index worksheet:
	82	= Total Cover		Total % Cover of: Multiply by:
50% of total cover: 41		total cover:	16.4	OBL species 7 x 1 = 7
Sapling/Shrub Stratum (Plot size: 15)				FACW species94
1 Carpinus caroliniana	10	Yes	FAC	FAC species108 x 3 =324
2. Nyssa sylvatica	8	Yes	FAC	FACU species20 x 4 =80
3. Acer rubrum	7	Yes	FAC	UPL species 0 x 5 = 0
4. Liquidambar styraciflua	6	No	FAC	Column Totals: 229 (A) 599 (B)
5. Ilex opaca	5	No	FACU	(-)
6. Clethra alnifolia		No No	FAC	Prevalence Index = B/A =2.61
	5		FACW	Hydrophytic Vegetation Indicators:
7. Quercus michauxii	4	No No	FACW	1 - Rapid Test for Hydrophytic Vegetation
8. Fraxinus pennsylvanica	4	No	FACW	2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
0.5		= Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 25	20% of	total cover:	10	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Woodwardia areolata	35	Yes	FACW	Problematic Hydrophytic Vegetation (Explain)
2. Arundinaria gigantea	15	Yes	FACW	10.00
3. Carex grayi	10	No	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Osmundastrum cinnamomeum	8	No	FACW	Definitions of Four Vegetation Strata:
5. Osmunda spectabilis	7	No	OBL	Definitions of Four Vegetation Strata.
6. Arisaema triphyllum	5	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7. Microstegium vimineum	3	No	FAC	more in diameter at breast height (DBH), regardless of height.
				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				my tan.
11	83			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 41.5		= Total Cover		of size, and woody plants less than 3.28 ft tall.
00	20% of	total cover:	10.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1 Smilax rotundifolia	12	Voo	FAC	height.
1.	2	Yes		
2. Toxicodendron radicans		No	FAC	
3				
4				Hydrophytic
5				Vegetation
	14	= Total Cover		Present? Yes No
50% of total cover: 7	20% of	total cover:	2.8	
Remarks: (Include photo numbers here or on a separate sl	heet.)			

(inches)	Matrix		Redo	x Features	1 . 2		
0-7	Color (moist) 2.5Y 3/1	<u>%</u> 100	Color (moist)	<u>%</u> <u>Ty</u>	pe ¹ Loc ²	<u>Texture</u> SL	Remarks
0-7	2.51 3/1					SL	
7-20	2.5Y4/1	90	2.5Y 5/6	10	C PL/M	SCL	
	-						
						21 11 5	
	oncentration, D=Dep Indicators:	oletion, RIV	=Reduced Matrix, MS	s=Masked Sar	id Grains.	Location: P	L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
			David Overface	(07)			
_ Histosol			Dark Surface		10) (MI DA 447		2 cm Muck (A10) (MLRA 147)
	oipedon (A2)			,	88) (MLRA 147, .RA 147, 148)	148) (Coast Prairie Redox (A16)
Black His	en Sulfide (A4)		Loamy Gleye	, , ,	.KA 147, 140)	_	(MLRA 147, 148) Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark			\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)		k Surface (F7)	1		Other (Explain in Remarks)
	ark Surface (A12)	(/ (/ (/ (/ (/ (/ (/ (/ (/ (/	Redox Depre	, ,	•		(2/1p.a (2/1p.a)
	lucky Mineral (S1) (LRR N.		ese Masses (F	12) (LRR N.		
	A 147, 148)	,	MLRA 13		, (
	Gleyed Matrix (S4)			, ce (F13) (MLF	RA 136, 122)	³ Inc	dicators of hydrophytic vegetation and
	Redox (S5)				F19) (MLRA 1 4		etland hydrology must be present,
	Matrix (S6)				MLRA 127, 14		lless disturbed or problematic.
estrictive I	Layer (if observed)	:					•
Type: noi	ne						
Depth (inc						Hydric Soil	I Present? Yes ✓ No
emarks:							
omano.							



Photo 1 Wetland data point wnra002f_w3 facing northeast



Photo 2
Wetland data point wnra002f_w3 facing northwest

Project/Site: Atlantic Coast Pipeline		City/County: Northampton Sampling Date: 5/2						
Applicant/Owner: Dominion				State: NC	Sampling Point: wnra002f_w4			
Investigator(s): GB, CR Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.): broad dr								
Subregion (LRR or MLRA): P	Lat:	Long: -77.	50339749	Datum: WGS 1984				
Soil Map Unit Name: Craven fine sandy loa	NWI classif	ication: PFO1A						
Are climatic / hydrologic conditions on the s	te typical for	r this time of year? Y	es No	(If no, explain in	Remarks.)			
Are Vegetation, Soil, or Hyd	rology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No			
Are Vegetation, Soil, or Hyd								
SUMMARY OF FINDINGS – Attac								
Hydrophytic Vegetation Present?	Vac V	No						
Hydric Soil Present?		No	Is the Sampled Area	V	M -			
		No	within a Wetland?	Yes	No			
Remarks:								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indic	eators (minimum of two required)			
Primary Indicators (minimum of one is req	uired; check	all that apply)		Surface Soi	l Cracks (B6)			
Surface Water (A1)		True Aquatic Plants (B14)	Sparsely Ve	egetated Concave Surface (B8)			
High Water Table (A2)	!	Hydrogen Sulfide Ode	✓ Drainage P.	atterns (B10)				
Saturation (A3)	Saturation (A3) Oxidized Rhizospheres on Living Roots (C3)							
Water Marks (B1)		Presence of Reduced		Dry-Seasor	Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bu				
Drift Deposits (B3)		Thin Muck Surface (C			/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	(Other (Explain in Ren	narks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	D7\			Geomorphic Position (D2)				
 Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)	В7)			Shallow Aquitard (D3) Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral Test (D5)				
Field Observations:				<u></u> 1710 110 111	1 1001 (20)			
	No 🗸	Depth (inches):						
		Depth (inches):						
		Depth (inches):		Wetland Hydrology Present? Yes _ ✓ No				
(includes capillary fringe)								
Describe Recorded Data (stream gauge, r	nonitoring w	ell, aerial photos, pre	vious inspections), if ava	ailable:				
Remarks:								

Sampling Point Willauuzi_W	Sampling	Point: wnra002f_w4	۲
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	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Fraxinus pennsylvanica	20	Yes	FACW	That Are OBL, FACW, or FAC:9 (A)
2. Liquidambar styraciflua	15	Yes	FAC	Total Number of Dominant
3. Quercus laurifolia	15	Yes	FACW	Species Across All Strata: 10 (B)
4. Liriodendron tulipifera	10	No	FACU	
5. Acer rubrum	10	No	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: 90 (A/B)
6. Ulmus rubra	4	No	FAC	That Ale OBL, FACW, OF FAC.
7	-			Prevalence Index worksheet:
r	74	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 37		total cover:_	14.8	OBL species5 x 1 =5
15	20 /6 01	total cover		FACW species 82 x 2 = 164
Sapling/Shrub Stratum (Plot size:) 1 Carpinus caroliniana	15	Yes	FAC	FAC species 80 x 3 = 240
-	10	Yes	FACU	FACU species x 4 = 80
2. Ilex opaca	5			0
3. Liquidambar styraciflua		No No	FAC	187 /80
4. Acer rubrum	5	No	FAC	Column Totals:(A)(B)
5. Ulmus rubra	5	No	FAC	Prevalence Index = B/A = 2.61
6. Quercus michauxii	3	No	FACW	Trevalence mack = B/TC =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.	-			2 - Dominance Test is >50%
ə	43	Total Cava		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 21.5		= Total Cove total cover:_	8.6	4 - Morphological Adaptations ¹ (Provide supporting
E	20 /6 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:) Arisaema triphyllum	15	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	12	Yes	FACW	
2. Carex grayi				¹ Indicators of hydric soil and wetland hydrology must
3. Poa sylvestris	12	Yes	FACW	be present, unless disturbed or problematic.
4. Arundinaria gigantea	5	No	FACW	Definitions of Four Vegetation Strata:
5. Iris virginica	5	No	OBL	_
6. Microstegium vimineum	4	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Botrychium lunaria	2	No	FAC	height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.	-			,
	55	Total Cava		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 27.5		= Total Cove total cover:_	11	of size, and woody plants less than 5.20 it tall.
20	20 /0 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1 Toxicodendron radicans	9	Yes	FAC	height.
2 Smilax rotundifolia	6	Yes	FAC	
=: <u></u>				
3				
4				Hydrophytic
5				Vegetation
	15	= Total Cove	r	Present? Yes No
50% of total cover: 7.5	20% of	total cover:_	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			

SOIL

Depth	<u>Matrix</u>		Redox Features		
inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ²		Remarks
0-14	2.5Y 3/1	100 		SL	_
14-22	2.5Y 4/1	100		SL	
22-30	2.5Y 5/1	100		SL	
	-			_	
				_	-
	·				
				_	
		pletion, RM=Re	educed Matrix, MS=Masked Sand Grains.	² Location:	PL=Pore Lining, M=Matrix.
lydric Soil	Indicators:			Indi	cators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA 14	17, 148)	Coast Prairie Redox (A16)
Black F	listic (A3)		Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	ed Below Dark Surfa	ce (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)		
	Mucky Mineral (S1)	(LRR N,	Iron-Manganese Masses (F12) (LRR N,		
	A 147, 148)		MLRA 136)	3.	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)		ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA		vetland hydrology must be present,
	d Matrix (S6)	N-	Red Parent Material (F21) (MLRA 127, 1	(47) u	inless disturbed or problematic.
	Layer (if observed):			
Type: no			_		
Depth (ir	nches):		_	Hydric So	oil Present? Yes No
Remarks:					



Photo 1 Wetland data point wnra002f_w4 facing northeast



Photo 2
Wetland data point wnra002f_w4 facing northwest

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Northampton		Sampling Date: 5/21/2015			
Applicant/Owner: Dominion		,	,	State: NC	Sampling Point: wnra002_u1			
Investigator(s): GB, CR, TP, S								
Landform (hillslope, terrace, e								
					Datum: WGS 1984			
Subregion (LRR of MLRA):	sandy loam 2 to 6	nercent slones	Long:		. None			
Soil Map Unit Name: Caroline								
Are climatic / hydrologic condi								
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal of	Circumstances" p	resent? Yes 🔽 No			
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, ex	xplain any answer	s in Remarks.)			
SUMMARY OF FINDIN	GS – Attach si	te map showing sam	pling point location	ns, transects,	important features, etc.			
Hudrophytic Vagotation Broa	vont? Von	✓ No.						
Hydrophytic Vegetation Pres Hydric Soil Present?	Yes	No	Is the Sampled Area		🗸			
Wetland Hydrology Present?	Yes	No 🗸	within a Wetland?	Yes	No			
Remarks:								
Upland data point taken above toe of slope for a saturated to seasonally flooded PFO wetland located in a broad draw.								
HYDROLOGY								
Wetland Hydrology Indicat	ors:			Secondary Indicat	ors (minimum of two required)			
Primary Indicators (minimum	of one is required;		<u> </u>	Surface Soil Cracks (B6)				
Surface Water (A1)		True Aquatic Plants (Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Patterns (B10)				
Saturation (A3)		Oxidized Rhizosphere						
Water Marks (B1)		Presence of Reduced		Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burr				
Drift Deposits (B3) Algal Mat or Crust (B4)		Thin Muck Surface (C Other (Explain in Ren			sible on Aerial Imagery (C9) ressed Plants (D1)			
Iron Deposits (B5)		Other (Explain in Nei	ilains)	Geomorphic I				
Inundation Visible on Ae	erial Imagery (B7)		-	Shallow Aquit				
Water-Stained Leaves (• • • •		•	Microtopographic Relief (D4)				
Aquatic Fauna (B13)	,			FAC-Neutral	, ,			
Field Observations:								
Surface Water Present?	Yes No _	Depth (inches):						
Water Table Present?		✓ Depth (inches):						
Saturation Present?		Depth (inches):		ydrology Presen	? Yes No✓			
(includes capillary fringe)		miner well posited abotton and	in a single state of the said	labla:				
Describe Recorded Data (str	eam gauge, monito	ring well, aerial photos, pre	vious inspections), if avail	lable:				
Remarks:								
no hydrology indicators prese	ent							

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	
1 Pinus taeda	65	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
2. Acer rubrum	5	No	FAC	That Are OBE, I ACW, OF I AC.
3. Liquidambar styraciflua		No	FAC	Total Number of Dominant
		No	FACU	Species Across All Strata: (B)
4. Liriodendron tulipifera		INO	FACU	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 75 (A/B)
6				(*-/
7.				Prevalence Index worksheet:
	80	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 40		total cover:	16	OBL species0 x 1 =0
15	20 /0 01	total cover		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 13	4.5	Vaa	EAC	444 400
1. Liquidambar styraciflua	15	Yes	FAC	FACULTURE $\frac{141}{26}$ $\times 3 = \frac{423}{104}$
2. Liriodendron tulipifera	15	Yes	FACU	FACU species X 4 =
3. Acer rubrum	10	No	FAC	UPL species x 5 =
4. Pinus taeda	7	No	FAC	Column Totals:167
5. Quercus alba	6	No	FACU	0.45
6. Clethra alnifolia	4	No	FAC	Prevalence Index = B/A =3.15
·				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				
	57	= Total Cove	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: <u>28.5</u>		total cover:	11.4	4 - Morphological Adaptations ¹ (Provide supporting
F	2070 0.			data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation ¹ (Explain)
1				
2				The disease of hydric as it and wattered by due to an accept
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				One Provide Manda de la constantina del constantina de la constantina del constantina de la constantin
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
10				,
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 0	20% of	total cover:_	0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Lonicera japonica	20	Yes	FAC	9
2. Smilax rotundifolia	5	No	FAC	
3. Toxicodendron radicans		No	FAC	
3. Textooderiateri radiodilo				
4				Hydrophytic
5				Vegetation
	30	= Total Cove	er	Present? Yes No
50% of total cover: 15		total cover:_		
Remarks: (Include photo numbers here or on a separate sl	neet)			
Tremarks. (morade priote numbers here of on a separate si	1001.)			

Profile Des	cription: (Describe t	o the depth	needed to document the inc	licator or confirm	the abser	nce of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-4	Color (moist) 2.5Y 3/2	<u>%</u> 100	Color (moist) %	Type ¹ Loc ²	Texture SL	e Remarks
4-11	2.5Y5/3	100			SL	
11-24	2.5Y 6/4	100			SL	
1					2	
'Type: C=C Hydric Soil		etion, RM=R	educed Matrix, MS=Masked S	and Grains.		: PL=Pore Lining, M=Matrix. dicators for Problematic Hydric Soils ³ :
Histoso			Dark Surface (S7)			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface	(S8) (MI DA 147		Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (I		140)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)	.)	_	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark Surface (F		_	Other (Explain in Remarks)
	ark Surface (A12)	(, , , , ,	Redox Depressions (F8)	.,	_	_ Caron (_npress minor)
	Mucky Mineral (S1) (L	RR N,	Iron-Manganese Masses	(F12) (LRR N,		
	A 147, 148)	,	MLRA 136)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	Gleyed Matrix (S4)		Umbric Surface (F13) (M	LRA 136, 122)	;	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soil			wetland hydrology must be present,
-	d Matrix (S6)		Red Parent Material (F21			unless disturbed or problematic.
	Layer (if observed):		·			-
Type: no	one		<u> </u>			
Depth (in	iches):		_		Hydric \$	Soil Present? Yes No
Remarks:						



Photo 1 Upland data point wnra002_u1 facing southwest



Photo 2
Upland data point wnra002_u1 facing south

Project/Site: Atlantic Coast Pipeline	City/County: Northan	npton	_ Sampling Date: 5/21/2015		
Applicant/Owner: Dominion			Sampling Point: wnra002_u2		
	Section, Township, F				
	e, convex, none): none Slope (%):				
Subregion (LRR or MLRA): P	at: 36.54108584	ong: -77.51410485	Datum: WGS 1984		
Soil Map Unit Name: Wehadkee loam, 0 to 2 percer	nt slopes, frequently flooded	NWI classif	ication: None		
Are climatic / hydrologic conditions on the site typica					
Are Vegetation, Soil, or Hydrology _	•				
Are Vegetation, Soil, or Hydrology _					
SUMMARY OF FINDINGS – Attach site					
			<u> </u>		
	No Is the Sampl				
	No within a Wet	and? Yes	No		
Wetland Hydrology Present? Yes Remarks:	No				
HYDROLOGY					
Wetland Hydrology Indicators:			cators (minimum of two required)		
Primary Indicators (minimum of one is required; ch		Surface Soi			
	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)			
	Hydrogen Sulfide Odor (C1)		atterns (B10)		
	Oxidized Rhizospheres on Living RoPresence of Reduced Iron (C4)				
Water Marks (B1) Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils	· · · · · · · · · · · · · · · · · · ·	Water Table (C2)		
Drift Deposits (B3)	Thin Muck Surface (C7)	oils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
	Other (Explain in Remarks)		Stressed Plants (D1)		
Iron Deposits (B5)			c Position (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aq			
Water-Stained Leaves (B9)			raphic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutra	al Test (D5)		
Field Observations:					
Surface Water Present? Yes No	Depth (inches):				
Water Table Present? Yes No	Depth (inches):				
	Depth (inches):	Wetland Hydrology Prese	ent? Yes No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorin	g well, aerial photos, previous inspectic	ns), if available:			
Remarks:					
no hydrology indicators present					

Samp	lina	Point:	wnra002_	_u2
Jailly	III IU	r on it.		

30	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30)	<u>% Cover</u> 35	Species? Yes	Status FAC	Number of Dominant Species
1. Pinus taeda	15	Yes	FAC	That Are OBL, FACW, or FAC:7 (A)
2. Liquidambar styraciflua	15			Total Number of Dominant
3. Fagus grandifolia		Yes	FACU	Species Across All Strata: 12 (B)
4. Quercus nigra	10	No	FAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 58.3333333 (A/B)
6				
7				Prevalence Index worksheet:
	75	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 37.5	20% of	total cover:	15	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1. Liquidambar styraciflua	15	Yes	FAC	FAC species106
2. Ilex opaca	10	Yes	FACU	FACU species35
3. Oxydendrum arboreum	10	Yes	UPL	UPL species10 x 5 =50
4. Pinus taeda	8	No	FAC	Column Totals: 151 (A) 508 (B)
5. Carpinus caroliniana	7	No	FAC	(-)
6 Fagus grandifolia		No	FACU	Prevalence Index = B/A = 3.36
<u> </u>			TACO	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	55	= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 27.5	20% of	total cover:	11	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Chasmanthium sessiliflorum	3	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Mitchella repens	3	Yes	FACU	
3. Microstegium vimineum	2	Yes	FAC	¹Indicators of hydric soil and wetland hydrology must
4. Cypripedium acaule	2	Yes	FACU	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 Cov	_	of size, and woody plants less than 3.28 ft tall.
50% of total cover:5	20% of	total cover:	2	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Smilax rotundifolia	5	Yes	FAC	
2. Lonicera japonica	4	Yes	FAC	
3. Toxicodendron radicans	2	No	FAC	
4.				Heaters best a
5.				Hydrophytic Vegetation
	11	= Total Cov		Present? Yes No
50% of total cover: 5.5		total cover:	2.2	
Remarks: (Include photo numbers here or on a separate s				
Remarks. (include prioto numbers here or on a separate s	ilicet.)			

Profile Des	cription: (Describe	to the dept	h needed to docun	nent the i	ndicator	or confirm	n the abse	ence of indicators.)			
Depth	Matrix		Redo	x Features	3						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Textur	e Remarks			
0-6	2.5Y 3/2	100					SL				
6-15	2.5Y 4/3	100					SL				
15-24	2.5Y 4/4	100					SL				
	• -				-			 -			
	· -										
	-				-						
					-			 -			
	<u> </u>										
1Type: C-C	Concentration, D=Dep	oletion RM-	Reduced Matrix MS		Sand Gr		² Location	n: PL=Pore Lining, M=Matrix.			
	I Indicators:	Dietion, IXIVI	rteduced Matrix, Mc	-iviaskeu	Sand On	airio.		ndicators for Problematic Hydric Soils ³ :			
Histoso			Dark Surface	(\$7)				2 cm Muck (A10) (MLRA 147)			
	Epipedon (A2)		Polyvalue Be		ce (S8) (N	II RA 147.	148)	Coast Prairie Redox (A16)			
	Histic (A3)		Thin Dark Su				, _	(MLRA 147, 148)			
	en Sulfide (A4)		Loamy Gleye	. ,	•	, ,		Piedmont Floodplain Soils (F19)			
	ed Layers (A5)		Depleted Mat		,		_	(MLRA 136, 147)			
	luck (A10) (LRR N)		Redox Dark S		6)			Very Shallow Dark Surface (TF12)			
Deplete	ed Below Dark Surfac	ce (A11)	Depleted Dar	k Surface	(F7)		_	_ Other (Explain in Remarks)			
	Oark Surface (A12)		Redox Depre								
	Mucky Mineral (S1) (LRR N,	Iron-Mangan		es (F12) (LRR N,					
	A 147, 148)		MLRA 136)								
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,								
	Redox (S5)							wetland hydrology must be present,			
	d Matrix (S6) Layer (if observed)		Red Parent N	riateriai (F.	21) (WLR	A 127, 147	<u>()</u>	unless disturbed or problematic.			
Type:	one	•									
								· . · . · . · . · . · . · . · . ·			
	nches):						Hydric	Soil Present? Yes No			
Remarks:											



Photo 1 Upland point wnra002_u2 facing south



Photo 2
Upland point wnra002_u2 facing southwest

Project/Site: Atlantic Coast Pip	peline	City/C	ounty: Northampton		Sampling Date: 5/21/2015
Applicant/Owner: Dominion			State: NC	Sampling Point: wnra002_u3	
Investigator(s): GB, CR, TP, S	SA	Section	on. Township. Range: No		
Landform (hillslope, terrace, et					
					Datum: WGS 1984
Subregion (LRR or MLRA): -	L	nercent slones	Long:		. None
Soil Map Unit Name: Bonneau					
Are climatic / hydrologic condit		-			
Are Vegetation, Soil	, or Hydrology	significantly disturb	bed? Are "Normal	Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answ	ers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point location	ns, transect	s, important features, etc.
Hydrophytia Vagatation Drag	ont? Voc W	, No			
Hydrophytic Vegetation Present?		No No	Is the Sampled Area		•
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No
Remarks:					
Upland data point taken above year old pine plantation	e toe of slope for a saf	turated to seasonally floc	oded PFO wetland locate	d in a broad low	elevation draw within a 10-15
HYDROLOGY					
Wetland Hydrology Indicate	ors:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum	of one is required; che	eck all that apply)		Surface Soi	Cracks (B6)
Surface Water (A1)	_	True Aquatic Plants (I	B14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		_ Hydrogen Sulfide Odd		Drainage Pa	atterns (B10)
Saturation (A3)		Oxidized Rhizosphere		Moss Trim I	
Water Marks (B1)		_ Presence of Reduced		-	Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction		Crayfish Bu	
Drift Deposits (B3)	_	Thin Muck Surface (C			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Ren	narks)		Stressed Plants (D1)
Iron Deposits (B5)	rial Imagary (P7)				Position (D2)
Inundation Visible on Ae Water-Stained Leaves (E				Shallow Aqu	aphic Relief (D4)
Aquatic Fauna (B13)	33)			FAC-Neutra	' '
Field Observations:					
Surface Water Present?	Yes No V	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		lydrology Prese	nt? Yes No
(includes capillary fringe)		_ , , , , _			
Describe Recorded Data (stre	eam gauge, monitoring	g well, aerial photos, pre	vious inspections), if ava	ılable:	
Remarks:					
insufficient hydrology indicato	rs present				

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	
1 Pinus taeda	65	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)
2 Liquidambar styraciflua	8	No	FAC	That Are OBE, I ACW, OF I AC.
3. Oxydendrum arboreum		No	UPL	Total Number of Dominant
3. Oxydendium aiboreum				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 90 (A/B)
6				, , ,
7.				Prevalence Index worksheet:
	76	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 38		total cover:_	15.2	OBL species0 x 1 =0
15	2070 0.			FACW species10
Sapling/Shrub Stratum (Plot size:) 1. Liquidambar styraciflua	20	Yes	FAC	FAC species 142 x 3 = 426
	10		UPL	FACU species 0 x 4 = 0
2. Oxydendrum arboreum		Yes		10 05
3. Clethra alnifolia	8	Yes	FAC	UPL species
4. Acer rubrum	5	No	FAC	Column Totals:(A)(B)
5. Quercus nigra	5	No	FAC	Prevalence Index = B/A = 3.09
6. Pinus taeda	5	No	FAC	Trevalence mack = B/Tt =
7. Morella cerifera	4	No	FAC	Hydrophytic Vegetation Indicators:
8. Quercus michauxii	3	No	FACW	1 - Rapid Test for Hydrophytic Vegetation
			FACW	✓ 2 - Dominance Test is >50%
9. Vaccinium corymbosum		No		3 - Prevalence Index is ≤3.0 ¹
04		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 31	20% of	total cover:_	12.4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				
1. Osmundastrum cinnamomeum	3	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Chasmanthium sessiliflorum	3	Yes	FAC	
3. Arundinaria gigantea	2	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Microstegium vimineum	2	Yes	FAC	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				Hart All back assess (see some d.) also (see some dile
	10 .	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 5		total cover:_	2	of size, and weedy plante less than e.ze it tail.
0070 01 total 00001.	2070 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1 Smilax rotundifolia	12	Yes	FAC	height.
''	5			
2. Vitis rotundifolia		Yes	FAC	
3				
4				Hydrophytic
5				Vegetation
	17	= Total Cove		Present? Yes No
50% of total cover: 8.5		total cover:_	3.4	
		_		
Remarks: (Include photo numbers here or on a separate sl	neet.)			

Profile Des	cription: (Describe	to the dept	h needed to docun	nent the i	ndicator	or confirm	the abse	nce of indicators.)			
Depth	Matrix		Redo	x Features	31	. 3	_				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	e Remarks			
0-6	2.5Y 3/2	100					SL				
6-13	2.5Y 4/3	100					SL				
13-24	2.5Y 5/3	100					SL				
	. .				-						
	· -										
	<u> </u>										
							-				
	· ·										
1Type: C-C	Concentration, D=Dep	oletion RM-	Reduced Matrix MS		Sand Gr		² Location	n: PL=Pore Lining, M=Matrix.			
	Indicators:	Jietion, Rivi=	Neduced Matrix, Mc	=iviaskeu	Sand Gr	aii i5.		ndicators for Problematic Hydric Soils ³ :			
Histoso			Dark Surface	(97)				_ 2 cm Muck (A10) (MLRA 147)			
	Epipedon (A2)		Polyvalue Be		ر (S2) رار	II RΔ 147	148)	Coast Prairie Redox (A16)			
	listic (A3)		Thin Dark Su				140) _	(MLRA 147, 148)			
	en Sulfide (A4)		Loamy Gleye	. ,	•	47, 140)		Piedmont Floodplain Soils (F19)			
	ed Layers (A5)		Depleted Mat		/		_	(MLRA 136, 147)			
	luck (A10) (LRR N)		Redox Dark S		6)			Very Shallow Dark Surface (TF12)			
	ed Below Dark Surface	ce (A11)	Depleted Dar				_	Other (Explain in Remarks)			
	ark Surface (A12)	` ,	Redox Depre								
Sandy	Mucky Mineral (S1) (LRR N,	Iron-Mangan	ese Masse	es (F12) (LRR N,					
MLR	A 147, 148)		MLRA 136)								
Sandy	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegetation and								
Sandy	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,								
Strippe	d Matrix (S6)		Red Parent N	faterial (F	21) (MLR	A 127, 147	7)	unless disturbed or problematic.			
Restrictive	Layer (if observed)	:									
Type: _n	one										
Depth (ir			<u></u>				Hydric	Soil Present? Yes No			
Remarks:							1 -				



Photo 1 Upland data point wnra002_u3 facing south



Photo 2Upland data point wnra002_u3 facing southwest

Project/Site: Atlantic Coast Pipeline	City/County: Northampton	Sampling Date: 5/22/2015			
Applicant/Owner: Dominion		_ State: NC Sampling Point: wnra002_u4			
	Section, Township, Range: No.	n. Range. No PLSS in this area			
Landform (hillslope, terrace, etc.): gentle slope					
· · · · · · · · · · · · · · · · · · ·	Lat: 36.54087926 Long: -77.				
Soil Map Unit Name: Craven fine sandy loam, 1 to	o 4 percent slopes	NWI classification: None			
	cal for this time of year? Yes No				
	significantly disturbed? Are "Norma				
	naturally problematic? (If needed, or				
		ons, transects, important features, etc.			
Lindrophytic Vegetation Present?	W. No.				
Hydrophytic Vegetation Present? Yes _ Hydric Soil Present? Yes _	No Is the Sampled Area within a Wetland?				
	No v within a Wetland?	Yes No			
Remarks:					
LIVEROLOGY					
HYDROLOGY		Consider Indicators (minimum of two required)			
Wetland Hydrology Indicators:	check all that apply)	Surface Sail Cracks (RS)			
Primary Indicators (minimum of one is required;		Surface Soil Cracks (B6)			
Surface Water (A1)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)			
High Water Table (A2) 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)				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)		Geomorphic Position (D2)			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)			
Water-Stained Leaves (B9)		Microtopographic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutral Test (D5)			
Field Observations:					
	Depth (inches):				
	Depth (inches):				
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches): Wetland I	Wetland Hydrology Present? Yes No			
	ring well, aerial photos, previous inspections), if ava	ailable:			
Remarks:					
no hydrology indicators present					

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1 Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC: 4 (A)
2. Liriodendron tulipifera	10	No	FACU	That Allo OBE, TAOW, OF TAO (A)
3. Liquidambar styraciflua	10	No	FAC	Total Number of Dominant
3. Elquidamour otyraomaa				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				
7				Prevalence Index worksheet:
	70	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover: 35	20% of	total cover:_	14	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15		_		FACW species9 x 2 =18
1. Liquidambar styraciflua	20	Yes	FAC	FAC species132 x 3 =396
2. Liriodendron tulipifera	15	Yes	FACU	FACU species 37 x 4 = 148
3. Acer rubrum	13	No	FAC	UPL species 0 x 5 = 0
				178 562
4. Pinus taeda	7	No	FAC	Column Totals:(A)(B)
5. Vaccinium corymbosum	5	No	FACW	Prevalence Index = B/A = 3.15
6. Magnolia virginiana	4	No	FACW	Trevalence mack = B/Tt =
7. Ilex opaca	4	No	FACU	Hydrophytic Vegetation Indicators:
···				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	68			3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	er 13.6	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:34	20% of	total cover:_	13.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				· · · · · · · · · · · · · · · · · · ·
1. Chasmanthium sessiliflorum	15	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2.				
				¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Woody 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
7				height.
8.				
0				Sapling/Shrub – Woody plants, excluding vines, less
ə				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 Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.5	20% of	total cover:_	3	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Smilax rotundifolia	17	Yes	FAC	
Parthenocissus quinquefolia	8	Yes	FACU	
3.	-			
3				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes No No
50% of total cover:12.5	20% of	total cover:_	5	
Remarks: (Include photo numbers here or on a separate s	heet.)			
` '	,			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox	x Features	S				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	2.5Y 3/2	100					SL		
6-10	2.5Y 5/3	100					SL		
10-15	2.5Y 6/3	100					SL		
15-26	2.5Y 5/2	85	10YR 4/6	15	С	M	SCL		
							-		
							-		
1- 0.0							21		
Hydric Soil	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	s=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :	
-			Davis Confess	(07)				•	
Histosol	pipedon (A2)		Dark Surface Polyvalue Be		co (S9) (N	II DA 147		2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)	
	pipedon (A2) istic (A3)		Polyvalue Be				(טדו,	(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye			, 1 7 0)	F	Piedmont Floodplain Soils (F19)	
	d Layers (A5)		Depleted Mat		,		<u> </u>	(MLRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark S		·6)		\	/ery Shallow Dark Surface (TF12)	
Deplete	d Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		(Other (Explain in Remarks)	
	ark Surface (A12)		Redox Depre						
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (LRR N,			
	A 147, 148)		MLRA 130		MI DA 40	0.400\	31	Parton of harden by Carra and Carra and	
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					dicators of hydrophytic vegetation and etland hydrology must be present,	
	Matrix (S6)		Red Parent M					nless disturbed or problematic.	
	Layer (if observed):		Red r arent w	iateriai (i	ZI) (INILIX	A 121, 141	1) ui	ileas disturbed of problematic.	
Type: no									
Depth (in							Hydric Soi	I Present? Yes No ✓	
Remarks:	<u> </u>						11,4110 001		
rtomants.									



Photo 1
Upland data point wnra002_u4 facing southwest



Photo 2
Upland data point wnra002_u4 facing southeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipel	ine	City/Co	ounty: Northampton		Sampling Date:	3/24/2015		
Applicant/Owner: DOMINION	State: NC	Sampling Point:	wnra002f (formerly					
nvestigator(s): Team C Section, Township, Range: No PLSS in this area wnrc001f_w						wnrc001f_w)		
Landform (hillslope, terrace, etc.)						ne (%)· 2		
Subregion (LRR or MLRA): P	•		•					
Soil Map Unit Name: Wehadkee	loam 0 to 2 perc	ent slones frequently flood	LUNG led	NAM alassitis	PFO1A P	atum: <u></u> PFO1C		
						1010		
Are climatic / hydrologic condition								
Are Vegetation, Soil	, or Hydrology	significantly disturb	oed? Are "Norma	al Circumstances" p	resent? Yes	No		
Are Vegetation, Soil	, or Hydrology	naturally problema	itic? (If needed,	explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS	6 - Attach sit	e map showing sam	pling point location	ons, transects	, important f	eatures, etc.		
Hydrophytic Vegetation Present	? Yes	✓ No						
Hydric Soil Present?		<u>✓</u> No	Is the Sampled Area	.	**			
Wetland Hydrology Present?		✓ No	within a Wetland?	Yes	No	-		
Remarks:								
Wetland located within the flood	plain of Jacks Sw	amp.						
HYDROLOGY								
Wetland Hydrology Indicators	3:			Secondary Indica	tors (minimum o	f two required)		
Primary Indicators (minimum of	one is required; o	check all that apply)		Surface Soil Cracks (B6)				
✓ Surface Water (A1)		Aquatic Fauna (B13)			getated Concave	Surface (B8)		
✓ High Water Table (A2)		Marl Deposits (B15) (LRR	✓ Drainage Parent	tterns (B10)				
✓ Saturation (A3)		Moss Trim Li						
Water Marks (B1)		Oxidized Rhizospheres al Presence of Reduced Iron			Water Table (C2))		
Sediment Deposits (B2)		Crayfish Burrows (C8)						
Drift Deposits (B3)	Saturation Visible on Aerial Imagery (C9)							
Algal Mat or Crust (B4)		✓ Geomorphic Position (D2)						
Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3)								
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U)						r 11\		
Field Observations:	'			Opilagilulii ii	1033 (D0) (EKK 1	1, 0)		
	Yes V No	Depth (inches): 4						
		Depth (inches): 0						
		Depth (inches): 0	Wetland	/etland Hydrology Present? Yes No				
(includes capillary fringe)								
Describe Recorded Data (stream	m gauge, monitor	ing well, aerial photos, prev	vious inspections), if av	ailable:				
Remarks: Wetland hydrology present								
vvetiand nydrology present								

20	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)		Species?		Number of Dominant Species	
1. Liquidambar styraciflua	40	Yes	FAC		A)
2. Acer rubrum	40	Yes	FAC		
3.				Total Number of Dominant Species Across All Strata: 5 (I	B)
				Species Across Air Strata (i	D)
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 100 (/	A/B)
6				Decorder of the decorated and	
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
	80	= Total Cov	or	OBL species0 x 1 =0	
FOOV of total covery 40			16	FACW species 25	
50% of total cover:	20% of	total cover:		FAC species 100 x 3 = 300	
Sapling/Shrub Stratum (Plot size: 15)				0	
1. Acer rubrum	10	Yes	FAC	'	
2. llex opaca	10	Yes	FAC	UPL species	
3.				Column Totals:(A)	(B)
				2.0	
4				Prevalence Index = B/A =2.8	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				✓ 2 - Dominance Test is >50%	
8					
	20	= Total Cov	or	✓ 3 - Prevalence Index is ≤3.0 ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 10	20% of	total cover:			
Herb Stratum (Plot size:5				¹ Indicators of hydric soil and wetland hydrology mu	st
1. Arundinaria gigantea	25	Yes	FACW	be present, unless disturbed or problematic.	
2.				Definitions of Four Vegetation Strata:	
				- commone of a car a ogenment of and	
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm	
4				more in diameter at breast height (DBH), regardles	s of
5				height.	
6				Sapling/Shrub – Woody plants, excluding vines, le	ess
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	,,,,
8				Herb – All herbaceous (non-woody) plants, regardle	ess
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine – All woody vines greater than 3.28 ft	in
11				height.	
12.					
	25	= Total Cov			
12.5			_		
50% of total cover: 12.5	20% of	total cover:			
Woody Vine Stratum (Plot size:)					
1					
2.					
3					
4					
5				Hydrophytic	
	0	= Total Cov	er	Vegetation	
50% of total cover:0				Present? Yes No	
Remarks: (If observed, list morphological adaptations belo					
Remarks: (ir observed, list morphological adaptations belo	w).				

SOIL Sampling Point: wnr a00 2f_w

Profile Des	cription: (Describe t	o the depth ne	eeded to docum	nent the i	ndicator	or confirm	the absence of	of indicators.)
Depth	Matrix		Redox	k Features	3			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10 YR 3/2	95 10`	YR 5/6	5	С	PL	SL	
			_					_
-		-						
							 ·	
¹ Type: C=C	oncentration, D=Depl	etion, RM=Rec	duced Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	ble to all LRR	s, unless other	wise note	ed.)		Indicators f	for Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Bel	low Surfac	ce (S8) (L	.RR S, T, U)) 1 cm M	uck (A9) (LRR O)
	pipedon (A2)	_	Thin Dark Su					uck (A10) (LRR S)
Black H	istic (A3)		Loamy Mucky	/ Mineral ((F1) (LRR	(O)	Reduce	ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)	_	_ Loamy Gleye	d Matrix (I	F2)		Piedmo	nt Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)	_	Depleted Mat	rix (F3)			Anomal	ous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U) <u>•</u>	Redox Dark S	Surface (F	6)		(MLR	A 153B)
5 cm M	ucky Mineral (A7) (LR	R P, T, U) _	_ Depleted Dar	k Surface	(F7)			rent Material (TF2)
	resence (A8) (LRR U)	· _	Redox Depre		3)			nallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	_	Marl (F10) (L				Other (E	Explain in Remarks)
	d Below Dark Surface	e (A11)	_ Depleted Och	. ,	-	•		
	ark Surface (A12)		Iron-Mangane					ators of hydrophytic vegetation and
	Prairie Redox (A16) (M		Umbric Surfa			, U)		and hydrology must be present,
-	Mucky Mineral (S1) (L	RR O, S) _	Delta Ochric (04 4500)	unie	ss disturbed or problematic.
-	Gleyed Matrix (S4)	_	_ Reduced Ver				24)	
-	Redox (S5) d Matrix (S6)	_	_ Piedmont Flo				A 149A, 153C,	153D)
	ırface (S7) (LRR P, S	T II)	Anomaious B	ngni Loan	ily Solis (rzo) (WERF	4 149A, 133C,	1330)
	Layer (if observed):	, 1, 0)						
_	Layer (ii observed).							
Type:	-1 \		•					D
Depth (in	cnes):		=				Hydric Soil F	Present? Yes No
Remarks:								
Hydric soil pr	esent							



Photo 1
Wetland data point wnra002f_w facing northeast



Photo 2
Wetland data point wnra002f_w facing southeast

Project/Site: Atlantic Coast Pip	eline	City/C	county: Northampton		Sampling Date: 5/22/2015
Applicant/Owner: Dominion				State: NC	Sampling Point: WNR A00 2f_w1
Investigator(s): TP, SA		Section	on, Township, Range: No	PLSS in this are	a
Landform (hillslope, terrace, etc					
					Datum: WGS 1984
Soil Map Unit Name: Bonneau	loamy sand, 6 to	12 percent slopes		NWI classific	cation: PFO/SS1EB, PFO1/4A,
Are climatic / hydrologic condition	ons on the site typ	oical for this time of year? Y	es No	(If no, explain in F	Remarks.)
Are Vegetation, Soil	, or Hydrolog	y significantly distur	bed? Are "Norma	I Circumstances"	oresent? Yes No
Are Vegetation, Soil					
					s, important features, etc.
Hydrophytic Vegetation Prese	nt? Yes	∨ No			
Hydric Soil Present?		✓ No	Is the Sampled Area	V V	No
Wetland Hydrology Present?		✓ No	within a Wetland?	res	NO
Remarks:		<u> </u>			
HYDROLOGY					
Wetland Hydrology Indicato	rs:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required:	; check all that apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)		True Aquatic Plants (B14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa	
✓ Saturation (A3)		Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)
Drift Deposits (B3)		Thin Muck Surface (0			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		tressed Plants (D1)
Iron Deposits (B5)				<u>✓</u> Geomorphic	
Inundation Visible on Aeri				Shallow Aqu	
Water-Stained Leaves (B	Э)				aphic Relief (D4)
Aquatic Fauna (B13)			1	FAC-Neutra	Trest (D5)
Field Observations: Surface Water Present?	Vos 🗸 No	Depth (inches):	2		
Water Table Present?			0		
Saturation Present?		Depth (inches):	0 Wetland I	Hydrology Prese	nt? Yes 🗸 No
(includes capillary fringe)	Tes NO	Deptil (illiches)	wetianu i	Tydrology Fresei	it: 165 NO
Describe Recorded Data (stre	am gauge, monito	oring well, aerial photos, pre	vious inspections), if ava	ailable:	
December					
Remarks: Also noted buttressed trees					
Also noted buttlessed trees					

Sampling	Point: WNR	A00 2f_	_w1
----------	------------	---------	-----

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1 Nyssa aquatica	20	Yes	OBL	That Are OBL, FACW, or FAC: 4 (A)
2. Nyssa biflora	20	Yes	FACW	That Alc OBE, I AOW, OI I AO.
3. Acer rubrum	10	No	FAC	Total Number of Dominant
		No	FACU	Species Across All Strata: (B)
4. Fagus grandifolia			TACO	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				()
7				Prevalence Index worksheet:
·· -	55	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 27.5		total cover:	11	OBL species35 x 1 =35
15	20% 01	total cover		FACW species 35 x 2 = 70
Sapling/Shrub Stratum (Plot size:)		.,		10 20
1. Fagus grandifolia	15	Yes	FACU	FAC species X3 = 120
2. Ilex opaca	10	Yes	FACU	7 ACO species
3				UPL species0 x 5 =0
				Column Totals:110(A)255(B)
				()
5				Prevalence Index = B/A =2.31
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
0				2 - Dominance Test is >50%
9	25	T 0		3 - Prevalence Index is ≤3.0 ¹
12.5		= Total Cove	r 5	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:12.5	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				, , ,
1Arundinaria gigantea	10	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Woodwardia virginica	10	Yes	OBL	
3. Osmunda spectabilis	5	No	OBL	¹ Indicators of hydric soil and wetland hydrology must
Moodwardia areolata	5	No	FACW	be present, unless disturbed or problematic.
4. Woodwardia areolata		110	TACVV	Definitions of Four Vegetation Strata:
5				To a Mandada a substitution discontinuity
6		-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7.				height.
8				
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, regardless
	30	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:15	20% of	total cover:_	6	W 1 2 4 4 4 6 6 6 6 1
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in height.
· · · · · · · · · · · · · · · · · · ·				neight.
1				
2				
3				
4				Hydrophytic
5.				Vegetation
	0	= Total Cove	r	Present? Yes No
50% of total cover: 0		total cover:	•	
0070 01 total 00V01:		total cover		
Remarks: (Include photo numbers here or on a separate si	neet.)			

Sampling Point: WNR A00 2f_w1

Profile Description: (Describe to the dep	oth needed to document the indicator or confirm	the absence	of indicators.)
Depth <u>Matrix</u>	Redox Features		
(inches) Color (moist) % 0-12 10YR 2/1 100	Color (moist) % Type ¹ Loc ²	Texture SCL	Remarks
			<u> </u>
¹ Type: C=Concentration, D=Depletion, RM Hydric Soil Indicators :	=Reduced Matrix, MS=Masked Sand Grains.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2	cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	148) (Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	_	(MLRA 147, 148)
Hydrogen Sulfide (A4)Stratified Layers (A5)	Loamy Gleyed Matrix (F2)Depleted Matrix (F3)	F	Piedmont Floodplain Soils (F19) (MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	\	/ery 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) Sandy Gleyed Matrix (S4)	MLRA 136) Umbric Surface (F13) (MLRA 136, 122)	3Inc	licators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14)		etland hydrology must be present,
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147		lless disturbed or problematic.
Restrictive Layer (if observed):			
Type:			
Depth (inches):	<u></u>	Hydric Soil	Present? Yes No
Remarks:			



Photo 1
Wetland data point WNRA002f_w1 facing northwest



Photo 2
Wetland data point WNRA002f_w1 facing southwest

Project/Site: Atlantic Coast Pipeline	City/C	ounty: Northampton		Sampling Date: 5/22/2015
Applicant/Owner: Dominion			State: NC	Sampling Point: wnr a00 2f_w2
	Section			
Landform (hillslope, terrace, etc.): broad swa				Slope (%): 1
Subregion (LRR or MLRA): P	Lat: 36.53811062	Long: -77.50	128597	Datum: WGS 1984
Soil Map Unit Name: Wehadkee loam, 0 to 2	percent slopes, frequently floor	ded	NWI classificat	ion: PFO/SS1EB, PFO1/4A,
Are climatic / hydrologic conditions on the site	e typical for this time of year? Y	res No (If	no, explain in Rer	marks.)
Are Vegetation, Soil, or Hydro	ology significantly distur	bed? Are "Normal C	ircumstances" pre	esent? Yes No
Are Vegetation, Soil, or Hydro				
SUMMARY OF FINDINGS – Attack				
Hydrophytic Vogototica Procent?	oo 🗸 No			
	es <u> </u>	Is the Sampled Area		
	es No	within a Wetland?	Yes	No
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:		S	econdary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is requi	red: check all that apply)	_	_ Surface Soil C	
Surface Water (A1)	True Aquatic Plants (tated Concave Surface (B8)
✓ High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patte	
Saturation (A3)	Oxidized Rhizosphere		Moss Trim Line	
✓ Water Marks (B1)	Presence of Reduced			ater Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio		Crayfish Burro	
Drift Deposits (B3)	Thin Muck Surface (C	C7) _	Saturation Visi	ble on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rer	narks)	_ Stunted or Stre	essed Plants (D1)
Iron Deposits (B5)		<u>•</u>	Geomorphic P	osition (D2)
Inundation Visible on Aerial Imagery (B	7)	_	Shallow Aquita	
Water-Stained Leaves (B9)		_	Microtopograp	` '
Aquatic Fauna (B13)		<u> </u>	FAC-Neutral T	est (D5)
Field Observations:				
	No Depth (inches):	10		
	No Depth (inches):	-		
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland Hy	drology Present?	? Yes <u> </u>
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, pre	vious inspections), if availa	ible:	
Remarks:				

Sampling	Point-wnr	a00 2f_v	N2

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover 20	Species? Yes	Status FAC	Number of Dominant Species
1. Liquidambar styraciflua 2. Nyssa sylvatica	15	Yes	FAC	That Are OBL, FACW, or FAC:(A)
3. Fraxinus pennsylvanica	15	Yes	FACW	Total Number of Dominant
3. Traxinus perinsylvanica	10	No	FAC	Species Across All Strata: (B)
5. Quercus michauxii	7	No	FACW	Percent of Dominant Species
6. Ulmus rubra	7	No	FAC	That Are OBL, FACW, or FAC: 90.90909090 (A/B)
6. dimus rubia				Prevalence Index worksheet:
7	74			Total % Cover of: Multiply by:
50% of total cover: 37		= Total Cove	r 14.8	OBL species25 x 1 =25
15	20% 01	total cover:_		FACW species 69 x 2 = 138
Sapling/Shrub Stratum (Plot size:) 1 Carpinus caroliniana	12	Yes	FAC	FAC species 102 x 3 = 306
2. Fraxinus pennsylvanica		Yes	FACW	FACU species 5 x 4 = 20
3. Clethra alnifolia		Yes	FAC	UPL species $0 \times 5 = 0$
4. llex opaca		Yes	FACU	Column Totals: 201 (A) 489 (B)
5. Acer rubrum	4	No	FAC	(2)
6 Nyssa sylvatica	4	No	FAC	Prevalence Index = B/A =2.43
<u> </u>				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	35			✓ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover:17.5		= Total Cove total cover:	r 7	4 - Morphological Adaptations ¹ (Provide supporting
E	20% 01	lotal cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:) Moodwardia areolata	25	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Saururus cernuus	15	Yes	OBL	
Company annothing	12	No	FACW	¹ Indicators of hydric soil and wetland hydrology must
3. Carex grayi 4. Carex comosa	10	No	OBL	be present, unless disturbed or problematic.
4. Carex cornosa 5 Arisaema triphyllum	5	No	FACW	Definitions of Four Vegetation Strata:
-		INO	FACW	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	67			Herb - All herbaceous (non-woody) plants, regardless
50% of total cover: 33.5		= Total Cove		of size, and woody plants less than 3.28 ft tall.
0070 01 total 00101.	20% of	total cover:_	13.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1 Smilax rotundifolia	18	Yes	FAC	height.
2 Campsis radicans	7	Yes	FAC	
-: <u></u>		163	170	
3				
4				Hydrophytic
5				Vegetation Present? Yes V No No No
12.5		= Total Cove	r 5	Present? Yes No No
50% of total cover: 12.5		total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wnr a00 2f_w2

SOIL

Profile Desc	cription: (Describe t	o the depth	needed to docum	nent the ir	ndicator o	r confirm	the absence	of indicate	ors.)	
Depth	Matrix		Redo	k Features	i					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>		Remarks	
0-5	2.5Y 2.5/1	100					L			
5-14	2.5Y 3/1	100					SL			
14-21	2.5Y 4/1	100					SL			
21-28	2.5Y 5/1	100					SL			
			_							
1- 0.0							21 .: 5			
	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ins.			ing, M=Matrix. roblematic Hy	
Hydric Soil			5 1 6 7	(07)					-	
Histosol			Dark Surface		o (CO) (M	I D A 447			A10) (MLRA 1 e Redox (A16)	47)
	pipedon (A2) istic (A3)		Polyvalue BeThin Dark Su				148) (oast Prairie 14 MLRA)	. ,	
	en Sulfide (A4)		Loamy Gleye			+1, 140)	F		oodplain Soils	(F19)
	d Layers (A5)		Depleted Mat		2)			(MLRA 13		(1 13)
	uck (A10) (LRR N)		Redox Dark S		6)		\		v Dark Surface	(TF12)
	d Below Dark Surface	e (A11)	Depleted Dar					•	in in Remarks)	, ,
	ark Surface (A12)		Redox Depre							
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (l	.RR N,				
	A 147, 148)		MLRA 13				3.			
	Gleyed Matrix (S4)		Umbric Surfa						ydrophytic veg	
	Redox (S5)		Piedmont Flo					-	logy must be p	
	Matrix (S6)		Red Parent N	lateriai (F2	21) (MLR/	127, 147	') ur	niess disturb	ed or problem	atic.
Type: no	Layer (if observed):									
									/	
Depth (in	ches):		_				Hydric Soi	I Present?	Yes	No
Remarks:										



Photo 1 Wetland data point wnra002f_w2 facing northeast



Photo 2
Wetland data point wnrc001f_w2 facing southeast

Project/Site: Atlantic Coast Pipeline	City/C	ounty: Northampton	Sampling Date: 5/22/2015
Applicant/Owner: Dominion		State: N	C Sampling Point: wnrc001f_w3
		on, Township, Range: No PLSS in th	
Landform (hillslope, terrace, etc.): broad swa			
Subregion (LRR or MLRA): P	Lat: 36.53612249	Long: -77.50296451	Datum: WGS 1984
Soil Map Unit Name: Wehadkee loam, 0 to 2	2 percent slopes, frequently flood	led NWI o	classification: PFO/SS1EB, PFO1/4A,
Are climatic / hydrologic conditions on the site			
Are Vegetation, Soil, or Hydro	ology significantly distur	bed? Are "Normal Circumsta	nces" present? Yes No
Are Vegetation, Soil, or Hydro			
SUMMARY OF FINDINGS – Attac			
Lindranhutia Vagatatian Procent?	'oo Ma		
	'es	Is the Sampled Area	v
	es No	within a Wetland? Yes	No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary	y Indicators (minimum of two required)
Primary Indicators (minimum of one is requi	ired; check all that apply)	·	ce Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (sely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Ode		age Patterns (B10)
✓ Saturation (A3)	Oxidized Rhizosphere	es on Living Roots (C3) Moss	Trim Lines (B16)
Water Marks (B1)	Presence of Reduced		eason Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio		ish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C		ation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Ren		ed or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	R7\		norphic Position (D2) ow Aquitard (D3)
Water-Stained Leaves (B9)))	_	topographic Relief (D4)
Aquatic Fauna (B13)			Neutral Test (D5)
Field Observations:			. ,
Surface Water Present? Yes	No Depth (inches):		
Water Table Present? Yes	No Depth (inches):	9	
Saturation Present? Yes	No Depth (inches):	6 Wetland Hydrology	Present? Yes 🔽 No
(includes capillary fringe) Describe Recorded Data (stream gauge, more stream)	onitoring well aerial photos, pre	vious inspections), if available:	
Describe Neseraea Data (Stream gauge, III	ormorning went, derical prioros, pre	vious inspections), il available.	
Remarks:			

Sampling	Point: wnrc001f_	_w3
Sambilliu	FUILL.	

00	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1. Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC:10 (A)
2. Fraxinus pennsylvanica	18	Yes	FACW	Total Number of Deminent
3. Quercus laurifolia	15	Yes	FACW	Total Number of Dominant Species Across All Strata: 10 (B)
4. Acer rubrum	15	Yes	FAC	(2)
5. Quercus pagoda	5	No	FACW	Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
6 Nyssa sylvatica		No	FAC	That Are OBL, FACW, or FAC: (A/B)
6. 11/000 0/1/41100				Prevalence Index worksheet:
7	78			Total % Cover of: Multiply by:
00		= Total Cove		OBL species 38 x 1 = 38
50% of total cover:39	20% of	total cover:	15.6	79 X 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x z =
1. Fraxinus pennsylvanica	10	Yes	FACW	FAC species x 3 =
2. Acer rubrum	10	Yes	FAC	FACU species x 4 =
3. Viburnum nudum	8	Yes	OBL	UPL species0 x 5 =0
4. Nyssa sylvatica	5	No	FAC	Column Totals:179 (A)383 (B)
· ·				
5				Prevalence Index = B/A =2.13
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 ¹
	33	= Total Cove	r	
50% of total cover:16.5		total cover:	6.6	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
1 Saururus cernuus	30	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Carex grayi	15	Yes	FACW	
3. Woodwardia areolata	8	No	FACW	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4. Arundinaria gigantea	7	No	FACW	Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
•				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11	60			Herb – All herbaceous (non-woody) plants, regardless
30		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 30	20% of	total cover:	12	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Smilax rotundifolia	8	Yes	FAC	
2				
3.				
4	-			
				Hydrophytic
5				Vegetation
A		= Total Cove	r 1.6	11030HC: 103 NO
50% of total cover: 4		total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix		Redox Features		
(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc	<u>Text</u>	ure Remarks
0-8	10YR 3/1	100		L	·
8-20	10YR 4/1	100		L	
20-30	10YR 5/1	100		CI	
Typo: C-C	Concentration D-Do	nlotion PM-P	educed Matrix, MS=Masked Sand Grains.	² l ocati	ion: PL=Pore Lining, M=Matrix.
	Indicators:	pietion, Kivi=Ki	educed Matrix, MS=Masked Sand Grains.		Indicators for Problematic Hydric Soils ³ :
_ Histoso			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	147 148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Surface (S9) (MLRA 147, 1		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	,	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	ce (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)		
	Mucky Mineral (S1)	(LRR N,	Iron-Manganese Masses (F12) (LRR I	٧,	
	A 147, 148)		MLRA 136)		
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 123		³ Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR		wetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 127	′, 147)	unless disturbed or problematic.
	Layer (if observed)):			
Type: no			_		
Depth (in	nches):		<u> </u>	Hydri	ic Soil Present? Yes No
emarks:					



Photo 1
Wetland data point wnrc001f_w3 facing east



Photo 2
Wetland data point wnrc001f_w3 facing south

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region city/County: Northampton ___ Sampling Date: 30 July 2015 Project/Site: Dominion _ Sampling Point: WNYCOOLF_W Applicant/Owner: K.Markham / D.Blue Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): _____ drai nage Local relief (concave, convex, none): __Con cave Slope (%): Lat: 36.54189 Long: -77.49.757 Subregion (LRR or MLRA): LRRP Datum; W6584 Soil Map Unit Name: Rains Fine sandy loam 7FO NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes_ _ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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? Is the Sampled Area Hydric Soil Present? Yes / No____ within a Wetland? Wetland Hydrology Present? Remarks: 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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Yes _____ No V Depth (inches): Surface Water Present? Yes No Depth (inches): _ Water Table Present? Wetland Hydrology Present? Yes _ V No _ Yes _____ No V Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

20 20 0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30 Ft.)		Species?		Number of Dominant Species
1. Acer vubrum	<u>60</u>		FAC	That Are OBL, FACW, or FAC:
2. Quercus michauxii	10_		FACW	T (13)
3. Nyssa biflora	20	Y	OBL	Total Number of Dominant Species Across All Strata; (B)
4				Openies Across Air Strata, (b)
				Percent of Dominant Species (DD (A/D)
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7.				
8				Total % Cover of: Multiply by:
	90	= Total Co	ver	OBL species x1 =
50% of total cover: 45	20% of	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30 ft)	2070 01	total covci	· <u> </u>	FAC species x 3 =
1. Nyssa hiflora	40	V	OBL	FACU species x 4 =
**				UPL species x 5 =
2. Carpinus caroliniana	40	<u> </u>	FAC	
3. Acer rubrum	30_	<u> </u>	FAC	Column Totals: (A) (B)
4		,		Dravelance Index - D/A
		J		Prevalence Index = B/A =
5			· ——	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.	·			2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
-	<u> </u>	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:55	20% o	f total cove		
Herb Stratum (Plot size: 30 x 30 Pt)				10. 10. 10. 10. 10. 10. 10. 10. 10. 10.
	30	У	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria tecta	- 20	4		
	- 5		FACW	Definitions of Four Vegetation Strata:
3. Saururus cernuus	. — " —	<u> </u>	<u> </u>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				J
8 '		;		Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11,				height.
12,				
	- 55	= Total Co	nver —	
50% of total cover: 27.		of total cove		-
30 % of total cover	20% (i total cove	sı. <u> r</u>	
Woody Vine Stratum (Plot size: 30 x 30 Ct.)				
1. <u>none</u>				
2				,
3				
4				
<u> </u>	-			
5	- 			Hydrophytic
		_ = Total C		Vegetation Present? Yes No
50% of total cover:	20% (of total cov	er:	riesentr resNo
Remarks: (If observed, list morphological adaptations be	low).	•		
				•
				•
1				•

Depth Markix Depth (1998) Scotlor (midels)				ii necaca to accan	ient me n	adicator	or contirm	the absence	of indicators.)
O - 2		Matrix		Redo				<u>.</u> .	
2 - 12									Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Type: C=Concentration, D=Depletion, Matrix, MS=Masked Sand Grains. Type: C=Concentration						$\frac{1}{2}$			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U) Muck Pricesence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Mout (A9) (LRR P) Mout (A9) (LRR D) Histosol (A7) Depleted Below Dark Surface (A11) Thin Dark Surface (F8) Mout Pricesence (A6) (LRR D, T) Depleted Dark Surface (F7) Redox Depressions (F8) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (A11) Thick Dark Surface (A12) Stratified Leyers (A5) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (A13) Mart (F10) (LRR U) Depleted Deriv (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Deriv (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Deriv (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Deriv (F11) (MLRA 151) Depleted Deriv (F11) (MLRA 151) Depleted Deriv (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Deriv (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Deriv (F11) (MLRA 151) Depleted Deriv (F11) (MLRA 151) Depleted Deriv (F12) Depleted Deriv (F13) (MLRA 154) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Reduced (Vertic (F18) (MLRA 150A) Dark Surface (F10) (LRR D, S) Sandy Gleyed Matrix (S6) Dark Surface (F10) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Reduced (Vertic (F18) (MLRA 154) Hydric Soil Present? Yes No Remarks:			· ——— ·						oxidized rhizospheres starky 4
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Thistosol (A1) Thistosol (A2) Thistosol (A3) Thistosol (A6) Thistosol (A7) Thistosol	12-20	10YR 4/1	80	57R 5/6	<u> 20</u>	C_		<u>C</u>	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Thistosol (A1) Thistosol (A2) Thistosol (A3) Thistosol (A6) Thistosol (A7) Thistosol									···
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosco (A1)									
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosco (A1)									
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosco (A1)	l ———		· —— ·					•	
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosco (A1)	<u> </u>		 .						
Histosol (A1)							ains.		
Histic Epipedon (A2)	·		able to all i			•	DD C 7 11		•
Black Histic (A3) Hydrogen Sulfide (A4)									
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) House Presence (A8) (LRR P, T, U) House Presence (A8) (LRR P, T) House Presence (A8) (LRR P, T, U) House Presence (A8) (LRR P, T, T) House Presence (A8) (LRR P, S, T) House Presence (A8) (_								
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mart (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Sürface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:	Hydroge	en Sulfide (A4)					•		
S cm Mucky Mineral (A7) (LRR P, T, U)					٠.				
Muck Presence (A8) (LRR U)						-			
1 cm Muck (A9) (LRR P, T)	Muck D	ucky Minerai (A7) (Li resence (A8) (LDD I	KK P, I, U) N						
Depleted Below Dark Strace (A11) Thick Dark Surface (A12) Thick Dark Su			,,			?)			
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (If observed): Type: Depth (inches): Remarks:			e (A11)			(MLRA 1	51)		(Explain in Containe)
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Remarks: Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Reduced Vertic (F18) (MLRA 149A) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Hydric Soil Present? Yes No Remarks:					ese Mass	es (F12) (LRR O, P,	T) ³ Ind	icators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Hydric Soil Present? Yes V No Remarks:							, U)		
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:			LRR U, S)				:04 4EDD\		iless disturbed or problematic.
Stripped Matrix (S6)									•
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil Present? Yes No									C, 153D)
Type: Hydric Soil Present? Yes V No Remarks:			S T 11)		•	•			•
Depth (inches): Hydric Soil Present? Yes No									
Remarks:	Restrictive	Layer (if observed)						1	
		Layer (if observed)							
	Type:							Hydric So	il Present? Yes V No
	Type: Depth (ir							Hydric So	il Present? Yes V No
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	Type: Depth (ir	nches):						Hydric So	il Present? Yes No
i e	Type: Depth (ir	nches):						Hydric So	il Present? Yes No
	Type: Depth (ir	nches):						Hydric So	il Present? Yes No

Environmental Field Surveys Wetland Photo Page



Wetland data point wnrc001f_w facing east.



Wetland data point wnrc001f_w facing northwest.

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Northampton		Sampling Date: 5/23/2015		
Applicant/Owner: Dominion					Sampling Point: wnrc001_u		
		Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): slope					Slope (%): <u>8</u>		
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Bonneau loamy sar	nd, 6 to 12 percent	t slopes		NWI classifica	ation: None		
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or H							
Are Vegetation, Soil, or H							
SUMMARY OF FINDINGS – Att							
SOMMANT OF TINDINGS - ALL	acii sile iliap	Silowing Sain	pining point locatio	nis, transects,	important reatures, etc.		
Hydrophytic Vegetation Present?	Yes N		Is the Sampled Area				
Hydric Soil Present?	Yes N		within a Wetland?	Yes	No		
Wetland Hydrology Present? Remarks:	Yes N	lo					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicat	ors (minimum of two required)		
Primary Indicators (minimum of one is r	oguirod: chock all	that apply)		Surface Soil (
Surface Water (A1)	-				etated Concave Surface (B8)		
High Water Table (A2)		e Aquatic Plants (I Irogen Sulfide Odd		Drainage Patt			
Saturation (A3)	-	-	es on Living Roots (C3)	Moss Trim Lir			
Water Marks (B1)		sence of Reduced	= : : :		Vater Table (C2)		
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Burro			
Drift Deposits (B3)	Thir	n Muck Surface (C	37)	Saturation Vis	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Oth	er (Explain in Rem	narks)	Stunted or Str	ressed Plants (D1)		
Iron Deposits (B5)				Geomorphic F	Position (D2)		
Inundation Visible on Aerial Imager	y (B7)			Shallow Aquit	ard (D3)		
Water-Stained Leaves (B9)					ohic Relief (D4)		
Aquatic Fauna (B13)			T	FAC-Neutral	Test (D5)		
Field Observations:	4/ -						
	No De						
	No <u> </u>						
Saturation Present? Yes (includes capillary fringe)	No <u> </u>	pth (inches):	Wetland H	lydrology Present	? Yes No		
Describe Recorded Data (stream gauge	, monitoring well,	aerial photos, pre	vious inspections), if ava	ilable:			
Remarks: no hydrology indicators present							
The frydrology indicators present							

Pinus taeda	Number of Dominant Species That Are OBL, FACW, or FAC:
1	Total Number of Dominant Species Across All Strata: 12 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 90 x 2 = 0 FAC species 45 x 4 = 180 UPL species 12 x 5 = 60 Column Totals: 147 (A) 510 (B) Prevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
3. Quercus nigra	Percent of Dominant Species That Are OBL, FACW, or FAC: Total % Cover of: Multiply by: OBL species O FACW species O FAC species FACU species 12 VPL species 12 VPL species 147 Column Totals: 147 Multiply by: OBL species 90 x 2 = 0 FACU species 90 x 3 = 270 FACU species 12 x 5 = 60 Column Totals: 147 (A) Frevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
A Liquidambar styraciflua	Percent of Dominant Species That Are OBL, FACW, or FAC: Total % Cover of: Multiply by: OBL species O FACW species O FAC species FACU species 12 VPL species 12 VPL species 147 Column Totals: 147 Multiply by: OBL species 90 x 2 = 0 FACU species 90 x 3 = 270 FACU species 12 x 5 = 60 Column Totals: 147 (A) Frevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
5	Percent of Dominant Species That Are OBL, FACW, or FAC:
6. 7. 73 = Total Cover 14.6 Sapling/Shrub Stratum (Plot size: 15) 10 yes FAC 15 1. Oxydendrum arboreum 12 yes UPL 12 yes FAC 2. Liquidambar styraciflua 10 yes FAC 3 3. Vaccinium arboreum 5 yes FACU 4 4. Carya cordiformis 5 yes FACU 5 5. Pinus taeda 5 yes FAC 6 6. Morella cerifera 5 yes FAC 7 7. Quercus alba 4 No FACU 8 8. Cornus florida 4 No FACU 9 9. Ilex opaca 3 No FACU 11.2 Herb Stratum (Plot size: 5 2 12% of total cover: 11.2 Herb Stratum (Plot size: 5 1 1 1. Asplenium platyneuron 2 yes FACU 2. Asplenium platyneuron 2 yes FACU 3. Chasmanthium sessiliflorum 2 yes FAC 4. Chasmanthium sessiliflorum 2 yes FACU 5. Mitchella repens 2 yes FACU 6	That Are OBL, FACW, or FAC:50
6	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 90 x 2 = 0 FAC species 45 x 4 = 180 UPL species 12 x 5 = 60 Column Totals: 147 (A) 510 (B) Prevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
7. 73 = Total Cover 20% of total cover: 14.6 Sapling/Shrub Stratum (Plot size: 15) 15 20% of total cover: 20% of total cover: 14.6 Sapling/Shrub Stratum (Plot size: 15) 10 Yes UPL UPL 2 Liquidambar styraciflua 3. Vaccinium arboreum 5 Yes FAC 4. Carya cordiformis 5 Yes FAC 5 5 Yes FAC 6. Morella cerifera 7 Yes FAC 7. Quercus alba 8. Cornus florida 9. Ilex opaca 9. Ilex	Total % Cover of: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 90 x 3 = 270 FACU species 45 x 4 = 180 UPL species 12 x 5 = 60 Column Totals: 147 (A) The species B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
Sapling/Shrub Stratum (Plot size: 15 15 20% of total cover: 14.6	OBL species 0 x 1 = 0 FACW species 90 x 2 = 0 FAC species 90 x 3 = 270 FACU species 45 x 4 = 180 UPL species 12 x 5 = 60 Column Totals: (A) 510 (B) Prevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
Sapling/Shrub Stratum (Plot size: 15 15 12 Yes UPL	FACW species 0 x 2 = 0 FAC species 90 x 3 = 270 FACU species 12 x 4 = 180 UPL species 12 x 5 = 60 Column Totals: 147 (A) 510 (B) Prevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
Sapling/Shrub Stratum (Plot size: 15) 1. Oxydendrum arboreum 12 Yes UPL 2. Liquidambar styraciflua 10 Yes FAC 3. Vaccinium arboreum 5 Yes FACU 4. Carya cordiformis 5 Yes FACU 5. Pinus taeda 5 Yes FAC 6. Morella cerifera 5 Yes FAC 7. Quercus alba 4 No FACU 8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU 9. Ilex opaca 3 No FACU 4 Herb Stratum (Plot size: 5) 1. Asplenium platyneuron 2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6. — 7 Yes FACU	FACW species
1 Oxydendrum arboreum 12 Yes UPL 2 Liquidambar styraciflua 10 Yes FAC 3 Vaccinium arboreum 5 Yes FACU 4 Carya cordiformis 5 Yes FACU 5 Pinus taeda 5 Yes FACU 5 Pinus taeda 5 Yes FAC 6 Morella cerifera 5 Yes FAC 7 Quercus alba 4 No FACU 8 Cornus florida 4 No FACU 8 Cornus florida 4 No FACU 8 Cornus florida 4 No FACU 5 E Total Cover 11.2 E E E E E E E E E	FAC species 90 x 3 = 270 FACU species 45 x 4 = 180 UPL species 12 x 5 = 60 Column Totals: 147 (A) 510 (B) Prevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
2. Liquidambar styraciflua 10 Yes FAC 3. Vaccinium arboreum 5 Yes FACU 4. Carya cordiformis 5 Yes FACU 5. Pinus taeda 5 Yes FAC 6. Morella cerifera 5 Yes FAC 7. Quercus alba 4 No FACU 8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU 56 = Total Cover 11.2 Herb Stratum (Plot size: 5)) 1 1. Asplenium platyneuron 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FACU 5. Mitchella repens 2 Yes FACU 6	FACU species 45
3 Vaccinium arboreum 5 Yes FACU 4 Carya cordiformis 5 Yes FACU 5 Pinus taeda 5 Yes FACU 5 Pinus taeda 5 Yes FACU 6 Morella cerifera 5 Yes FACU 7 Quercus alba 4 No FACU 8 Cornus florida 4 No FACU 9 Ilex opaca 3 No FACU 11.2	UPL species 12 x 5 = 60 Column Totals: 147 (A) 510 (B) Prevalence Index = B/A = 3.46 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
4. Carya cordiformis 5 Yes FACU 5. Pinus taeda 5 Yes FAC 6. Morella cerifera 5 Yes FAC 7. Quercus alba 4 No FACU 8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU 50% of total cover: 28 20% of total cover: 11.2 Herb Stratum (Plot size: 5) 1 1. Asplenium platyneuron 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6.	Column Totals:147
5. Pinus taeda 5 Yes FAC 6. Morella cerifera 5 Yes FAC 7. Quercus alba 4 No FACU 8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU 50% of total cover: 28 20% of total cover: 11.2 Herb Stratum (Plot size: 5)) 11.2 Herb Stratum (Plot size: 5)) 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4 Chasmanthium sessiliflorum 2 Yes FACU 5. Mitchella repens 2 Yes FACU 5 Mitchella repens 2 Yes FACU 8. -	Prevalence Index = B/A =3.46 Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
6. Morella cerifera 5 Yes FAC 7. Quercus alba 4 No FACU 8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU 50% of total cover: 28 20% of total cover: 11.2 Herb Stratum (Plot size: 5)) 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4 Chasmanthium sessiliflorum 2 Yes FACU 5 Mitchella repens 2 Yes FACU 6 5 Mitchella repens 2 Yes FACU 6 7 6 6 7 7 7 8 6 6 7	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
7. Quercus alba 4 No FACU 8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU 50% of total cover: 28 20% of total cover: 11.2 Herb Stratum (Plot size: 5) 1. Asplenium platyneuron 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
8. Cornus florida 4 No FACU 9. Ilex opaca 3 No FACU Herb Stratum (Plot size: 5) 28 20% of total cover: 11.2 1. Asplenium platyneuron 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6	 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
1 1 2 3 No FACU 56 = Total Cover 11.2	 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
Solition Solition	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
Solid Cover 28 20% of total cover 11.2	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
Solid total cover: 28 20% of total cover: 11.2 Herb Stratum (Plot size: 5)	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
Herb Stratum (Plot size:	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
1. Asplenium platyneuron 2 Yes FACU 2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6.	¹ Indicators of hydric soil and wetland hydrology must
2. Asplenium platyneuron 2 Yes FACU 3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6.	
3. Chasmanthium sessiliflorum 2 Yes FAC 4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6.	
4. Chasmanthium sessiliflorum 2 Yes FAC 5. Mitchella repens 2 Yes FACU 6.	be present, unless disturbed or problematic.
5. Mitchella repens 2 Yes FACU 6.	
6	Definitions of Four Vegetation Strata:
7	Tree Mondy plants evaluating vince 2 in (7.6 cm) or
8	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	height.
9	One line (Ohmule - Wassiders Lands and Indian Company)
	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.	
6 = Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3 20% of total cover: 1.2	or olzo, and woody planto loss than 0.20 ft tail.
Woody Vine Stratum (Plot size: 30)	Woody vine – All woody vines greater than 3.28 ft in
1 Vitis aestivalis 7 Yes FACU	height.
2 Vitis aestivalis 7 Yes FACU	
2.	
3. Smilax rotundifolia 5 Yes FAC	
4	Hydrophytic
5	Vegetation
12 = Total Cover	Present? Yes No
50% of total cover: 6 20% of total cover: 2.4	
Remarks: (Include photo numbers here or on a separate sheet.)	

Profile Des	cription: (Describe t	o the depth	needed to document the in	dicator or confirm	the abser	nce of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-5	<u>Color (moist)</u> 2.5Y 3/2	<u>%</u> 100	Color (moist) %	Type ¹ Loc ²	Texture SL	Remarks
5-11	2.5Y 4/3	100			SL	
11-24	2.5Y 5/4	100			SL	
		etion, RM=R	educed Matrix, MS=Masked	Sand Grains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:				Inc	dicators for Problematic Hydric Soils ³ :
Histoso			Dark Surface (S7)			_ 2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface		148)	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9)			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F	2)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6		_	_ Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (_	Other (Explain in Remarks)
	ark Surface (A12)	DD 11	Redox Depressions (F8)			
	Mucky Mineral (S1) (L	RR N,	Iron-Manganese Masses	s (F12) (LRR N,		
	A 147, 148)		MLRA 136)	ALD A 400 400\	3	Nadiantara of harden butin an estation and
	Gleyed Matrix (S4)		Umbric Surface (F13) (N			Indicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Floodplain SoRed Parent Material (F2			wetland hydrology must be present,
	d Matrix (S6) Layer (if observed):		Red Parent Material (F2	1) (WILKA 127, 147	<i>)</i>	unless disturbed or problematic.
Type: _nc						
	iches):		<u> </u>		Hydric S	Soil Present? Yes No
Remarks:						



Photo 1
Upland data point wnrc001_u facing northwest



Photo 2
Upland data point wnrc001_u facing west

Applicant/Owner: Dominion State: NC Sampling Point: wnrc001_u1 Investigator(s): TP, SA Section, Township, Range: No PLSS in this area Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 10 Subregion (LRR or MLRA): P Lat: 36.53520006 Long: -77.51009003 Datum: WGS 1984 Soil Map Unit Name: Bonneau loamy sand, 6 to 12 percent slopes NWI classification: None Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Investigator(s): TP, SA Section, Township, Range: No PLSS in this area Landform (hillslope, terrace, etc.): hill slope
Landform (hillslope, terrace, etc.): hill slope
Subregion (LRR or MLRA): P Lat: 36.53520006 Long: -77.51009003 Datum: WGS 1984 Soil Map Unit Name: Bonneau loamy sand, 6 to 12 percent slopes NWI classification: None Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes V No
Soil Map Unit Name: Bonneau loamy sand, 6 to 12 percent slopes NWI classification: None Are climatic / hydrologic conditions on the site typical for this time of year? Yes Vegetation, soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes Vegetation No.
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
(,,,,
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes No ✓
Liverin Coil Property
Wetland Hydrology Present? Yes No within a Wetland? Yes No
Upland point taken in pine plantation.
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)
Ordinant Deposits (B2) Trecent Nort Neddector in Third Cons (CO) Ordinant Duriows (CO)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Output
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

Sampling	Point: wnrc001	_u1
Januania	I UIIII	_

00	Absolute	Dominant In	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	30	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
2				T. 10 1 15 15 1
3				Total Number of Dominant Species Across All Strata: 6 (B)
_				Species Across Air Strata. (D)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
	30	= Total Cove		Total % Cover of: Multiply by: ORL species 0 ×1 = 0
50% of total cover: 15	20% of	total cover:_	6	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 Liriodendron tulipifera	15	Yes	FACU	FAC species 45 x 3 = 135
2. Acer rubrum	10	Yes	FAC	FACU species35
3. Ilex opaca	10	Yes	FACU	UPL species 5 x 5 = 25
	10		FACU	85 300
4. Cornus florida		Yes		Column Totals: (A) (B)
5. Oxydendrum arboreum	5	No	UPL	Prevalence Index = B/A = 3.52
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
9	50			3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 25		= Total Cove	r 10	4 - Morphological Adaptations ¹ (Provide supporting
<u> </u>	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation ¹ (Explain)
1				Problematic Hydrophytic Vegetation (Explain)
2				4
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
	0	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 0		total cover:_	0	of size, and woody plants less than 5.20 it tall.
30 /0 of total cover	20 /6 01	total cover		Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1 Vitis rotundifolia	5	Voo	EAC	height.
1. Vilis roturiuriona		Yes	FAC	
2		-		
3		-		
4				l
5.				Hydrophytic Vegetation
<u> </u>	5	Total Cava		Present? Yes No
50% of total cover: 2.5		= Total Cover total cover:	1	
0070 01 total 00701.		lotal cover		
Remarks: (Include photo numbers here or on a separate si	heet.)			

Profile Des	cription: (Describe	to the dept				or confirm	the absen	ce of indicators.)
Depth	Matrix	0/	Redo	K Features	S T 1	Loc ²	T t	Demode
(inches) 0-2	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	<u></u> %	Type ¹	LOC	Texture SL	Remarks
								
2-12	10YR 4/4	100					SCL	
		·						- -
	· -	· ——						
								-
	·				-			_
	-				-			
							2	
	Concentration, D=Dep Indicators:	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
•							ina	licators for Problematic Hydric Soils ³ :
Histoso			Dark Surface	. ,	(0.5) =			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		-0\			(MLRA 136, 147)
	uck (A10) (LRR N)	o (A11)	Redox Dark S				_	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ed Below Dark Surfac	e (ATT)	Depleted Dar Redox Depre					Other (Explain in Remarks)
	Park Surface (A12)	DD N				I DD N		
	Mucky Mineral (S1) (I A 147, 148)	LKK N,	Iron-Mangan		es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MI DA 13	6 122\	31	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	d Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):		Neu i aleni i	iateriai (i	Z I) (IVILIX	A 121, 141	1	unless disturbed or problematic.
	Layer (ii observea).							
Type:								
	nches):						Hydric S	oil Present? Yes No
Remarks:								



Photo 1 Upland data point wnrc001_u1 facing northeast



Photo 2
Upland data point wnrc001_u1 facing southeast

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Northampton		Sampling Date: <u>5/22/2015</u>			
Applicant/Owner: Dominion					Sampling Point: wnrc001_u2			
Investigator(s): GB, CR		Section	on, Township, Range: No					
Landform (hillslope, terrace, e								
					Datum: WGS 1984			
Subregion (LRR of MLRA):	fine sandy loam 1 to	A nercent slones	Long:		. None			
Soil Map Unit Name: Craven								
Are climatic / hydrologic condi								
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal of	Circumstances" p	resent? Yes No			
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, ex	xplain any answer	s in Remarks.)			
SUMMARY OF FINDIN	GS – Attach si	te map showing sam	pling point location	ns, transects	, important features, etc.			
Hydrophytic Vegetation Pres	ent? Ves	✓ No						
Hydric Soil Present?			Is the Sampled Area	.,	No			
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	NO			
Remarks:								
Spiana data point tanon abov	Upland data point taken above toe of slope for a saturated to semi-permanently flooded PFO wetland - Jacks Swamp							
HYDROLOGY								
Wetland Hydrology Indicat	ors:		·		tors (minimum of two required)			
Primary Indicators (minimum	of one is required;		<u> </u>	Surface Soil (, ,			
Surface Water (A1)		True Aquatic Plants (Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Pat				
Saturation (A3)		Oxidized Rhizosphere		Moss Trim Li				
Water Marks (B1)		Presence of Reduced			Vater Table (C2)			
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burr				
Drift Deposits (B3) Algal Mat or Crust (B4)		Thin Muck Surface (COther (Explain in Ren			sible on Aerial Imagery (C9) ressed Plants (D1)			
Iron Deposits (B5)		Other (Explain in Ren	inanto)	Geomorphic				
Inundation Visible on Ae	rial Imagery (B7)		-	Shallow Aqui				
Water-Stained Leaves (I	• • • •		•		phic Relief (D4)			
Aquatic Fauna (B13)	-,			FAC-Neutral	. , ,			
Field Observations:								
Surface Water Present?	Yes No _	Depth (inches):						
Water Table Present?		Depth (inches):						
Saturation Present?		Depth (inches):		ydrology Presen	t? Yes No			
(includes capillary fringe)		2		1-1-1-				
Describe Recorded Data (str	eam gauge, monitor	ring weii, aeriai photos, pre	vious inspections), ir avail	lable:				
Remarks:								
no hydrology indicators prese	ent							

20	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30)	<u>% Cover</u> 40	Species? Yes	Status FAC	Number of Dominant Species
1. Pinus taeda	15	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Liquidambar styraciflua				Total Number of Dominant
3. Liriodendron tulipifera	10	No	FACU	Species Across All Strata: 9 (B)
4. Quercus michauxii	5	No	FACW	Percent of Dominant Species
5. Quercus alba	5	No	FACU	That Are OBL, FACW, or FAC: 55.5555555 (A/B)
6				
7				Prevalence Index worksheet:
	75	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 37.	5 20% of	total cover:	15	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1. Liquidambar styraciflua	15	Yes	FAC	FAC species 91 x 3 = 273
2. Oxydendrum arboreum	12	Yes	UPL	FACU species44 x 4 =176
3. Carpinus caroliniana	8	No	FAC	UPL species12 x 5 =60
4. llex opaca	7	No	FACU	Column Totals: 156 (A) 527 (B)
5. Fagus grandifolia		No	FACU	(-)
6. Quercus michauxii	4	No	FACW	Prevalence Index = B/A =3.37
	· -	· 	TACVV	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9		. <u></u>		3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	400	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:25.	5 20% of	total cover:	10.2	
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
1. Chasmanthium sessiliflorum	7	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Mitchella repens	2	Yes	FACU	
3				¹Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
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	·	·		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 Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 4.5	20% of	total cover:	1.8	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)		.,	=	height.
1. Parthenocissus quinquefolia	8	Yes	FACU	
2. Vitis aestivalis	7	Yes	FACU	
3. Smilax rotundifolia	6	Yes	FAC	
4		· <u></u>		Hydrophytic
5.				Hydrophytic Vegetation
	21	= Total Cov	er	Present? Yes No
50% of total cover: 10.8	_ `	total cover:	4.0	
Remarks: (Include photo numbers here or on a separate s				
(,			

Profile Des	cription: (Describe t	o the depth	needed to document the indicator or conf	irm the al	sence of indicators.)
Depth	Matrix		Redox Features	_	
(inches) 0-5	Color (moist) 2.5Y 3/2	<u>%</u> 100	Color (moist) % Type ¹ Loc ²		ture Remarks SL
5-12	2.5Y 5/3	100			SL .
12-19	2.5Y 6/4	100		5	SL
19-27	2.5Y 6/6	100		S	CL
		etion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	2Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:				Indicators for Problematic Hydric Soils ³ :
Histoso			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA 14		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Surface (S9) (MLRA 147, 148	3)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
	d Layers (A5) uck (A10) (LRR N)		Depleted Matrix (F3)Redox Dark Surface (F6)		(MLRA 136, 147) Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	(A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)	(,,,,	Redox Depressions (F8)		Guioi (Explain in Nomano)
	Mucky Mineral (S1) (L	RR N,	Iron-Manganese Masses (F12) (LRR N,		
	A 147, 148)		MLRA 136)		
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)		³ Indicators of hydrophytic vegetation and
Sandy	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA		wetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 127,	147)	unless disturbed or problematic.
	Layer (if observed):				
Type: no	one		<u> </u>		,
Depth (ir	nches):		<u> </u>	Hydı	ric Soil Present? Yes No
Remarks:					



Photo 1
Upland data point wnrc001_u2 facing northwest



Photo 2
Upland data point wnrc001_u2 facing southwest

Project/Site: Atlantic Coast Pi	peline	City/	County: Northampton		Sampling Date: <u>5/22/2015</u>	
Applicant/Owner: Dominion			,	State: NC	Sampling Point: wnrc001_u3	
Investigator(s): GB, CR Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, e						
Cubranian (LDD an MLDA). P	ic.). <u>c </u>	26 53628126	-77.5	032509	Datum: WGS 1984	
Soil Map Unit Name: Bonneau	u loamy sand 0 to	6 percent slopes	Long:		. None	
Are climatic / hydrologic condi						
Are Vegetation, Soil	, or Hydrolog	gy significantly distu	urbed? Are "Normal	Circumstances" p	resent? Yes No	
Are Vegetation, Soil	, or Hydrolog	gy naturally problen	natic? (If needed, ex	xplain any answer	s in Remarks.)	
SUMMARY OF FINDIN	GS – Attach s	site map showing sa	mpling point location	ns, transects,	important features, etc.	
Hudrophytic Vagotation Broa	ent? Voc	√ No				
Hydrophytic Vegetation Pres Hydric Soil Present?		No	Is the Sampled Area		4	
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No	
Remarks:						
Upland data point taken abov	e toe of slope for a	a saturateu to semi-perman	lentry flooded FT O welland	- Jacks Swamp		
HYDROLOGY						
Wetland Hydrology Indicat	ors:			Secondary Indicat	tors (minimum of two required)	
Primary Indicators (minimum	of one is required			Surface Soil (` '	
Surface Water (A1)		True Aquatic Plants		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide O		Drainage Pat		
Saturation (A3)				Moss Trim Lir		
Water Marks (B1)		Presence of Reduce			Vater Table (C2)	
Sediment Deposits (B2)		Recent Iron Reducti		Crayfish Burr		
Drift Deposits (B3) Algal Mat or Crust (B4)		Thin Muck Surface (sible on Aerial Imagery (C9) ressed Plants (D1)	
Iron Deposits (B5)		Other (Explain in Ne	anarks)	Geomorphic I		
Inundation Visible on Ae	rial Imagery (B7)		•	Shallow Aquit		
Water-Stained Leaves (,		•		phic Relief (D4)	
Aquatic Fauna (B13)	,			FAC-Neutral	, ,	
Field Observations:					<u></u>	
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?		Depth (inches):				
Saturation Present?		Depth (inches):		ydrology Present	t? Yes No	
(includes capillary fringe)		enine well conicle better as	ii	labla:		
Describe Recorded Data (str	eam gauge, monito	toring well, aerial photos, pr	evious inspections), if avail	iable:		
Remarks:						
no hydrology indicators prese	ent					

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	
1 Pinus taeda	65	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)
2. Liriodendron tulipifera	5	No	FACU	That Are OBE, I ACW, OF I AC (A)
3. Liquidambar styraciflua		No	FAC	Total Number of Dominant
		No	FACU	Species Across All Strata: (B)
4. Quercus alba			TACO	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 75 (A/B)
6				, ,
7.				Prevalence Index worksheet:
	80	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover: 40		total cover:_	16	OBL species0 x 1 =0
15	2070 01			FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size:) 1. Symplocos tinctoria	12	Yes	FAC	FAC species 128 x 3 = 384
				00
2. Liquidambar styraciflua	10	Yes	FAC	FACU species x 4 = 92 0
3. Quercus alba	8	No	FACU	UPL species $\begin{array}{c} 0 \\ 151 \\ \end{array}$ $\begin{array}{c} x \ 5 = 0 \\ 476 \\ \end{array}$
4. Pinus taeda	7	No	FAC	Column Totals: (A) (B)
5. Carya tomentosa	6	No		
6				Prevalence Index = B/A = 3.15
· ·				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 21.5	20% of	total cover:_	8.6	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Mitchella repens	3	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Asplenium platyneuron	2	Yes	FACU	
3. Panicum capillare	2	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8.				
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	7			Herb – All herbaceous (non-woody) plants, regardless
2.5		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3.5	20% of	total cover:_	1.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Smilax rotundifolia	15	Yes	FAC	
2. Vitis rotundifolia	12	Yes	FAC	
3.				
1				
T				Hydrophytic
5				Vegetation Present? Yes No No
500/ () 13.5		= Total Cove	r 5.4	1105cm: 105 NO
50% of total cover: 13.5		total cover:_		
Remarks: (Include photo numbers here or on a separate sl	neet.)			

Profile Des	cription: (Describe	to the dept				or confirm	the absen	ce of indicators.)
Depth	Matrix		Redo	k Feature:	S1	. 2		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-6	7.5YR 4/3	100					SL	
6-20	7.5YR 5/6	100					SL	
	• 1							_
								
					-			
						· ——		
	· ·							
	· -	·						
¹ Type: C=C	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Ind	licators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be	. ,	ce (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		•	,		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat		,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Dar					Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
Sandy	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) (LRR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	³ I	Indicators of hydrophytic vegetation and
Sandy	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8)	wetland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent N	1aterial (F	21) (MLR	A 127, 147	7)	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type: _n	one							
Depth (ir							Hydric S	oil Present? Yes No 🗸
Remarks:	,						1	
rtomanto.								



Photo 1 Upland data point wnrc001_u3 facing north



Photo 2
Upland data point wnrc001_u3 facing northwest

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Northampton		Sampling Date: 5/20/2015	
Applicant/Owner: Dominion					_ Sampling Point: wnra001f_w	
Investigator(s): GB, CR Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, et						
Subregion (LRR or MLRA): P	Lloamy sand 6 to	_ Lat:	Long:		. None	
Soil Map Unit Name: Bonneau						
Are climatic / hydrologic condi-		·				
Are Vegetation, Soil	, or Hydrology	y significantly distur	bed? Are "Normal	Circumstances" pr	esent? Yes No	
Are Vegetation, Soil	, or Hydrolog	y naturally problema	atic? (If needed, e	explain any answers	s in Remarks.)	
SUMMARY OF FINDIN	GS – Attach si	ite map showing sam	pling point locatio	ns, transects,	important features, etc.	
Hydrophytic Vegetation Pres	ont? Voc	✓ No				
Hydric Soil Present?	Yes	✓ No	Is the Sampled Area	4		
Wetland Hydrology Present?		_	within a Wetland?	Yes	No	
Remarks:						
Wetland data point taken for a	2 Seasonally Satura	ica i i o wellana locatea iii	a sware within a 10 10 y	car dia pine pianta		
HYDROLOGY						
Wetland Hydrology Indicat	ors:			Secondary Indicate	ors (minimum of two required)	
Primary Indicators (minimum	of one is required;	check all that apply)		Surface Soil C	Cracks (B6)	
Surface Water (A1)		True Aquatic Plants (etated Concave Surface (B8)	
High Water Table (A2)		or (C1)	✓ Drainage Patte			
Saturation (A3)		Oxidized Rhizosphere		Moss Trim Lin		
Water Marks (B1)		Presence of Reduced			/ater Table (C2)	
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro		
Drift Deposits (B3)		Thin Muck Surface (C			ible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Explain in Ren	narks)	Geomorphic F	essed Plants (D1)	
Inundation Visible on Ae	rial Imagery (R7)			Shallow Aquita	, ,	
Water-Stained Leaves (I					phic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutral 7	, ,	
Field Observations:					,	
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?		Depth (inches):				
Saturation Present?		Depth (inches):		lydrology Present	? Yes ✔ No	
(includes capillary fringe)						
Describe Recorded Data (str	eam gauge, monito	oring well, aerial photos, pre	vious inspections), if ava	ilable:		
Remarks:						
water stained leaves located	in scattered depres	sions				
	·					

Samplin	na Point:	wnra001f_	w
Sambill	ia Point.	***********	

20	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1. Pinus taeda	<u>% Cover</u> 40	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:11 (A)
2. Betula nigra	20	Yes	FACW	
3. Acer rubrum	2	No	FAC	Total Number of Dominant Species Across All Strata: 11 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
04		= Total Cover		OBL species $0 \times 1 = 0$
50% of total cover: 31	20% of	total cover:	12.4	74 X 1 =
Sapiling/Shrub Stratum (Plot size:)				FACW species x z =
1. Morella cerifera	15	Yes	FAC	FAC species x 3 =
2. Clethra alnifolia	12	Yes	FAC	FACU species X 4 =
3. Vaccinium corymbosum	10	Yes	FACW	UPL species x 5 =
4. Magnolia virginiana	10	Yes	FACW	Column Totals: (A) (B)
5. Acer rubrum	8	No	FAC	Prevalence Index = B/A = 2.64
6. Betula nigra	5	No	FACW	Trevalence index = B//(=
_				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	60			✓ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 30		= Total Cover	12	4 - Morphological Adaptations ¹ (Provide supporting
	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	00			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Andropogon glomeratus	20	Yes	FACW	Troblemane Tryarepriyae Vegetation (Explain)
2. Panicum capillare	10	Yes	FAC	Indicators of hydric soil and watland hydrology must
3. Chasmanthium sessiliflorum	10	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Dichanthelium scoparium	5	No	FACW	Definitions of Four Vegetation Strata:
5. Osmundastrum cinnamomeum	4	No	FACW	Definitions of Four Vegetation Strata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
0				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
24.5		= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 24.5	20% of	total cover:	9.8	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30)		.,	=	height.
1. Smilax rotundifolia	25	Yes	FAC	
2. Gelsemium sempervirens	10	Yes	FAC	
3				
4				Undrambutia
5.				Hydrophytic Vegetation
	35	= Total Cover		Present? Yes No
50% of total cover:17.5		total cover:	7	
Remarks: (Include photo numbers here or on a separate s		_		
Tromaino. (morado prioto hamboro here di ori a deparate d	11001.)			

100	Profile Des	scription: (Describe	to the dep	th needed to docur	nent the i	indicator	or confirm	the absenc	e of indicators.)
3-7 2.5Y 4/2 100 SL SL				Redo		s		_	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	(inches)			Color (moist)	%	Type ¹	Loc ²		Remarks
7-20 2.5Y 5/1 75 7.5YR 4/6 20 C PL/M SCL Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Soils³: Indicators for Problematic Hydric Soils F19 Indicators for Problematic Hydric Soils F19 Indicators for Problematic Hydric Soils F19 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators f1 Hydric Soil Present? Yes	0-3	2.5Y 3/2	100					SL	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histic Spipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) MLRA 147, 148) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N) MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) MLRA 136, 122) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Inone Depth (inches): Hydric Soil Present? Yes No Normalization: Normalization: Piedmont Floodplain Soils (F19) Hydric Soil Present? Yes No Normalization: Normalization: Piedmont Floodplain Soils (F19) MLRA 147, 148) Wetland hydrology must be present, unless disturbed or problematic.	3-7	2.5Y 4/2	100					SL	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histic Spipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) MLRA 147, 148) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N) MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) MLRA 136, 122) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Inone Depth (inches): Hydric Soil Present? Yes No Normalization: Normalization: Piedmont Floodplain Soils (F19) Hydric Soil Present? Yes No Normalization: Normalization: Piedmont Floodplain Soils (F19) MLRA 147, 148) Wetland hydrology must be present, unless disturbed or problematic.	7-20	2.5Y 5/1	75	7.5YR 4/6	20	С	PL/M	SCL	
Hydric Soil Indicators: Histosol (A1)		•							
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)		-							
Hydric Soil Indicators: Histosol (A1)		<u> </u>							
Hydric Soil Indicators: Histosol (A1)		<u> </u>							
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)	1Tuno. C. C	Concentration D. Dor	olotion DM	Doduced Metrix M	- Maaka			2l continu	DI Doro Lining M Motrice
Histosol (A1)			Jielion, Kivi	=Reduced Matrix, Mis	5=IVIASKE	J Sand Gr	allis.		
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Peleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (F6) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) MLRA 136, 147) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 147, 148) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 136, 122) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	•			Dork Surface	(07)				· · · · · · · · · · · · · · · · · · ·
Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Thin Dark Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (MLRA 147, 148) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No					. ,	co (S8) (N	M D A 1/17		
Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depleted Matrix (P2) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Type: Other (Explain in Remarks) Nemarks Very Shallow Dark Surface (TF12) Lepleted Dark Surface (F7) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Lepleted Dark Surface (F7) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Lepleted Dark Surface (F7) Other (Explain in Remarks) Nemarks Very Shallow Dark Surface (TF12) Lepleted Dark Surface (F7) Other (Explain in Remarks) Nemarks Very Shallow Dark Surface (TF12) Nemarks Very Shallow Dark Surface (TF12) Nemarks Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Nemarks Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Nemarks Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Nemarks Very Shallow Dark Surface (TF12) Nemarks Nemarks) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Nemarks Nemarks Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Nemarks Nema								140)	
Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) MLRA 136) MLRA 136, 122) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Hydric Soil Present? Yes No							, .,		
						. –,			
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) Red Parent Material (F21) (MLRA 127, 147) Depleted Dark Surface (F7) Depleted Dark Surface (F12) (LRR N, De						- 6)			
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)			ce (A11)	Depleted Dar	rk Surface	(F7)			
MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No	Thick D	Dark Surface (A12)		Redox Depre	essions (F	8)			
Sandy Gleyed Matrix (S4)			LRR N,			es (F12) (LRR N,		
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:none Depth (inches): Hydric Soil Present? Yes No								•	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type:none Depth (inches): Hydric Soil Present? Yes No									
Restrictive Layer (if observed): Type: none Depth (inches): Hydric Soil Present? Yes No									
Type: none Depth (inches): Hydric Soil Present? Yes No				Red Parent N	Material (F	21) (MLR	A 127, 147	') u	inless disturbed or problematic.
Depth (inches): No	Restrictive	· Layer (if observed)	:						
				<u></u>					
Remarks:	Depth (ii	nches):						Hydric So	oil Present? Yes No No
	Remarks:								



Photo 1 Wetland data point wnra001f_w facing north



Photo 2
Wetland data point wnra001f_w facing south

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Northampton	Sampling Date: 5/20/2015		
Applicant/Owner: Dominion		State: NC Sampling Point: wnra001_u		
	Section, Township, Range: No			
Landform (hillslope, terrace, etc.): gentle slope				
· · · · · · · · · · · · · · · · · · ·	Lat: 36.5351318 Long: -77.5			
Soil Map Unit Name: Bonneau loamy sand, 6 to 1	2 percent slopes	NWI classification: None		
Are climatic / hydrologic conditions on the site typi	cal for this time of year? Yes No	(If no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes No		
	naturally problematic? (If needed, e			
		ons, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes	V No Is the Sampled Area			
Hydric Soil Present? Yes	No. 4/	Yes No		
	No within a Wetland?	Yes No		
Remarks:				
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)	0.111 1.011 1	Moss Trim Lines (B16)		
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)		
Iron Deposits (B5)		Geomorphic Position (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)		
Water-Stained Leaves (B9)		Microtopographic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutral Test (D5)		
Field Observations:	V 5 4 6 4 5			
	Depth (inches):			
	Depth (inches):			
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches): Wetland F	Hydrology Present? Yes No		
	ing well, aerial photos, previous inspections), if ava	ilable:		
Remarks: no hydrology indicators present				
The flydrology indicators present				

Sampling	Point: wnra001_u
Sambilliu	POILL

•	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	75	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2				Total New horse (Descious)
3				Total Number of Dominant Species Across All Strata: 7 (B)
4				CPOSICO 7 III CII dida.
				Percent of Dominant Species That Are ORL FACW or FAC: 71.42857142 (A/R)
5				That Are OBL, FACW, or FAC:
b				Prevalence Index worksheet:
1	75			Total % Cover of: Multiply by:
27.5		= Total Cove	r 15	OBL species x 1 = 0
50% of total cover: 37.5	20% of	total cover:_		0 40
Sapiing/Snrub Stratum (Plot size:)				100 x 2 =
1. Gaylussacia baccata	10	Yes	FACU	FAC species x 3 =
2. Aralia spinosa	8	Yes	FAC	FACU species x 4 =
3. Vaccinium corymbosum	6	Yes	FACW	UPL species x 5 =
4. Ilex opaca	5	No	FACU	Column Totals:(A)(B)
5. Liquidambar styraciflua	5	No	FAC	24
6. Pinus taeda	5	No	FAC	Prevalence Index = B/A =3.1
7. Clethra alnifolia	4	No	FAC	Hydrophytic Vegetation Indicators:
8. Magnolia virginiana	3	No No	FACW	1 - Rapid Test for Hydrophytic Vegetation
8. Magnona virginiana		NO	TACW	✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
90		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 23	20% of	total cover:_	9.2	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				. ,
1. Chasmanthium sessiliflorum	5	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Cypripedium acaule	1	No	FACU	
3.				¹Indicators of hydric soil and wetland hydrology must
Δ				be present, unless disturbed or problematic.
5				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
1				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
	6	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:3	20% of	total cover:_	1.2	Was desired Allowed as a section than 0.00 ft is
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1 Vitis labrusca	8	Yes	FACU	noight.
2 Gelsemium sempervirens	7	Yes	FAC	
=: <u></u>				
3				
4				Hydrophytic
5				Vegetation No.
7.5		= Total Cove		Present? Yes No
50% of total cover: 7.5	20% of	total cover:_	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wnra001_u

Profile Des	cription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirm	the abse	ence of indicators.)
Depth	Matrix		Redo	x Features	31			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Textur</u>	re Remarks
0-4	2.5Y 3/3	100					SL	
4-12	2.5Y 5/4	100					SL	
12-22	2.5Y 6/6	100					SL	
	. .				-			
					-			
					-		-	
	<u> </u>							
	-				-		-	
1- 0.6							21	
	Concentration, D=Dep	oletion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		n: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
-			5 . 6 .	(O-)			"	•
Histoso			Dark Surface		(00) (1			2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be				148) _	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	. ,	•	47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		_	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mar		·C)			(MLRA 136, 147)
	luck (A10) (LRR N)	o (A11)	Redox Dark S				_	Very Shallow Dark Surface (TF12)Other (Explain in Remarks)
	ed Below Dark Surfac Oark Surface (A12)	e (ATT)	Depleted Dar Redox Depre				_	Other (Explain in Remarks)
	Mucky Mineral (S1) (I DD N	Iron-Mangan			I DD N		
	A 147, 148)	LIXIX IV,	MLRA 13		55 (1 12) (LIXIX IN,		
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	6 122)		³ Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				18)	wetland hydrology must be present,
	d Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed)		Red r drene n	natorial (17	Z I) (III ZIX	7. 127, 147	<u> </u>	unicos distarsed of prosiematio.
Type: n	one	•						
							1	
	nches):						Hydric	Soil Present? Yes No
Remarks:								



Photo 1 Upland data point wnra001_u facing north



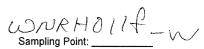
Photo 2 Upland data point wnra001_u facing west

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Project/Site: Applicant/Owner: Investigator(s): Section, Township, Range: _ Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Low Chaul Long: 77 30'56, S57 Subregion (LRR or MLRA): Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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? No Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes No Remarks: **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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) (FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Saturation Present? Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydro begy presen

WNRHOUTF - W Sampling Point: _____

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

T		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?		Number of Dominant Species
1. Queraus michogyxii		$-\sqrt{}$	FACW	That Are OBL, FACW, or FAC: (A)
2. Quescus Couritolia	_30_	$\overline{}$	FACW	Total Number of Dominant
3. Her rubran	8001)	FAC	Species Across All Strata: (B)
4. Quercus allon	10		FIACU	
5			,	Percent of Dominant Species
1 _				That Are OBL, FACW, or FAC: // (A/B)
				Prevalence Index worksheet:
7	* *************************************			Total % Cover of: Multiply by:
8	Soll			OBL species x 1 =
1.13		= Total Cov		FACW species x 2 =
50% of total cover:	20% of	total cover	:_16	
Sapling/Shrub Stratum (Plot size:)	47			FAC species x 3 =
1. Mar vulorum	10	\angle	FAC	FACU species x 4 =
2. Clothra Alnifolia	40	$\overline{}$	FACIN	UPL species x 5 =
3			•	Column Totals: (A) (B)
4				Describer on Index - D/A
5.				Prevalence Index = B/A =
6.		-		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	20/2			3 - Prevalence Index is ≤3.0¹
		= Total Cov	1 (Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 25	20% of	total cover	: _/	
Herb Stratum (Plot size:)	112	. /		¹ Indicators of hydric soil and wetland hydrology must
1. Hrundincoria gingantee	10	14	EAGW	be present, unless disturbed or problematic.
2. Clothon apritolia	30)	$\rightarrow \angle \angle$	FACW	Definitions of Four Vegetation Strata:
3. Corex intumescens		\triangle	EAW	The Medicular with the form
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6.				Continui Otombo Wiendowie wolad was de la continui
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m 550 and grouter than 5.25 k (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12.				
31.	90	= Total Cov	er , 🟑	A 70-7 LIMITAN
50% of total cover:	20% of	total cover	<u> </u>	
Woody Vine Stratum (Plot size:/)		,		
1. Smilax ritunditolie	10	ا کی	FAC	
2.		-	11-	
3				
1				
F				
5	10			Hydrophytic
		= Total Cov		Vegetation
50% of total cover:		total cover		100
Remarks: (If observed, list morphological adaptations below	ow).			



Depth	cription. (Describe i	to the depth i	needed to docu	ment the I	ndicator	or confirm	the absence of in	dicators.)
(inches)	Matrix Color (moist)			x Features			- .	
N-C	104R3/1		Color (moist)	%	Type ¹	Loc ²		Remarks
0 1/4	101/0/1						& lown	
4-16	104K6/1						fand lo	Hm

			***************************************			***************************************		
				-				
1		-						
Type: C=C	oncentration, D=Depl	etion, RM=Re	duced Matrix, M	S=Masked	Sand Gra	ains.	***************************************	Pore Lining, M=Matrix.
	Indicators: (Applica	able to all LK						roblematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)	•	Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, U	. []	(A9) (LRR O)
	istic (A3)	•	Thin Dark So Loamy Muck	unace (59)	(LKK 5, (E1) /I DD	(, U)	177	(A10) (LRR S)
	en Sulfide (A4)	•	Loamy Gley			0,		ertic (F18) (outside MLRA 150A, oodplain Soils (F19) (LRR P, S, '
	d Layers (A5)	Ý	Depleted Ma	*	,			Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T, U)]	Redox Dark		6)		(MLRA 15	
5 cm Mi	ucky Mineral (A7) (LR	R P, T, U)	Depleted Da	-				Material (TF2)
1	resence (A8) (LRR U)) _	Redox Depre		8)			w Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (L				U Other (Expla	ain in Remarks)
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Oc					
	rairie Redox (A12) (N	II PA 150A\)	☐ Iron-Mangar ☐ Umbric Surfa					of hydrophytic vegetation and
, , , , , , , , , , , , , , , , , , , 	/ucky Mineral (S1) (L		Delta Ochric			, 0)		nydrology must be present, sturbed or problematic.
·	Sleyed Matrix (S4)		Reduced Ve			0A. 150B)	unicas ui	sturbed or problematic.
Sandy F	Redox (S5)		Piedmont Fl				9A)	
	Matrix (S6)		Anomalous I	Bright Loar	ny Soils (F	20) (MLR	A 149A, 153C, 153I	O)
	rface (S7) (LRR P, S	, T, U)		******			•	
Type:	Layer (if observed):							
	ches):		<u></u>				Hydric Soil Pres	ent? Yes No
Remarks:				······			Tryunc 3011 F183	entr 165 140
		ſ	1			~		
		1.	LyDon	_		$\langle () \rangle$		
			W I I	2				1 1
1		ί,	1000		5e7	-	$P \wedge Q \wedge Q$	
		('	igor (50	7	prese	t
		('	1gov		50	~	prese	at the same of the
		('	igo.		50	4	prese	
		('	igo.		50	4	prese	
		('	igo.		50		prese	
		('	igo.		50	4	prese	
		('	igo.		50		prese	
		('	igo.		50		prese	
		('	igo.		50		prese	
		('	igo.		50		prese	
		('	igo.		50		prese	
		('	Y C		50		prese	
		('	Y		50		prese	
			Y		50		prese	
			i Govi		50		prese	
			Y CO		50		prese	
					50		prese	
			Y Con		50		prese	
					50		prese	

wnrh011f_w



Wetland data point wnrh011f_w facing east



Wetland data point wnrh011f_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Project/Site: Sampling Point! NRHO Applicant/Owner: Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Subregion (LRR or MLRA): Soil Map Unit Name: Nor Hol NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) _, Soil ____, or Hydrology __ _ significantly disturbed? Are "Normal Circumstances" present? Yes 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? Is the Sampled Area Hydric Soil Present? Yes within a Wetland? Wetland Hydrology Present? Yes Remarks: **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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches) Water Table Present? No Depth (inches) Saturation Present? Wetland Hydrology Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

WNRHOLL- U

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

Sampling Point:

Troo Stratum / Plot sine		Dominant		Dominance Test worksheet:
1. Linus to Sk	% Cover	Species?	Status FAC	Number of Dominant Species
2. Quarcus alba	3/		FACU	That Are OBL, FACW, or FAC: (A)
3.				Total Number of Dominant Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8.		***************************************		Total % Cover of: Multiply by:
	70	= Total Cov	er , ,	OBL species x 1 =
50% of total cover:	20% of	total cover	:_/4	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	2 ^			FAC species x 3 =
1. Quercus alba	20		FACU	FACU species x 4 =
2. Oxyclandron as boroa	10		FACU	UPL species x 5 =
3. Lyginston bar Styre The.	48		FAC	Column Totals: (A) (B)
5			FALL	Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8.				2- Dominance Test is >50%
40	87)	= Total Cov	ar 16	3 - Prevalence Index is ≤3.0¹
50% of total cover:				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 1 Cosman hum sessi / Horum	20		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria grannea	10	- 400	FACIN	Definitions of Four Vegetation Strata:
3. Rupus argatus	30	$\overline{}$	FAC	
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Sanling/Shrub Mondy plants avaliding time to
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8 9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height.
12				J
	3 0:	= Total Cov	er / Z	
50% of total cover: 🚽 💋	20% of	total cover:		
Woody Vine Stratum (Plot size:)	m ·			
1. Smelax rotunditole	ID		FAC	
2. Vitis votundi dola	20		FAC	
3				
4				
5		·		Hydrophytic
	30:	= Total Cov	er _	Vegetation
50% of total cover: 15	20% of	total cover:	_6	Present? Yes No
Remarks: (If observed, list morphological adaptations below	w).			

WIVRHO (1 - U Sampling Point:

Depth Matrix	th needed to document the indicator or confirm	i the absence of indicators.)
	Redox Features	,
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Remarks
0-1 LOYR4/2		
2-8 104R4/3		
SI / TO VIN EI/I		
<u> </u>		
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, L	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	└── Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	
Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S)	· Part	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Redox (S5)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Stripped Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 14 Anomalous Bright Loamy Soils (F20) (MLR	
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loanly Solls (F20) (WLR	A 149A, 153C, 153D)
Restrictive Layer (if observed):		
Type:		
Depth (inches):		\setminus
		Hydric Soil Present? Yes No
Remarks:		Hydric Soil Present? Yes No
	95 1.0	
	- Do Lydnzso	
	- Jo hydniso	
	Jo Lydnzso	
	Jo hydnzso	
	Jo Lydrizso	
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	Jo Lydnzso	
	Jo Lydrizso	
	Jo hydrizso	
	Jo Lydrizso	
	Jo Lydrizso	
	Jo Lydrizso	

wnrh011_u



Upland data point wnrh011_u facing east



Upland data point wnrh011_u facing north

wnrh011 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: SERP City/County	y: Northburgton Sampling Date: 8-14-12
Applicant/Owner: Dominion	State: Sampling Point NOR HOLD
Investigator(s): DDWEST a Section To	ownship, Range:
- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(concave, convex, none):
Subregion (LRR or MLRA): Lat: 30 31 4/1	556 Long: 77° 30' 59, 406" Datum: 65608
	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed?	
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing samplin	
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No Is the state of	ne Sampled Area
Wetland Hydrology Present?	nin a Wetland? Yes No
Remarks:	
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Saturation (A3) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I	Moss Trim Lines (B16) Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Tilled	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth (inches):	
Surface Water Present? Yes No Depth (inches): Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	inspections), if available:
Remarks:	<u></u>
	in process t
TI Warsing	ju present
	l l

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

Tree Stratum (Plot size:)			t Indicator	Dominance Test worksheet:
1. Pinus taeda	200ver	Species	Status	Number of Dominant Species
	10		1/40	That Are OBL, FACW, or FAC:(A)
2. Liquidomby Styps, thea	- 		FAC	Total Number of Dominant
3. Quescus alles			FACU	Species Across All Strata: (B)
4				(-/
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				!
8				Total % Cover of: Multiply by:
	60	= Total Co	ver	OBL species x 1 =
50% of total cover:	20% of	total cove	12	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	20 /0 01	total cove		FAC species x 3 =
	70	. //	500	FACU species x 4 =
	770	-	FAC	i l
2. Clothan alnitolic	70	$\overline{}$	FACW	UPL species x 5 =
3. Liriodendron talipitera	_5_		FACU	Column Totals: (A) (B)
4. Oxydendron arborea	-5		FACU	
5			***************************************	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
	70	= Total Co	ver .	
50% of total cover:	20% of	total cover	14	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:)	20 /6 01	total cover		
Tiero Stratom (Piot size:	75		,	¹ Indicators of hydric soil and wetland hydrology must
1. Frundingna grantea	<u>~</u>	\rightarrow	FACW	be present, unless disturbed or problematic.
2. Dichanthelium Scoprium	10	$\overline{}$	FACW	Definitions of Four Vegetation Strata:
3				_
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				of size, and woody plants less than 5.26 it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12				
	25:	= Total Cov	/er	
50% of total cover: 7.	20% of	total cover	. 7	
Woody Vine Stratum (Plot size: (c)	20 /0 01	(Otal Cover	. ———	
	27	. /	En	
	22	$ \checkmark$ $-$	1179	agent
2. Urtis rotundi Rolia	40	~	FAC.	
3				
4				
5.		/		
	Z.	. T		Hydrophytic
		Total Cov		Vegetation Present? Yes No
50% of total cover: 25	20% of	total cover	:	resenti res
Remarks: (If observed, list morphological adaptations below	w).			
				1

Profile Des	cription: (Describe to	o the depth r	eeded to docum	ent the ir	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix	~		(Features				
(inches)	Color (moist)		Color (moist)	%	_Type ¹ _	Loc ²		Remarks
0-6	109R 2/1						<u> 1000 m</u>	
6-16+	104R5/7	14	24/44	565		M	SCC	
				·				

	***************************************					***************************************		
								MMWWWWWWW.Conc. L. C.

¹ Type: C=C	concentration, D=Deple	etion. RM=Re	duced Matrix. MS	=Masked	Sand Gra	ains	2l ocation: Pl =l	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	ble to all LRI	Rs, unless other	wise note	d.)			roblematic Hydric Soils ³ :
☐ Histoso		j	Polyvalue Bel			RR S. T. U	1 cm Muck	(A9) (LRR O)
Histic E	pipedon (A2)	Ì	Thin Dark Sur					(A10) (LRR S)
	listic (A3)		Loamy Mucky	Mineral (F1) (LRR	(0)	Reduced Ve	ertic (F18) (outside MLRA 150A,B)
, 	en Sulfide (A4)	ļ	Loamy Gleye	•	-2)			loodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	}	Depleted Mat	, ,				Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, ucky Mineral (A7) (LRI		Redox Dark S	•	•		(MLRA 15	,
	resence (A8) (LRR U)		Depleted Darl Redox Depres		. ,			Material (TF2) w Dark Surface (TF12)
	uck (A9) (LRR P, T)	1	Mari (F10) (Li	•	'')			ain in Remarks)
	ed Below Dark Surface	(A11)	Depleted Och		MLRA 1	51)	Onior (Expir	an in recinario,
Thick D	ark Surface (A12)	<u> </u>	Iron-Mangane				Γ) ³ Indicators	of hydrophytic vegetation and
]mmd[Prairie Redox (A16) (M	′ 1	Umbric Surfac			, U)	wetland	hydrology must be present,
proming	Mucky Mineral (S1) (LI	RR O, S)	Delta Ochric (unless d	sturbed or problematic.
-	Gleyed Matrix (S4)	ļ	Reduced Vert					
7	Redox (S5)	-	Piedmont Flo	•	, ,	•	•	_,
	d Matrix (S6) urface (S7) (LRR P, S, "		Anomalous B	rignt Loan	ıy Solis (i	-20) (MLRA	A 149A, 153C, 153)
	Layer (if observed):	1, 0)						
Type:								
Depth (in	nches):		<u> </u>				Hydric Soil Pres	ent? Yes <u>/</u> No
Remarks:								
			1					
			/./	0			` (/	
			ldy	do	2	20	C/ Br	esen
							(
			$\overline{}$					
		*						
	× .							

wnrh010f_w



Wetland data point wnrh010f_w facing east



Wetland data point wnrh010f_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: SERP	City/County: North Hangle Sampli	Day 2/14/14
Applicant/Owner: DOMINION	State: NC Sampli	ng Point: 11 1/RHO10
A second	Section, Township, Range:	ing Folint. IN PRINCIPLE
	Local relief (concave, convex, none):	01(01)
Cubrosian (IRD a-MIDA)	2/2/1 2/7 - 7702/15 & 10	Slope (%):
Subregion (LRR or MLRA): Lat: 3/6	31'41.30Z Long: 77°30'59.18	(8 Datum: [22-20
Soil Map Unit Name: <u>Critiney fine smoy loom</u> S		
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present?	Yes No
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If needed, explain any answers in Re	marks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, impo	ortant features, etc.
Hydrophytic Vegetation Present? Yes No		
	Is the Sampled Area within a Wetland? Yes N	<i>></i>
Hydric Soil Present? Wetland Hydrology Present? Yes NoX	within a Wetland? Yes N	°
Not all three parameters	present	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (mi	nimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks	
Surface Water (A1) Aquatic Fauna (B1:) Sparsely Vegetated	Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15	(LRR U) Drainage Patterns (E	110)
Saturation (A3) Hydrogen Sulfide C	dor (C1) Moss Trim Lines (B1	6)
	res along Living Roots (C3) 📙 Dry-Season Water T	
Sediment Deposits (B2)	` '	
	on in Tilled Soils (C6) Saturation Visible on	
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface ☐ Iron Deposits (B5) ☐ Other (Explain in R	`	` '
Inundation Visible on Aerial Imagery (B7)	emarks)	· .
Water-Stained Leaves (B9)	Sphagnum moss (D8	· 1
Field Observations:		,,(
Surface Water Present? Yes No Depth (inches)	·	
Water Table Present? Yes No Depth (inches)		
Saturation Present? Yes No Depth (inches)	Wetland Hydrology Present? Ye	s No_ <u>-</u>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	•	
December Needs Data (officially gauge, monitoring well, acrial prote	s, previous інвресцонаў, іі available.	
Remarks:		
Wetland hydrology not	present	
		-

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

Sampling Point: WRHOID_CA

Coo colonida in				Sampling Folit.	
To Start of Colors		Dominant		Dominance Test worksheet:	•
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species	
1. Pinus teady	15	1/	FAC	That Are OBL*, FACW, or FAC:	(A)
2. Querens de alba	- 10		PACU		(' '
				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					(, , ,)
				Prevalence Index worksheet:	
7					
8				Total % Cover of: Multiply by:	_
	75			OBL species x 1 =	
	(Kana)	= Total Co	ver _		
50% of total cover: 😥	S 20% of	f total cover	. <	FACW species x 2 =	_
			*	FAC species x 3 =	
Sapling/Shrub Stratum (Plot size:)			10 3/1 2"		
1. Pines made	10	/	FAR	FACU species x 4 =	
2. Liquidambero Styronithera	110	$\overline{}$	TIME	UPL species x 5 =	
	- <u>40</u>		177		3
3. /- cer represe	10		FAC	Column Totals: (A)	- (R)
•					
4				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	-
				p===q	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8					
·				3 - Prevalence Index is ≤3.0¹	
	0.0	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain	in)
50% of total cover:	(20% of	f total cover	·		,
			•		
Herb Stratum (Plot size:)	10	1		¹ Indicators of hydric soil and wetland hydrology r	nust
1. Chasmanthium secsali Avea	10	√ .	PAC	be present, unless disturbed or problematic.	
			FAC		
2. Jerse Cografia			1 2-15	Definitions of Four Vegetation Strata:	
3					
				Tree – Woody plants, excluding vines, 3 in. (7.6	
4				more in diameter at breast height (DBH), regard	less of
5				height.	
6				Sapling/Shrub - Woody plants, excluding vines	
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall	
8				Herb – All herbaceous (non-woody) plants, rega	rdless
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine - All woody vines greater than 3.28	ft in
11				height.	
12	-				
	(>	= Total Co	ver		
50% of total cover:	5 20% A	f total cover	. 3		
	20 /0 01	. total cover			
Woody Vine Stratum (Plot size:)		/"			
1. With robushiblier	10	1	FW		
1. Ustra 101 - 101			1 1 1		
2.					
3					
o,					
4.					
5.					
·				Hydrophytic	
	- 40	= Total Co	ver _	Vegetation	
50% of total cover: ్రే	20% of	f total cover	ecohoru	Present? Yes No No	
		00101	`	I	
Remarks: (If observed, list morphological adaptations be	low).				

\sim	\sim	
-	6 1	

'6_4

SOIL						Sampling	Point:
Profile Desc	cription: (Describe to the	e depth needed to docum	ent the indicator o	or confirm t	he absence	of indicators.)	
Depth	Matrix	Redox	Features				
(inches)	Color (moist) 9	Color (moist)	% Type ¹	_Loc ² _	Texture \$ <	Rem	narks
3 -/	28484			-	54		
3 6	47 77						
6-16	7,577/6				<u> </u>		
			····				
¹Type: C=C	oncentration, D=Depletion	n, RM=Reduced Matrix, MS	 =Masked Sand Gra	ins.	² Location:	PL=Pore Lining, M	=Matrix.
Hydric Soil	Indicators: (Applicable	to all LRRs, unless other	•			for Problematic H	
Histosol			ow Surface (S8) (L l			Muck (A9) (LRR O)	
	pipedon (A2) stic (A3)		face (S9) (LRR S,			fuck (A10) (LRR S)	
	en Sulfide (A4)	Loamy Gleyed	Mineral (F1) (LRR Matrix (F2)	0)	71		tside MLRA 150A,B) (F19) (LRR P, S, T)
	d Layers (A5)	Depleted Matr	• •		\neg	alous Bright Loamy	
Organic	Bodies (A6) (LRR P, T, U		urface (F6)			RA 153B)	,
	icky Mineral (A7) (LRR P,	——————————————————————————————————————	` '		7-7	arent Material (TF2	
	resence (A8) (LRR U) uck (A9) (LRR P, T)	Redox Depres	• •		, ,	hallow Dark Surfac	
	d Below Dark Surface (A1	Mari (F10) (LF	ric (F11) (MLRA 15	(1)	Other ((Explain in Remark	5)
	ark Surface (A12)	'	se Masses (F12) (L	•) ³ Indic	ators of hydrophytic	c vegetation and
	rairie Redox (A16) (MLRA	🕽 150A) 🔲 Umbric Surfac	e (F13) (LRR P, T ,			land hydrology mus	•
	flucky Mineral (S1) (LRR (=17) (MLRA 151)		unle	ess disturbed or pro	blematic.
	Bleyed Matrix (S4) Redox (S5)	<u> </u>	c (F18) (MLRA 150		4 \		
,	Matrix (S6)		idplain Soils (F19) ight Loamy Soils (F	•	•	153D)	
	rface (S7) (LRR P, S, T, L		igin Louiny Cond (i	LO) (IIILIO	1407, 1000	, 1000)	
	Layer (if observed):						
Туре:							
Depth (in	ches):				Hydric Soil	Present? Yes_	No <u>/</u>
Remarks:	1,	indicaters	+		<u></u>		
17	elvic soil	1010000		resen			
VI Ju	*		Ø				
		ē					
	• •						

wnrh010_u



Upland data point wnrh010_u facing east



Upland data point wnrh010_u facing north

wnrh010 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Applicant/Owner: Sampling Point: WNR A Investigator(s): Section, Township, Range: _ Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): __ 31 25.888 Long: 77°31' 08. 29 Subregion (LRR or MLRA): DAMY SOAN Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology ____ ___ significantly disturbed? Are "Normal Circumstances" present? Yes 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: **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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Saturation Present? Wetland Hydrology Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

WNRH009	6	
Sampling Point:	·	W

Tron Charles (District		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. Duarcus michauxi,	% Cover	Species?	<u>Status</u> FACW	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Acar rubrum	25		FAC	That Are OBL, FACW, or FAC: (A)
3. Liquidantar styrosciffua	20		FAC	Total Number of Dominant Species Across All Strata: (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	******	***************************************		Total % Cover of: Multiply by:
8	90	= Total Cov		OBL species x 1 =
50% of total cover:		total cover	1 5 /	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	20 % 01	total cover		FAC species x 3 =
1. Hex opaca,	20		FAC	FACU species x 4 =
2. Quercies mychaelxii	78	$\overline{\mathcal{O}}$	FACW	UPL species x 5 =
3. Liquirocentra Sterraciffue	(10		FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6		***************************************		1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	47			3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	20% of	= Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot-size:			y <u> </u>	Indicators of hydric cell and wellowd hydroless, west
1. Humbinaria granka	<u>S</u>	$\underline{\hspace{1cm}}$	FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. 5.				more in diameter at breast height (DBH), regardless of height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11		·		height.
12	5	= Total Cov	er .	
50% of total cover 2.5		total cover	/	
Woody Vine Stratum (Plot size:)		. /		
1. Smelox rotrey ade volva		\sim	FAC	
2. Vitis rotunde folia	_5_	$\underline{\hspace{1cm}}$	FAC	and the state of t
3				
4	***************************************			
5	77			Hydrophytic
50% of total cover:		= Total Cov total cover:	}	Vegetation Present? Yes No
Remarks: (If observed, list morphological adaptations belo		total cover		
(() iot morphological adaptations belo	,.			

JNRH009f	,
Sampling Point:	\mathcal{L}

Profile Des	cription: (Describe to the dep	th needed to documen	t the in	dicator o	or confirm	the absence of indi	cators.)
Depth	Matrix	Redox Fe	atures				·
(inches)	Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	104R3/2					losan	
6-8	104R 4/2					Standy 100	
8 11	+10110 = 10	INVALILIASIA	7		61	<u> </u>	an
0-16	10916 3/2	104R4/445/6	<u> </u>		/N_	<u> 5CC</u>	
		,					
			-				- The state of the
			 -				
¹ Type: C=C	oncentration, D=Depletion, RM=	Reduced Matrix, MS=M	asked S	Sand Gra	ins.	² Location: PL=Po	ore Lining, M=Matrix.
Hydric Soil	Indicators: (Applicable to all	LRRs, unless otherwis	e noted	d.)	***************************************	Indicators for Pro	oblematic Hydric Soils ³ :
. Histosol	(A1)	Polyvalue Below	Surface	e (S8) (LI	RR S. T. U		-
Histic E	pipedon (A2)	Thin Dark Surfac	e (S9) ((LRR S, 1	r, U)	2 cm Muck (A	
	istic (A3)	Loamy Mucky Mi	neral (F	1) (LRR	O)		ic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	Loamy Gleyed M					odplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	Depleted Matrix (right Loamy Soils (F20)
	Bodies (A6) (LRR P, T, U)	Redox Dark Surfa				(MLRA 153)	B)
5 cm Mu	ucky Mineral (A7) (LRR P, T, U)					Red Parent M	aterial (TF2)
	resence (A8) (LRR U)	Redox Depression)			Dark Surface (TF12)
- program	ick (A9) (LRR P, T)	Marl (F10) (LRR				U Other (Explain	n in Remarks)
	d Below Dark Surface (A11)	Depleted Ochric				2	
	ark Surface (A12)	Iron-Manganese				•	f hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150<i>A</i> l ucky Mineral (S1) (LRR O, S)				U)		drology must be present,
	Bleyed Matrix (S4)	Delta Ochric (F17				unless dist	urbed or problematic.
	Redox (S5)	Reduced Vertic (I					
_	Matrix (S6)	Piedmont Floodp					
	rface (S7) (LRR P, S, T, U)	Anomalous Brign	t Loamy	y Solis (F	20) (MLRA	A 149A, 153C, 153D)	
	Layer (if observed):			w		I	
	cayer (ii observed).						_
Type:							\searrow
	ches):					Hydric Soil Preser	nt? Yes <u>/</u> No
Remarks:							
		110			1		\cap
		6/2.()=		_	5	11 ~	4/
		Myss	\mathcal{C}	- 7	0	A BUOK	sen y
						1	•
							İ

wnrh009f_w



Wetland data point wnrh009f_w facing east



Wetland data point wnrh009f_w facing south

WEILAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SEPP	City/County: North Handen Sampling Date: State: North Sampling Point NRH OC Section, Township, Range: NA Local relief (concave, convey, pone): Co. M. S.
Applicant/Owner: DOMINION	State: NC Sampling Point NRH OC
Investigator(s): DVWest	Section, Township, Range:
Landform (hillslope, terrace, etc.): HILLSLOPE	Local relief (concave, convex, none): CONVEX Slope (%): 3 1 2 4 , 9 2 7 " Long: 77 ° 3 l' 0 8 , 3 6 8 " Datum: Wiss
Subregion (LRR or MLRA): Lat: \(\)	31'24,927" Long: 77°31' 08,368" Datum: 1460
Soil Map Unit Name: Norto K sandy logm 2-	6% stope NWI classification:
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	
Attach site map snowing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present?	Willia Wolland
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Harl Deposits (B15)	
Saturation (A3) Hydrogen Sulfide (
	neres along Living Roots (C3) Dry-Season Water Table (C2)
	· · · · · · · · · · · · · · · · · · ·
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in F	· · · · · · · · · · · · · · · · · · ·
☐ Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
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 photo	os, previous inspections), if available:
Remarks:	
wetland hydrologer not p	resent

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

WARHOOQ U
Sampling Point:

A A	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	i (
1. tage (grand folio	30 FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Pince Handa	ZP TAC	That Ale Obe, I ACVV, OT Ac (A)
3. Queros cibe		Total Number of Dominant
	15 V ENCY	Species Across All Strata: (B)
4. Crandon Ser styracifles	10 FAC	
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		That Are OBL, FACW, or FAC: (A/B)
		Prevalence Index worksheet:
7.		Total % Cover of: Multiply by:
8		
**************************************	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover: (5	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)		FAC species x 3 =
1. Acres resour	10 V FAC.	FACU species x 4 =
2	<u> </u>	UPL species x 5 =
2. Ilax ofaca		
3. fine factor	<u> </u>	Column Totals: (A) (B)
4		Prevalence Index = B/A =
5		
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	= Total Cover	
50% of total cover:		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30)	20 % of total cover.	
		¹ Indicators of hydric soil and wetland hydrology must
1. Mitchelle rigens	- PACU	be present, unless disturbed or problematic.
2. januarghtes	15 _// FAC	Definitions of Four Vegetation Strata:
3. Chesmanthum sessaliflorum	5 V FAC	
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5		more in diameter at breast height (DBH), regardless of height.
5		neight.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Horb All harbassaus (non mande) alasta assessita
9		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10		or size, and weedy planta toos than size it tall.
		Woody vine - All woody vines greater than 3.28 ft in
11.		height.
12.		
	= Total Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size:)		
4 12° ks and 1° La L'	7	
1. U.T.S FORCED 1801.9		
2. Span (2) (10 ml, 40 / a	TAC	
3		
4.		
5		,
<u> </u>	11	Hydrophytic
##Uru	= Total Cover	Vegetation
50% of total cover:	20% of total cover: 💉 🖔	Present? Yes No
Remarks: (If observed, list morphological adaptations below	w).	
-		

_	_		_
c	n	ı	1
J	u	Ł	_

WNRHOOG - U

Depth			ocaca to acce	ament me i	ndicator	or confirm	the absence	of indicators.)
	Matrix		Red	lox Feature	S			
(inches)	Color (moist)	<u>%</u> C	Color (moist)	%	_Type ¹	_Loc ²	<u>Texture</u>	Remarks
25	104R 4/Z							
3-10	104R 4/3				***************************************			
10-16	<u> 104R 5/3</u>	7					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			-					
	_							<u> </u>

1T								
Hydric Soil	oncentration, D=Deplet Indicators: (Applicab	tion, RM=Red	uced Matrix, M	//S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Histoso		ile to all LIXIX			-	DD 0 T 11	L	for Problematic Hydric Soils ³ :
	pipedon (A2)	F	Polyvalue B Thin Dark S					luck (A9) (LRR O) luck (A10) (LRR S)
	istic (A3)		Loamy Muc					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley			•		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted M	, ,				lous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P, Tucky Mineral (A7) (LRR	, U)	Redox Dark	,	•			(A 153B)
Muck P	resence (A8) (LRR U)	. F, 1, U)	Depleted Da Redox Depr				1 1	rent Material (TF2)
	uck (A9) (LRR P, T)	İ	Marl (F10) (,,			nallow Dark Surface (TF12) Explain in Remarks)
Deplete	d Below Dark Surface (A11) <u>[</u>	Depleted O	chric (F11)				explain in remainey
	ark Surface (A12)		Iron-Mangai	nese Masse	es (F12) (I	_RR O, P,	T) ³ Indica	ators of hydrophytic vegetation and
	rairie Redox (A16) (ML /lucky Mineral (S1) (LR		Umbric Surf	face (F13) (LRR P, T,	U)		and hydrology must be present,
	Bleyed Matrix (S4)	T (1, 3)	Delta Ochrid Reduced Ve			0A 150B)	unle	ss disturbed or problematic.
- Control	Redox (S5)	İ	Piedmont FI)A)	
	Matrix (S6)						A 149A, 153C,	153D)
	rface (S7) (LRR P, S, T Layer (if observed):	r, u)			*****			
Restrictive	Laver (ii observed):							
Type:								
Type:							though our	· · · · · · · · · · · · · · · · · · ·
Depth (in	ches):						Hydric Soil	Present? Yes No
							Hydric Soil I	Present? Yes No
Depth (in							Hydric Soil	Present? Yes No
Depth (in			a. 9		0			Present? Yes No
Depth (in				L18	- Qa	. C S		Present? Yes No
Depth (in			No	hy	In	.C 5	Hydric Soil	Present? Yes No
Depth (in			No	hy	In	· C S		Present? YesNo
Depth (in			No	hy	In	.C S		Present? YesNo
Depth (in			No.	hy	In	.c 5		Present? YesNo
Depth (in			No	hy	Dr	· C S		Present? YesNo
Depth (in			Mo	hy	In	, C S		Present? YesNo
Depth (in			No	hy	In	C 5		Present? YesNo
Depth (in			No	hy	In	C 5		Present? YesNo
Depth (in			No	hy	In	· C 5		Present? YesNo
Depth (in			No	hy	In	· C S		Present? Yes No
Depth (in			No	hy	In	C 5		Present? Yes No
Depth (in			No	hy	In	C 5		Present? Yes No
Depth (in			No	hy	In	· C S		Present? YesNo
Depth (in			No	hy	Da	C 5		Present? YesNo
Depth (in			No	kg	In	· C S		Present? YesNo
Depth (in			No	Ly	In	, C S		Present? Yes No
Depth (in			No	hy	In	.C S		Present? Yes No

wnrh009_u



Upland data point wnrh009_u facing east



Upland data point wnrh009_u facing north

wnrh009 soils



Wetland/upland soils

WEILAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP	City/County: Northampton Sampling Date:
Applicant/Owner: Down 100	State: NC Sampling Point: RHOO
Investigator(s): DWEST	Section, Township, Range:
Landform (hillslope, terrace, etc.): Boxon land	Local relief (concave, convex, none): LONCAVE Slope (%):
Subregion (LRR or MLRA): Lat: 24.0	3/122.160 Long: 773/12.066 Datum: WS6 52
Soil Map Unit Name: We how kee	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	· · · · · · · · · · · · · · · · · · ·
	g sampling point locations, transects, important features, etc.
Attach site map showing	y sampling point locations, transects, important reatures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	within a Wetland? Yes No
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) Aquatic Fauna (B1	
High Water Table (A2) High Water Table (A2) Marl Deposits (B1	
Saturation (A3) Hydrogen Sulfide Water Marks (B1) Oxidized Rhizospi	Odor (C1)
Sediment Deposits (B2) Presence of Redu	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	e (C7) Geomorphic Position (D2)
Iron Deposits (B5)	Remarks)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches	s)·
	s):
Saturation Present? Yes No Depth (inches	s): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photons are considered by the control of the contr	los, previous inspections), if available:
Remarks:	
Hudrdoge	y present

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

WNRHOOSE Sampling Point:

	Ab1-t- Di(1-tit-	Camping Folia.
Tree-Stratum (Plot size:)	Absolute Dominant Indicator	Dominance Test worksheet:
1. Tinus teeda	% Cover Species? Status	Number of Dominant Species
	30 / FAC	That Are OBL, FACW, or FAC:(A)
2. Liquidant Styraci Pluce	20 V FAC	Total Number of Deminent
3. Acor rubnem	10 FAC	Total Number of Dominant Species Across All Strata: (B)
l '		Species Across Air Strata(B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		
		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		
	= Total Cover	OBL species x 1 =
50% of total cover: 30	20% of total cover:	FACW species x 2 =
	2070 01 (0(0) 00701.	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	15	FACU species x 4 =
1. Liquid surper styrace This	13 V/ FAC	
2. Magnolia Virgina	20 U/ FAKh	
12 (6)	30 V FACE	/ Column Totals: (A) (B)
4. Hear rubrum		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		
		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8.		3 - Prevalence Index is ≤3.0¹
	75 = Total Cover	<u></u>
50% of total cover: 27,		Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size:)	28	¹ Indicators of hydric soil and wetland hydrology must
1. Rubus homer cercutus.	30 +1 FAC	
2. Rhyn chospora cophalante	W 15 BB	Definitions of Four Vegetation Strata:
3. Chasman their Jakum		
3. Crasman Min Joyum	- IS FACE	
4. Arundinaria gagnontea	30 \ FACH	more in diameter at breast height (DBH), regardless of
		height.
		·
6.		Sapling/Shrub - Woody plants, excluding vines, less
7.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Harb All borbaccous (non woods) plants regardless
		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		of size, and woody plants less than 5.20 it tall.
10.		Woody vine - All woody vines greater than 3.28 ft in
11.		height.
12		
	9 0 -	•
1.17	= Total Cover	
50% of total cover: <u>~//</u> 3	20% of total cover: ()	.]
Woody Vine Stratum (Plot size:		
1		
	-	·
2.	-	.
3		
4		
		1
J		Hydrophytic \ \ /
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	uwj.	
§		

	cription: (Describe i	io ine depli	n needed to docur	nent the i	ndicator	or confirn	n the absence of in	dicators.)	
Depth	Matrix			x Feature				·	
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
2.5	104R3/1						lown		
5.8	104R 4/3						Sandy lo	74-142	
8-16+	104R 5/Z		104R 516	$\overline{\kappa}$	\overline{C}	m	501		
V (P									
									
						~~~~			
¹Type: C=C	oncentration, D=Depl	etion RM=F	Reduced Matrix Ms	S=Macker	Sand Gr		21 contion: DI =1	Pore Lining, M=Matrix	<u> </u>
Hydric Soil	Indicators: (Applica	ble to all L	RRs, unless other	rwise not	ed.)	aii 15.		Problematic Hydric S	
☐ Histoso			☐ Polyvalue Be			RR S. T. I	_	(A9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
	istic (A3)		Loamy Muck				777	ertic (F18) (outside M	LRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		F2)			loodplain Soils (F19) (	
	d Layers (A5)		Depleted Ma					Bright Loamy Soils (F	20)
-	Bodies (A6) (LRR P,		Redox Dark	•	•		(MLRA 15	•	
	ucky Mineral (A7) <b>(LR</b> resence (A8) <b>(LRR U</b> )		Depleted Date Redox Depre				7 1	Material (TF2) w Dark Surface (TF12	
	uck (A9) (LRR P, T)	ľ	Marl (F10) (L	•	0)			w Dark Surface (17 12 ain in Remarks)	.)
	d Below Dark Surface	e (A11)	Depleted Oct	•	(MLRA 1	51)	Jan Other (Expir	un in remarks,	
	ark Surface (A12)		☐ Iron-Mangan		•		T) ³ Indicators	of hydrophytic vegeta	ition and
	rairie Redox (A16) <b>(N</b>		***************************************			, U)	wetland l	hydrology must be pre	esent,
	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric					isturbed or problemati	c.
-	Gleyed Matrix (S4)		Reduced Ver						
	Redox (S5) I Matrix (S6)		Piedmont Flo					<b>.</b> .	
	irface (S7) <b>(LRR P, S</b>	T 11)	Anomalous E	sright Loai	ny Solis (	-20) (MLF	RA 149A, 153C, 153	(ט	
	made (Or) (mixix i , O	, ,, ,,							
							-		
Restrictive	Layer (if observed):								
Restrictive Type:	Layer (if observed):	***************************************					Hydric Soil Pres	ent? Yes	No
Restrictive	Layer (if observed):						Hydric Soil Pres	sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):							eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):			· ·	_			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doi(		,,0		sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	i Se	02		eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Hyd	Doic	_ Se	0~		sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Hyd	Doic		50		eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	i Se	50		sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	- Se			sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doi (	. Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	: Se			sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	· Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	i Ze			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	i Se			sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	Se			sent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	`Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	- Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	i Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- llyd	Doic	i Ze			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		- Wyd	Doic	- Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		Ilyd	Doic	Se Se			eent? Yes	No
Restrictive Type: Depth (in	Layer (if observed):		Ilyd	Doic	Se Se			eent? Yes	No

# wnrh008f_w



Wetland data point wnrh008f_w facing east



Wetland data point wnrh008f_w facing south

WETLAND DETERMINATION DATA				
Project/Site: SERP	City/County:	) all	24 - ab-	Sampling Date:
Applicant/Owner: Do M IN 10 N	_ City/County	04 / 61	State: NC	Sampling Point:
Investigator(s): DD WEST	_ Section, Township	n Range:	NA	
Landform (hillslope, terrace, etc.): HILLSLOPE  Subregion (LRR or MLRA): Lat: 36.	Local relief (conc	eve conve	v none): ( O P %	/Ex Sione (%): 6-10
Subregion (LRR or MLRA):	371 11.8	9/ Long	47703111	7 .(a 77 Datum 1 26 8
Soil Map Unit Name: Norto k opmy spind.	2-60/2 Storne	TT Long.	NIM/L classific	ention: NONE
Are climatic / hydrologic conditions on the site typical for this time of y				•
Are Vegetation, Soil, or Hydrology significantl				
Are Vegetation, Soil, or Hydrology naturally p			l, explain any answe	
SUMMARY OF FINDINGS – Attach site map showing	g sampling po	int local	tions, transects	i, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the San	anlad Ara		
Hydric Soil Present? Yes No	within a W	•		No <u> </u>
Wetland Hydrology Present? Yes No Remarks:	-		1 7 7	
Not all three parameter  HYDROLOGY	,		400 A 0 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)	١			ators (minimum of two required)
Surface Water (A1)  Aquatic Fauna (B)			Surface Soil	getated Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide			☐ Drainage Pa☐ Moss Trim L	''
	heres along Living I	Roots (C3)		Water Table (C2)
Sediment Deposits (B2)  Presence of Redu  Drift Deposits (B3)  Recent Iron Redu	• •	(00)	Crayfish Bur	
Algal Mat or Crust (B4)  Thin Muck Surface	e (C7)	(06)	<del></del>	isible on Aerial Imagery (C9) Position (D2)
Iron Deposits (B5) Other (Explain in I	` '		Shallow Aqu	` '
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral	1
☐ Water-Stained Leaves (B9)			Sphagnum n	noss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?  Yes No Depth (inchest)  Water Table Present?  Yes No Depth (inchest)	s):			
		19/-41		
(includes capillary fringe)			l Hydrology Preser	nt? Yes No_ <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspec	ctions), if a	vailable:	
Remarks:	MANAGE AND A STATE OF THE STATE			
Wetland hydrology not p	resent			

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

WUR	H008	ep-4	4
Sampling Point:			- ~

Tree Stratum /Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Quercus 9/ha	30		FACU	That Are OBL, FACW, or FAC: (A)
2. Carya tomintesca	10		VPL	That Ale OBE, I AOV, OI I AO(A)
				Total Number of Dominant
				Species Across All Strata: (B)
4				
5				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	60	= Total Co	ver	OBL species x 1 =
50% of total cover: 30	20% 0	f total cover	/ 7_	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	2070 01	total cove	· C Yearn	FAC species x 3 =
	70	1	8 × × ×	
1. Liquidanber styree Hag			T-X	FACU species x 4 =
2. Orydendera orboreum			EACY	UPL species x 5 =
3. Carro los posos	5		UPL	Column Totals: (A) (B)
4			James & British	
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
8.				2 - Dominance Test is >50%
0.	71			3 - Prevalence Index is ≤3.01
,		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: _ ℓ ℓ-	<u></u> 20% of	total cover	::	
Herb Stratum (Plot size: 30 )				1
1. Rubus a-surte	10	$\sim L$	FAV	¹Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
2. Clasting classifica	40	$\overline{}$	FIKW	Definitions of Four Vegetation Strata:
3. Mitchella signas	<u> </u>		FACU	The Manual Manua
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				l Holynu
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3,28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12				
	777	= Total Co	····	
500/ 6/ 1	,		1111	
50% of total cover:	20% of	total cover	:	
Woody Vine Stratum (Plot size:)		/		
1. Vitic coundifolia	20		FAC	
2. Parthopoisus auinguelles	\$	$\overline{\mathcal{A}}$	FAC	
		<del></del>	1 9 Wall	
3				
4				
5				Hydrophytic
• • • • • • • • • • • • • • • • • • • •	25	= Total Co	ver	Vagatation
EDDY of total account (7)	and aged "		yar.	Present? Yes X No No
50% of total cover: \( \lambda \)		total cover	•	
Remarks: (If observed, list morphological adaptations belo	w).			
				1

Profile Des	scription: (Des	cribe to the de	pth needed to docu	ment the ir	ndicator o	r confirm	the absence of in	dicators.)	
Depth (inches)	Ma Color (moi	ntrix		ox Features		1 - 2	<b>-</b> .		
(mones)	COIOI (MOI	St) %	Color (moist)	*%	Type'	Loc ²	Texture	Remarks	
11/2	- 107° 1/	<u> </u>					<u> </u>		
4-8	_ <u>~~</u>	<u> </u>					<u> </u>		
8-16	<u> 7.5 Y:</u>	<u> </u>					_SL		
	,								
				<del></del>			***************************************	***************************************	
				-					
	_								<del></del>
'Type: C=C	Concentration, D	=Depletion, RM	M=Reduced Matrix, M	IS=Masked	Sand Gra	ins.		Pore Lining, M=Matri	
·		pplicable to al	LRRs, unless othe				_	Problematic Hydric	Soils³:
Histoso	ol (A1) Epipedon (A2)		Polyvalue B				[]	(A9) (LRR O)	
1 ===	tistic (A3)		Thin Dark S Loamy Muc					(A10) <b>(LRR S)</b> ertic (F18) <b>(outside I</b>	#I DA 450A D\
1 Terminal	en Sulfide (A4)	*	Loamy Gley			<b>O</b> ,		loodplain Soils (F19)	
	ed Layers (A5)		Depleted M		-,			Bright Loamy Soils (	
1	c Bodies (A6) (L		Redox Dark	Surface (F6	•		(MLRA 1	53B)	
	fucky Mineral (A		· ' '				7-3	Material (TF2)	
. —	Presence (A8) <b>(L</b> luck (A9) <b>(LRR I</b>		Redox Depr	•	)			w Dark Surface (TF1	2)
I —	ed Below Dark S		Marl (F10) ( Depleted O		MI RA 15	1)	Utner (Expl	ain in Remarks)	
	Dark Surface (A1	, ,	Iron-Mangai				Γ) ³ Indicators	of hydrophytic vege	tation and
Coast F	Prairie Redox (A	16) <b>(MLRA 15</b> 0					•	hydrology must be p	
	Mucky Mineral (		Delta Ochrid	(F17) <b>(ML</b> F	RA 151)		unless d	isturbed or problema	tic.
	Gleyed Matrix (S	54)	Reduced Ve						
	Redox (S5)		Piedmont FI					<b>.</b> .	
	d Matrix (S6) urface (S7) <b>(LRi</b>	R.P. S.(T. U)	Anomaious	Bright Loam	ty Solls (F	20) (MLRA	\ 149A, 153C, 153	D)	
	Layer (if obser			***************************************					
Type:									. /
Depth (ir	nches):						Hydric Soil Pres	ent? Yes	No 💹
Remarks:		9 &							Ε
4	elsi's	coil	indica	Larc	ant		. ,		
17			100164	7	1101	P.M	esch		
						97			
,			-						
		*	•	*					
1									

# wnrh008_u

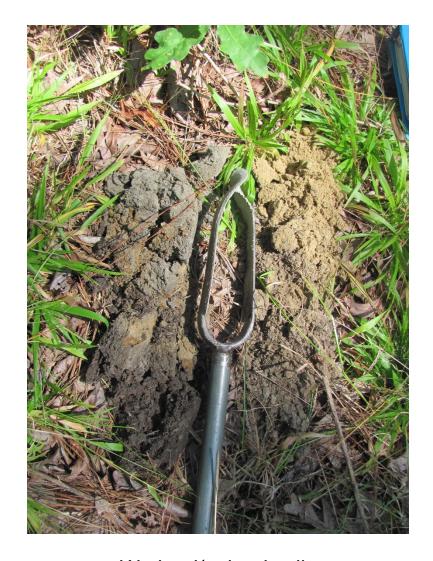


Upland data point wnrh008_u facing east



Upland data point wnrh008_u facing north

### wnrh008 soils



Wetland/upland soils

	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP	City/County: Northampton Sampling Date:
Applicant/Owner: Dominion	State: NC Sampling Point UNRHOC
Investigator(s): DOCOSST	Section, Township, Range:
Subregion (LRR or MLRA): Lat: 36°	Local relief (concave, convex, none): $27000000000000000000000000000000000000$
Soil Map Unit Name: Jehad Kee John	NWI classification:
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	
	·
Solving - Attach site map snowing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  Yes No  Yes No  No  Yes No	1 is the dampied Area ( )
HYDROLOGY	
Wetland Hydrology Indicators:	Consider Indicator (wining of the continue)
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B1)	- I
High Water Table (A2)  Marl Deposits (B15)	
Saturation (A3) Hydrogen Sulfide (	
Water Marks (B1) Qxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	ced Iron (C4) Crayfish Burrows (C8)
	ction in Tilled Soils (C6)
Algal Mat or Crust (B4)  Thin Muck Surface	
☐ Iron Deposits (B5) ☐ Other (Explain in F	
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	Spriagrium moss (Do) (ERR 1, U)
Surface Water Present? Yes No Depth (inches	5):
	);
Saturation Present? Yes No Depth (inches	s): Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photo	os pravious inspections) if available:
Seeds the recorded Data (stream gauge, monitoring well, acrial priori	os, previous inspections), il available.
Remarks:	
Hydrolog	y present

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

WN RH 007f-W Sampling Point:

Trop Stratum (Diet sine)	Absolute Dominant Indicator	Dominance Test worksheet:
1. Fraxinus parsi/vancas	% Cover Species? Status	Number of Dominant Species
The forey banks	Frew Frew	
2. Liquidambar styraeiflua	70 V FAC	Total Number of Dominant
3. Queorus micholuxii	15 - FACIN	Species Across All Strata: (B)
4. Dugrees Couri della	12 FACW	1
5. Tlex space	10 FAC	Percent of Dominant Species
l c		That Are OBL, FACW, or FAC: (A/B)
7.		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
8	1,20	OBL species x1 =
	Total Cover	
50% of total cover: SO	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
1. Fraxinus ponsylvanica	20 / +ACU	FACU species x 4 =
2. Tlex opaca	2D FAC	UPL species x 5 =
3. Liquidamber Sturver thea	10 V FAC	Column Totals: (A) (B)
4		
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	50 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 25	20% of total cover: /O	Li Froblematic Frydrophytic Vegetation (Explain)
Herb Stratum (Plot size:)	ne ~	1
1. Arundenceria armantea	15 / FACW	lndicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Corex intumestons	75 1	
3. Jaureuro rernua		Definitions of Four Vegetation Strata:
4. Wood onrda oereslete	- $ 0$ $0$ $0$	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
-	<u> </u>	more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub – Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		
9		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10		
11		Woody vine - All woody vines greater than 3.28 ft in
		height.
12.	50 - F-110	
	= I otal Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size:)		
1. Smilax rotundifolia	10 J FAC	
2		
3		
4		
5.		
	70	Hydrophytic \(\frac{1}{2}\)
500 (1.1)	= Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	1000
Remarks: (If observed, list morphological adaptations below	v).	

Profile Desc	cription: (Describe to the	depth needed to docun	nent the	indicator	or confirm	the absence of ind	licators.)
Depth _(inches)	Matrix	Redox	x Feature	s			,
1 - W	Color (moist) %	Color (moist)	%	Type ¹	_Loc ² _	<u>Texture</u>	Remarks
J- 1	104R 412	3-110 1116	~	·		lown	
10-10+		- 104R 4/6	2		m	10am	
10-16	104R 5/2_	104R 4/6	_5_		M	SCL_	
****							
			***************************************				
¹Type: C=C	oncentration, D=Depletion, I	RM=Reduced Matrix MS	=Macked	Sand Gr		2l costion: DI -D	and the fact of th
Hydric Soil	Indicators: (Applicable to	all LRRs, unless other	wise not	ed.)	XII 15.	Indicators for Pr	ore Lining, M=Matrix.  oblematic Hydric Soils³:
☐ Histosol	(A1)	Polyvalue Bel		•	RR S, T, U		-
	pipedon (A2)	Thin Dark Sur	face (S9	) (LRR S,	T, U)	2 cm Muck (A	
Black Hi	stic (A3) in Sulfide (A4)	Loamy Mucky	Mineral	(F1) (LRR	0)		tic (F18) (outside MLRA 150A,B)
1 == -	Layers (A5)	Loamy Gleyed		(F2)			odplain Soils (F19) (LRR P, S, T)
Organic	Bodies (A6) (LRR P, T, U)	Redox Dark S	` '	·6)		(MLRA 153	right Loamy Soils (F20)
5 cm Mu	cky Mineral (A7) (LRR P, T	, U) 🔲 Depleted Darl	k Surface	(F7)		Red Parent N	
	esence (A8) <b>(LRR U)</b> ick (A9) <b>(LRR P, T)</b>	Redox Depres	•	8)			Dark Surface (TF12)
	Below Dark Surface (A11)	☐ Marl (F10) <b>(Li</b> ☐ Depleted Och		(MI DA 15	:41	U Other (Explai	n in Remarks)
	irk Surface (A12)	Iron-Mangane				T) ³ Indicators of	of hydrophytic vegetation and
	airie Redox (A16) (MLRA 1	50A) Umbric Surfac	ce (F13) (	LRR P, T,	U)		drology must be present,
	lucky Mineral (S1) (LRR O,	<del>-</del>					turbed or problematic.
	ileyed Matrix (S4) edox (S5)	Reduced Vert					
	Matrix (S6)	Piedmont Floo				9A) A 149A, 153C, 153D]	
Dark Sur	face (S7) (LRR P, S, T, U)		·g = ou.	, 000 (1	20) (111210	1 1400, 1000, 1000,	
	.ayer (if observed):		****				
Type:							\/
Depth (inc	:hes):					Hydric Soil Prese	nt? Yes <u> </u>
Remarks:							
		-1					
		Ayono		~	()		$\Delta$
		Hydro		or	XF	212501	
		$\mathcal{O}$			1		

# wnrh007f_w



Wetland data point wnrh007f_w facing east



Wetland data point wnrh007f_w facing south

WEILAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP	City/County: 1001 M Clare to Sampling Date:
Applicant/Owner: Dominion	State: NC Sampling Point WNRHOC
Investigator(s): DD WEST	Section, Township, Range:
Subregion (LRR or MLRA):	Local relief (concave, convex, none): Slope (%): 2 - (c 31'05, 009" Long: 77 ° 37 ' / 9, 87 4" Datum: 657 6
Soil Map Unit Name: Bonneau Onmy sond	6-10% State NIMI classification:
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 pr	
	g sampling point locations, transects, important features, etc.
Actual site map showing	3 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
Wetland Hydrology Present? Yes No	
Not all three pare	a moder MOSOMA
1001 all 10 ll pare	Mary Jacob
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) Aquatic Fauna (B1	
High Water Table (A2)  Marl Deposits (B1)	
Saturation (A3) Hydrogen Sulfide (	
☐ Water Marks (B1) ☐ Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	ced Iron (C4) Crayfish Burrows (C8)
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Other (Explain in F	, , , , , , , , , , , , , , , , , , , ,
│	FAC-Neutral Test (D5)
Field Observations:	☐ Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches	3).
Water Table Present? Yes No Depth (inches	
	): Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Do Me	Grobogy present

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

WNRHOOT - U Sampling Point: _____

Trop Chrotism (District	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:  1. Lin oderdron fulliplance	%.Cover	Species?		Number of Dominant Species
	$\frac{\varphi_{\mathcal{O}}}{\varphi_{\mathcal{O}}}$	<u> </u>	FACU	That Are OBL, FACW, or FAC: (A)
2. flex opaca	<del>-12</del> .		FAC,	Total Number of Dominant
3. Frunus sgrotina	<u> </u>		FACU	Species Across All Strata: (B)
4. Liquidantour StyrAci Flua	10_		FAC	
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7.				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
8	01			OBL species x 1 =
(1)		Total Cov	1-8	FACW species x 2 =
50% of total cover:	20% of t	total cover	: _[0_	
Sapling/Shrub Stratum (Plot size:)	1	. [		FAC species x 3 =
1. 1 ox opoege	12		++K_	FACU species x 4 =
2. Liquidan Syrace Flue	10		FAC	UPL species x 5 =
3				Column Totals: (A) (B)
4				Decorder of the DM
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	75			3 - Prevalence Index is ≤3.0¹
19	<del>=</del>	Total Cov	rer 🗠	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 12 c	👱 20% of t	otal cover	:	
Herb Stratum (Plot size:	~	. /	s x	¹Indicators of hydric soil and wetland hydrology must
1. Vitis totrendifolia		$\mathcal{L}$	FAC	be present, unless disturbed or problematic.
2. Thistichum acros foides	5		FACU	Definitions of Four Vegetation Strata:
3.				_
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
5.				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				····
	70=	Total Cov	er	
50% of total cover:		otal cover:	/	
Woody Vine Stratum (Plot size: /) , )	20 /0 01 0	otal cover.		
1. Urtra rotundi kalisa	5	\ /	FOI	
310 1 Standard Tollar	<del></del> -	<del></del>	15 (a.C.)	
2. Invert Portired Police		\	175	
3.				
4				
5				Hydrophytic ( /
	10 =	Total Cov	er	Vegetation
50% of total cover:	20% of t	otal cover:	2_	Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
, , , , , , , , , , , , , , , , , , , ,	, .			

SOIL

WNRHOO7
Sampling Point:

	cription. (Describe to	the depth i	leeded to docu	ment the indi	cator or confirm	the absence of it	ndicators.)	
Depth	Matrix			x Features				
(inches)	Color (moist)	<u> </u>	Color (moist)	<u> </u>	ype ¹ Loc ²	Texture	Remarks	
2 45	104R 4/3					Strong	OAM	
3-16+	104R5/3			<del></del>		SAUSTI	DAM	
						(		
				<del></del>				
	<u> </u>							· · · · · · · · · · · · · · · · · · ·
'Type: C=C	oncentration, D=Deple	tion, RM=Re	duced Matrix, M	S=Masked Sa	and Grains.		Pore Lining, M=Matr	
l —	Indicators: (Applicat	ole to all LRI	_				Problematic Hydric	Soils':
Histoso	l (A1) pipedon (A2)	ļ			(S8) <b>(LRR S, T, L</b>	. —	(A9) (LRR O)	
	istic (A3)	1		urface (S9) <b>(L</b> ly Mineral (F1		777	(A10) <b>(LRR S)</b> 'ertic (F18) <b>(outside</b> l	MI DA 150A D)
	en Sulfide (A4)			ed Matrix (F2)		T1	Floodplain Soils (F19)	
Stratifie	d Layers (A5)	Ì	Depleted Ma				Bright Loamy Soils	
	Bodies (A6) (LRR P, T		Redox Dark	Surface (F6)		(MLRA 1		•
	ucky Mineral (A7) (LRR	(P, T, U)		rk Surface (F	7)		t Material (TF2)	
	resence (A8) (LRR U) uck (A9) (LRR P, T)	ļ	Redox Depr	` ,		· ·	ow Dark Surface (TF1	12)
	d Below Dark Surface(	(A11)	Marl (F10) (I	-KK U) hric (F11) <b>(M</b> I	PA 151)	Uther (Exp	lain in Remarks)	
	ark Surface (A12)	,,,,, 	_		F12) (LRR O, P,	T) ³ Indicator	s of hydrophytic vege	tation and
1 =	rairie Redox (A16) (ML	.RA 150A) 🗍		ace (F13) (LR			hydrology must be p	
	Mucky Mineral (S1) (LR	R O, S)	Delta Ochric	(F17) (MLRA	151)		disturbed or problema	itic.
	Gleyed Matrix (S4)	ļ			RA 150A, 150B)			
	Redox (S5)	+			(F19) (MLRA 14			
	d Matrix (S6) urface (S7) <b>(LRR P, S,</b> '	T !!\	Anomalous i	Bright Loamy	Solis (F20) (MLR	A 149A, 153C, 153	3D)	
		1, 0)						
Restrictive	Layer (if observed):	1, 0)	***************************************					
Restrictive Type:	Layer (if observed):	1, 0)	-			Hydric Soil Pre	sent? Yes	No
Restrictive Type:		1, 0)	_			Hydric Soil Pre	sent? Yes	No.
Restrictive Type: Depth (in	Layer (if observed):	1, 0)	_			Hydric Soil Pre	sent? Yes	, No.
Restrictive Type: Depth (in	Layer (if observed):							No.
Restrictive Type: Depth (in	Layer (if observed):			0				No
Restrictive Type: Depth (in	Layer (if observed):		- hu	Queix				No.
Restrictive Type: Depth (in	Layer (if observed):		s hey	Qru	· So			, No.
Restrictive Type: Depth (in	Layer (if observed):		· hy	Qru	So	Hydric Soil Pre		No.
Restrictive Type: Depth (in	Layer (if observed):		s hey	Qruè	. So			No
Restrictive Type: Depth (in	Layer (if observed):		hey	Qvv	So			No
Restrictive Type: Depth (in	Layer (if observed):		hey	Qru	So			No
Restrictive Type: Depth (in	Layer (if observed):		s hey	Qru	So			No.
Restrictive Type: Depth (in	Layer (if observed):		s hey	Qruè	So			No
Restrictive Type: Depth (in	Layer (if observed):		s hy	Qruè	So			No
Restrictive Type: Depth (in	Layer (if observed):		hey	Qvv	So			No
Restrictive Type: Depth (in	Layer (if observed):		hey	Qru	So			No
Restrictive Type: Depth (in	Layer (if observed):		s he	Qru	So			No
Restrictive Type: Depth (in	Layer (if observed):		s hey	Qru	So			No
Restrictive Type: Depth (in	Layer (if observed):		s hy	Qvu	So			No
Restrictive Type: Depth (in	Layer (if observed):		hey	Qvv	So			No
Restrictive Type: Depth (in	Layer (if observed):		hey	Qru	So			No
Restrictive Type: Depth (in	Layer (if observed):		- he	Qru	50			No
Restrictive Type: Depth (in	Layer (if observed):		- he	Qru	So			No

# wnrh007_u



Upland data point wnrh007_u facing east



Upland data point wnrh007_u facing north

### wnrh007 soils



Wetland/upland soils

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/6	County: Northampton Sampling Date: 11/18/15
Applicant/owner: Dominion	State: NC Sampling Point: Whro OOIf.
	ion, Township, Range: NOV
	Il relief (concave, convex, none): CONCOVE Slope (%): 2-5
	2334 Long: -77 , 5 2 6 3 11 Datum: WGS 8
Soil Map Unit Name: Caroline sundy Dam, 2-6%	Slopes 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 distu	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sar	npling 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
Wetland Hydrology Present? Yes No	Within a Welland?
Remarks:	
	T 15
NCWAM: Headwater Forest	
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Inc	
Drift Deposits (B3) Recent Iron Reduction in	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	ks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	Λ
Surface Water Present? Yes No Depth (inches):	114
Water Table Present? YesNo Depth (inches):	720
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
	9 11 11 11 11 11 11 11

2 0 1 20 1		Dominant	20.00	Dominance Test worksheet:	
Tree Stratum (Plot size: 30ft x 30ft)	% Cover	Species?		Number of Dominant Species	.
1. Pinus taeda	20		FAC	That Are OBL, FACW, or FAC:	A)
2. Aler rubrum	12		PAL	Total Number of Dominant	. 1
3. Betula nigra	_5_	N	FACW	Species Across All Strata: (I	B)
4				Percent of Dominant Species	
5					A/B)
6					
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	- 1
	40	= Total Cov	er	OBL species x 1 =	
50% of total cover: 20	20% of	total cover	8	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)				FAC species x 3 =	
1. Acer rubrum	10	Y	FAC	FACU species x 4 =	
2. Betula nigra	5	Y	PACW	UPL species x 5 =	
3. Ligustrum sinense	10	Y		Column Totals: (A)	(B)
4.				Developes Index - B/A -	
5				Prevalence Index = B/A =	
				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8	75	= Total Cov		3 - Prevalence Index is ≤3.01	
50% of total cover: 12.	5	= lotal Cov	er <	— Problematic Hydrophytic Vegetation¹ (Explain)	)
50% of total cover: 120	20% 01	total cover	:		
Herb Stratum (Plot size: 30ff x 30ff)				Indicators of hydric soil and wetland hydrology mu	ıst
1. none				be present, unless disturbed or problematic.	
2				Definitions of Four Vegetation Strata:	
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm	
4				more in diameter at breast height (DBH), regardles	ss of
5				height.	
6				Sapling/Shrub - Woody plants, excluding vines, le	ess
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb All herbaceous (non-woody) plants, regard	less
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine - All woody vines greater than 3.28 ft	t in
11				height.	
12					
	0	= Total Co	/er		
50% of total cover:		f total cover			
Woody Vine Stratum (Plot size: 30ft x 30ft)			No.		
1. Smilax rotundifolia	ID	Y	FAC.		
2. Lonivera japonica	5	Y	FACLA		
2					
3					
4					
5	15			Hydrophytic Vegetation	
7.5		= Total Co	-	Present? Yes No	
50% of total cover: 115		f total cover			
Remarks: (If observed, list morphological adaptations belo	ow).				

Sampling		wnra	001	f-D
Sampling	Point:	0.11.0		-0

SOIL

		to the depth	needed to docum			or contirn	n the absence	of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	Features %	Type	Loc²	Texture		Remarks	
0-6	10 YR 4/2	0	DYR 5/6	5	(	M	C.1		11011101110	
	10/12/10				-	11. 0	<u> </u>			
6-120	1046 411	95	DYR5/6	5		M	CL			
					A					
1= 0.0		leties DM-D	advised Matrix MC		Cond Co		21 postion:	DI -Doro I	ining, M=Matri	·
Type: C=C	oncentration, D=Dep Indicators: (Applic	etion, RM=R	educed Matrix, MS	=Masked	Sand Gr	ains.	Indicators	for Proble	matic Hydric	x. Solle ³ :
e 156		able to all Lr								30115 .
Histosol			Polyvalue Bel					Muck (A9) (I		
	pipedon (A2)		Thin Dark Sur					Muck (A10)		ILRA 150A,B)
_	istic (A3)		Loamy Mucky Loamy Gleyer			. 0)				(LRR P, S, T)
	en Sulfide (A4) d Layers (A5)		Depleted Mate	1	-2)				Loamy Soils (	
	: Bodies (A6) (LRR P	T 10	Redox Dark S		6)			RA 153B)	Loamy Cons (	20)
	ucky Mineral (A7) (LF		Depleted Dark				•	arent Mater	ial (TF2)	
	resence (A8) (LRR U		Redox Depres						k Surface (TF1	2)
The state of the s	uck (A9) (LRR P, T)	,	Marl (F10) (LI		,			(Explain in		,
	d Below Dark Surfac	e (A11)	Depleted Och		MLRA 1	51)				
	ark Surface (A12)		Iron-Mangane	se Masse	s (F12) (	LRR O, P,	T) ³ Indi	cators of hy	drophytic vege	ation and
Coast P	rairie Redox (A16) (N	ALRA 150A)	Umbric Surface	e (F13) (	LRR P, T	, U)	we	tland hydrol	ogy must be p	esent,
Sandy N	Mucky Mineral (S1) (I	RR O, S)	Delta Ochric (	F17) (ML	RA 151)		un	less disturbe	ed or problema	tic.
Sandy C	Gleyed Matrix (S4)		Reduced Vert							
Sandy F	Redox (S5)		Piedmont Floo	100						
	d Matrix (S6)		Anomalous Br	right Loan	ny Soils (	F20) (MLR	RA 149A, 1530	c, 153D)		
	rface (S7) (LRR P, S						_			
Restrictive	Layer (if observed):									
Туре:			_						/	
Depth (in	ches):		_				Hydric Sol	Present?	Yes X	No
Remarks:										
							,			
							t			
							· ·			
							· ·			
							,			
							,			
							·			

#### Environmental Field Surveys Wetland Photo Page



Wetland data point wnro001f_w facing south.



Wetland data point wnro001f_w facing west.

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Investigator(s): EST (L Roper, N. Murphrey) Section Landform (hillslope, terrace, etc.): Orange Local	relief (concave, convex, none): LON UNC Slope (%): 2-5° 336 Long: -77.52621 Datum: W658  No No (If no, explain in Remarks.)  reded? Are "Normal Circumstances" present? Yes No No No No No No No No No No No No No
SUMMARY OF FINDINGS – Attach site map showing san	
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland?  Yes No
HYDROLOGY	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Aquatic Fauna (B13)  High Water Table (A2) Marl Deposits (B15) (LRF)  Saturation (A3) Hydrogen Sulfide Odor (Continuous)  Water Marks (B1) Oxidized Rhizospheres at Presence of Reduced Iron Deposits (B3) Recent Iron Reduction in Thin Muck Surface (C7)  Iron Deposits (B5) Other (Explain in Remark Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	C1)
	Wetland Hydrology Present? Yes No evicus inspections), if available:

Sampling Point: WhroUU - 4

2561 2561	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)	% Cover Species? Status	Number of Dominant Species
1. Pinus taeda	ZO Y FAC	That Are OBL, FACW, or FAC:(A)
	5 N FAC	Total Number of Dominant
3. Aur rubrum	10 Y FAC	Species Across All Strata: (B)
4. Liguidambar Styraciflua		Percent of Dominant Species That Are OBL, FACW, or FAC: 88/ (A/B)
6.		
7		Prevalence Index worksheet:
8.		Total % Cover of:Multiply by:
	45 = Total Cover	OBL species x 1 =
50% of total cover: 27	- 5 20% of total cover: 9	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)		FAC species x 3 =
1. Pinus taeda	10 Y FAC	FACU species x 4 =
2. Liquidambar styraliflum		UPL species x 5 =
3. Alex rubrum		Column Totals: (A) (B)
4. Quercus alba		Description of Index - D/A -
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8	36	3 - Prevalence Index is ≤3.01
17.	25 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 121	5 20% of total cover: 5	
Herb Stratum (Plot size: 30ff x 30ff)		¹ Indicators of hydric soil and wetland hydrology must
1. none		be present, unless disturbed or problematic.
2		Definitions of Four Vegetation Strata:
3		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12.		
14.	= Total Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size: 30ff x 30ff)		
1. Smilax rotundifolia	10 Y FAC	
2		
3		
4		
5.	10 = Total Cover	Hydrophytic Vegetation
_		Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (If observed, list morphological adaptations be	ow).	

Profile Description: (Describe to the dept	h needed to docur	nent the in	dicator	or confirm	the absence of in	ndicators.)
Depth Matrix		x Features		1 = =2	Touture	Remarks
(inches) Color (moist) %  D-15 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Color (moist)	%	Type	Loc²	Texture	Remarks
0-15 10/25/3 100	1011051			1.0	01	
15-20 104/25/2 95	10100	5		M	_CL	
/	41					
			5300			
						_
				-		
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, Ma	S=Masked	Sand Gra	ins.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless othe	rwise note	d.)		Indicators for I	Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Be					
— Histic Epipedon (A2)	Thin Dark Su					(A10) (LRR S)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Muck Loamy Gleye			O)		ertic (F18) (outside MLRA 150A,B) Toodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma		2)			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark		5)		(MLRA 1	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da	rk Surface	(F7)		Red Parent	Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre	*	)			ow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L				Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Oc				T) 3Indicators	of hydrophytic vocatation and
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A	Iron-Mangan  ) Umbric Surfa					s of hydrophytic vegetation and hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric			٥,		disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ve			DA, 150B)		***************************************
Sandy Redox (S5)	Piedmont Flo					
Stripped Matrix (S6)	Anomalous B	Bright Loam	ny Soils (F	20) (MLR	A 149A, 153C, 153	(D)
Dark Surface (S7) (LRR P, S, T, U)						
Restrictive Layer (if observed):						
Type:					Hudda Sall Bros	sent? Yes No
Depth (inches):					Hydric Soil Pres	sent resNo
Remarks:						
					1	
						_ ====

#### Environmental Field Surveys Wetland Photo Page



Upland data point wnro001_u facing east.



Upland data point wnro001_u facing north.

WETLAND DETERMINATION DATA FOR	M – Atlantic and G	Bulf Coastal Pl	ain Region	
Project/Site: SE Reliability City/O	County: North	ampton	Sampling Date: 08/2	V;
Applicant/Owner: Dominion	/	State: NC	Sampling Point: WNK	161
10.4	on, Township, Range: _			113035
Landform (hillslope, terrace, etc.): Flat - depression Local			Slope (%):	
Cathorism (I BB as MI BA)	1 11 538" and	77621'50	1-374" Datum:	
Subregion (LRR or MLRA): Lat: 36 30 Soil Map Unit Name: Voven 8 5 9/3	Cong.	/ / 3( )	cation: Wether	
	- 0			_
Are climatic / hydrologic conditions on the site typical for this time of year? Y				
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Norma	al Circumstances"	present? Yes <u>K</u> No _	_
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locati	ons, transects	s, important features, e	tc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes A No No No No No No No No No No No No No	Is the Sampled Area within a Wetland?	Yes>	<_ No	
Wethand present				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two require	<u>d)</u>
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil		
Surface Water (A1) Aquatic Fauna (B13)			getated Concave Surface (B8	)
High Water Table (A2) Marl Deposits (B15) (LRI		Drainage Pa		
Saturation (A3) Hydrogen Sulfide Odor (0		Moss Trim L		
Water Marks (B1) Oxidized Rhizospheres a			Water Table (C2)	
Sediment Deposits (B2) Presence of Reduced Iro		Crayfish Bur		
Drift Deposits (B3) Recent Iron Reduction in	Tilled Soils (Cb)		isible on Aerial Imagery (C9) Position (D2)	
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remark	ke)	Shallow Aqu		
Iron Deposits (B5) Other (Explain in Remark Inundation Visible on Aerial Imagery (B7)	(5)	FAC-Neutral		
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Depth (inches):				
Water Table Present? Yes Vo Depth (inches):	1 "			
Saturation Present? Yes No Depth (inches):	Wetland	Hydrology Preser	nt? Yes <u>×</u> No	_
(includes capillary fringe)		W		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if av	ailable:		
Remarks:				
Hydrology present.				
1) / 1000				

	W 14 B 1 1 1 1 1 1 1 1 1	I Bendana Testanakahasti
Tree Stratum (Plot size: 36)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet:  Number of Dominant Species
1. Pinus tarda	46 FAC	That Are OBL, FACW, or FAC:(A)
2. Lightdambar Styreit Inc	10 T FAC	Total Number of Dominant Species Across All Strata:  (B)
3. 4.		
5		Percent of Dominant Species That Are OBL, FACW, or FAC: / DG (A/B)
6.		That Are OBL, FACW, OF FAC.
7		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
	30 = Total Cover	OBL species x 1 =
50% of total cover: 26	20% of total cover: 10	FACW species x 2 =
Santian (Shark Stratum (Diet sing)	20% of total cover 1	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30 )	5 Y OBL	FACU species x 4 =
1. Salix nigra	7 000	UPL species x 5 =
2. Acer rubina	5 Y FAC	Column Totals: (A) (B)
3. Liquidante Styraciffae 4. Para Magnalia Virginiana	- PAC	A STATE OF THE STA
6.		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
7		∠2 - Dominance Test is >50%
8	79 = Total Cover	3 - Prevalence Index is ≤3.0¹
	T = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size:)	2 Y EN	Indicators of hydric soil and wetland hydrology must
1. Eulalia Viningo	Z T FAC	be present, unless disturbed or problematic.
2. Chasmauthian laxun	Z Y FACW	Definitions of Four Vegetation Strata:
3		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Western Allers de dies arrectes than 2 29 ft in
11		Woody vine – All woody vines greater than 3.28 ft in height.
12		
12.	= Total Cover	
50% of total course 7	20% of total cover: 0.8	
	20% of total cover.	
Woody Vine Stratum (Plot size:)	5 Y FAC	
1. Toxicodendron radicons		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover: 2.	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo		
Hy draphy tie Veg.	is fresent.	

Sampling Point: WNRHOIZF-W

epth <u>Matrix</u>		Features		the absence of ir	
nches) Color (moist) %	Color (moist)	% Type	Loc²	Texture	Remarks
5-4 104KM 100				5. loan	
1->18 2.5441 90	164R 5/6	10		5. loan	Xa.
ype: C=Concentration, D=Depletion, RM dric Soil Indicators: (Applicable to all Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, L Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5)	M=Reduced Matrix, MS:  II LRRs, unless otherv  — Polyvalue Belo — Thin Dark Suri — Loamy Mucky — Loamy Gleyed — Depleted Matri — Redox Dark Si — Redox Depresi — Marl (F10) (LF — Depleted Ochri — Iron-Mangane DA) — Umbric Surfac Delta Ochric (I — Reduced Verti — Piedmont Floo	=Masked Sand G vise noted.)  ow Surface (S8) (face (S9) (LRR S Mineral (F1) (LR d Matrix (F2) ix (F3) urface (F6) c Surface (F7) sisions (F8) RR U) ric (F11) (MLRA se Masses (F12) ric (F13) (LRR P, F17) (MLRA 151) ric (F18) (MLRA 1 odplain Soils (F19)	LRR S, T, U , T, U) R O) (51) (LRR O, P, T, U) 50A, 150B) ) (MLRA 14	²Location: PL= Indicators for I  1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Paren Very Shalld Other (Exp	(A10) (LRR S)  Yertic (F18) (outside MLRA 150A, Floodplain Soils (F19) (LRR P, S, Test Bright Loamy Soils (F20)  53B)  It Material (TF2)  It Mater
TE - 기계에 하면지 하고 있었다. 14 프로그램 15 15 15 15 15 15 15 15 15 15 15 15 15	Piedmont Floo Anomalous Br	odplain Soils (F19 ight Loamy Soils	(MLRA 14	9A) A 149A, 153C, 153 Hydric Soil Pres	_

# wnrh012f_w



Wetland data point wnrh012f_w facing east



Wetland data point wnrh012f_w facing south

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: SERP Sampling Point: WNRHO12-Applicant/Owner: DOMI MION Section, Township, Range: _ NA Investigator(s): DNW FST Local relief (concave, convex, none): NovE Landform (hillslope, terrace, etc.): 4/4 Long: 77°31'51. 248' Subregion (LRR or MLRA): _ NWI classification: _______ Soil Map Unit Name: ______ ____ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes _____ No _ Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: COCATED WITHIN A WETLAND 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) Sparsely Vegetated Concave Surface (B8) ___ Aquatic Fauna (B13) Surface Water (A1) __ High Water Table (A2) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) __ Saturation (A3) __ Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Oxidized Rhizospheres along Living Roots (C3) __ Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) ___ Algal Mat or Crust (B4) Thin Muck Surface (C7) Other (Explain in Remarks) Shallow Aquitard (D3) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Wetland hydrology not present

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
D'	40	V	_	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
1. Pirus togala.	- 90	-	FAC	That Are OBL, FACTY, of FAC.
2. Quency , /acr. tolia				Total Number of Dominant
3. Liquidamber styreitly a			FAC	Species Across All Strata: (B)
4.				a the first terms of
5			(7	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
				That Are OBL, FACTV, of FAC.
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	50	= Total Cov	/er	OBL species x 1 =
50% of total cover: 2				FACW species x 2 =
	207001	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	(	V	FAC	FACU species x 4 =
1 Flex opaca	-2			UPL species x 5 =
2. Vaccina cornalesum	5_	<u>Y_</u>	FACW	Mark A. A. Carrier and C. Carrier an
3.				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				#2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
<u></u>	10	= Total Cov	·or	
				— Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of	total cover		
Herb Stratum (Plot size: 36)				¹ Indicators of hydric soil and wetland hydrology must
1.				be present, unless disturbed or problematic.
2. Chaconguthing laryon	7	~	TACIA	Definitions of Four Vegetation Strata:
			1	Dominions of Four Pogotation Strata.
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
227				than 3 in. DBH and greater than 3.28 ft (1 m) fall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
A789-				
12,	- 2			
	1	= Total Cov		
50% of total cover:	20% of	total cover	0.9	
Woody Vine Stratum (Plot size:)				
1. Cm. lax notembrolla	7		FAC	
-	10	V	EAC	
2. Josicodendron restours	10	$\overline{}$	TAU	
3				
4				The state of the s
5.				Hydrophytic
	12	= Total Cov	er er	Hydrophytic Vegetation
2220 20 20 2			2.1	Present? Yes _ No
50% of total cover:	20% of	total cover	2.7	
Remarks: (If observed, list morphological adaptations bel	ow).			
* **			(4)	
Hed at the Meantity	15	Drees	1	
Hydrophytic Vegetation	/	16760		

epth iches)	Color (moist)	_%_	Color (moist)	dox Features	pe¹ Loc²	<u>Texture</u>	Remar	ks
>-Y_	OYRYZ	100				<u>SL</u> _		
- 16.7	7,546/4	2	104P3/6	98		<u> 5L</u>		
								_
			(-					
	-		-					
			-					
	oncentration, D=Dep	letion RM	I=Reduced Matrix	MS=Masked Sar	nd Grains.	² Location: PL	=Pore Lining, M=N	Matrix.
dric Soil	Indicators: (Applic	able to al	LRRs, unless oth	erwise noted.)	id Ordinor	Indicators for	Problematic Hyd	Iric Soils³:
Histosol				Below Surface (S			k (A9) (LRR O)	
	pipedon (A2)			Surface (S9) (LR cky Mineral (F1)		Reduced	k (A10) <b>(LRR S)</b> Vertic (F18) <b>(outs</b> i	ide MLRA 150A,
_	listic (A3) en Sulfide (A4)			yed Matrix (F2)	(Little o)	Piedmont	Floodplain Soils (F	F19) (LRR P, S, T
	d Layers (A5)		Depleted N				s Bright Loamy So	oils (F20)
	Bodies (A6) (LRR P			k Surface (F6)		(MLRA		
	ucky Mineral (A7) (LF			Dark Surface (F7) pressions (F8)	)		nt Material (TF2) low Dark Surface	(TF12)
_	resence (A8) (LRR U uck (A9) (LRR P, T)	,	Marl (F10)				plain in Remarks)	
	ed Below Dark Surfac	e (A11)	Depleted C	Ochric (F11) (ML	RA 151)			
	ark Surface (A12)			anese Masses (F			rs of hydrophytic v d hydrology must l	
	Prairie Redox (A16) (I		7	rface (F13) (LRF ric (F17) (MLRA			disturbed or probl	
	Mucky Mineral (S1) (I Gleyed Matrix (S4)	LRR O, S)		/ertic (F18) (MLF			distances of pros.	
	Redox (S5)		Piedmont I	Floodplain Soils	(F19) (MLRA 14	19A)		
Stripped	d Matrix (S6)		Anomalous	s Bright Loamy S	Soils (F20) (MLR	RA 149A, 153C, 15	53D)	
Stripped Dark St	urface (S7) (LRR P, S		Anomalous	s Bright Loamy S	Soils (F20) (MLR	RA 149A, 153C, 18	53D)	
Stripped Dark Su estrictive	urface (S7) (LRR P, S Layer (if observed)			s Bright Loamy S	Soils (F20) (MLR	RA 149A, 153C, 18	53D)	
Stripped Dark Suestrictive	urface (S7) (LRR P, S Layer (if observed)			s Bright Loamy S	Soils (F20) (MLR			No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed)			s Bright Loamy S	Goils (F20) (MLR		esent? Yes	No <u>X</u>
Stripped Dark Suestrictive	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>K</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>X</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>X</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>K</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>K</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>X</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>X</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>K</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>X</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No <u>X</u>
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X
Stripped Dark Su estrictive Type: Depth (in	urface (S7) (LRR P, \$ Layer (if observed)  nches):							No X

# wnrh012_u



Upland data point wnrh012_u facing east



Upland data point wnrh012_u facing north

### wnrh012 soils



Wetland/upland soils

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Southeast Rollability Projectity/County: North	Hampston Sampling Date: 7-1-2014
Applicant/Owner: Dominion J d	State: Sampling Point: UNR 6-00 1e_w
Investigator(s): DDWEST G Section, Township, Rar	
Landform (hillslope, terrace, etc.): borrow pit Local relief (concave, co	
Landiorni (missiope, terrace, etc.). 15-1(10 to p). 1 Local relief (concave, co	onvex, none). Corrowo C. Slope (%).
	ong: 77° 31′ 51.824″ Datum:
Soil Map Unit Name: Craven fine standy loam	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Normal Circumstances" present? Yes No _X
Are Vegetation, Soil, or Hydrology naturally problematic? (If ne	eded, explain any answers in Remarks.) Borrow
SUMMARY OF FINDINGS – Attach site map showing sampling point to	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes  No  Is the Sampled within a Wetland Wetland Hydrology Present?	
Remarks: Man-made berrow area naturalized wi Sedges, rushes and herbs.	the wetland grasses,
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living Roots	(C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algai Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	X FAC-Neutral Test (D5)
■ Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
(includes capillary fringe)	tland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	), if available:
Remarks: Area Holds Suffree Water for long dura	etion.

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

Sampling Point: 001 ... W

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)  1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. 3.		Total Number of Dominant Species Across All Strata: (B)
4 5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY O
8		Total % Cover of:Multiply by:
	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
1		FACU species x 4 =
2.		UPL species x 5 =
		Column Totals: (A) (B)
3		
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		X 2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover	20% of total cover:	robismatic rryarophytic vogetation (Explain)
Herb Stratum (Plot size: 30 )		ting we say ave a Took street and
	(0 V FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Rhynchuspora Inerpansa	- 60 V Frictor	
2. Phychanthelium skhoperia	5 PACW	Definitions of Four Vegetation Strata:
3. Juneus effusus	\$2 FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Scienus cyparinas	5 OBL	more in diameter at breast height (DBH), regardless of
5. Enthania manage gramipino	u 5 FAC	height.
e Ti	25 FACH	
6. Janene scirpcides	3	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7. Juneus achminatus		than 3 m. DBH and greater than 3.26 it (1 m) tail.
8 9		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12.		
12.	81 = Total Cover	
110		
50% of total cover: 40	15 20% of total cover: 16.2	
Woody Vine Stratum (Plot size:)		
1		
2.		
3		
4		
		2002 52 50 1175
5		Hydrophytic
	= Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	100-11-11
Remarks: (If observed, list morphological adaptations bel	low).	1
	376	
1		

Depth	ription: (Describe Matrix			x Features	i		uie absence o	i maioators.,
(inches)	Color (moist)		color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	107R5/1	70 5	YR 5/8	30			lonn	
	-							
Type: C=C	oncentration, D=Dep	oletion, RM=Red	uced Matrix, M	S=Masked	Sand Gra	ains.	² Location: F	PL=Pore Lining, M=Matrix.
	Indicators: (Applic	Section Committee or Committee	And in case of the last of the				Indicators for	or Problematic Hydric Soils ³ :
_ Histosol		-	_ Polyvalue B					ick (A9) (LRR O)
	pipedon (A2) istic (A3)	-	<ul><li>Thin Dark S</li><li>Loamy Much</li></ul>					ick (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,E
	en Sulfide (A4)	-	_ Loamy Gley			0)		nt Floodplain Soils (F19) (LRR P, S, T
	d Layers (A5)	-	Depleted Ma					ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P		_ Redox Dark					A 153B)
	ucky Mineral (A7) (LI resence (A8) (LRR L		_ Depleted Da					ent Material (TF2) allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	<i>"</i>	_ Redox Depr _ Marl (F10) (I		0)		-	explain in Remarks)
	d Below Dark Surfac	ce (A11)			(MLRA 1	51)		
	ark Surface (A12)				[			tors of hydrophytic vegetation and
	rairie Redox (A16) (I					, U)		and hydrology must be present, as disturbed or problematic.
	Mucky Mineral (S1) ( Gleyed Matrix (S4)	LKK 0, 3) _	<ul><li>Delta Ochric</li><li>Reduced Ve</li></ul>			0A. 150B)	unies	as disturbed or problematic.
	Redox (S5)	_	Piedmont FI				(A)	
	d Matrix (S6)	-	_ Anomalous	Bright Loar	ny Soils (	F20) (MLRA	149A, 153C,	153D)
	rface (S7) (LRR P, S							
240	Layer (if observed)	:						
Type:	ches):						Hydric Soil P	Present? Yes X No
Remarks:					-			
0	2 0							1
1	Sor Sor	TOW G	sit (m	cen-	made	, exc	Avatec	majority of ng a shallow
	0	V	1	1 0	4	080		-1. 11 .
	A I	rorizon	de	40 F	hor	120n	causi	ng a snallow
	•	· L 0						
	agi	ithra.						



WNRG001e_w – Emergent Wetland



WNRG001e_w – Emergent Wetland

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: Southeast Reliability Project City/County: North Hampton Sampling Date: 7-1-2014 State: NC Sampling Point: WNR 6001_4 Applicant/Owner: __ Investigator(s): DDWEST G Section, Township, Range: Landform (hillslope, terrace, etc.): I-IIISlope Local relief (concave, convex, none): CONVOX Slope (%): O Lat: 36° 29' 56.124" Long: 77' 31'51-188" Datum: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes _ Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? ___, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) Are Vegetation SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Not all three wetland parameters present 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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) __ High Water Table (A2) __ Marl Deposits (B15) (LRR U) ___ Drainage Patterns (B10) __ Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) ___ Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) __ Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) __ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) ___ Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) __ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes _____ No__' Saturation Present? No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No hydrology indicators present

21 March 10 - 222 3 3 3		Dominant		Dominance Test worksheet:
(Plot size:)		Species?		Number of Dominant Species 5
Pinns trada			FAC	That Are OBL, FACW, or FAC: (A
Liquidantin styraciflus				Total Number of Dominant
				Species Across All Strata: (E
				Percent of Dominant Species & 3
				That Are OBL, FACW, or FAC:
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	60	= Total Cov	er	OBL species x 1 =
50% of total cover:		total cover:	a 6	FACW species x 2 =
apling/Shrub Stratum (Plot size:	)	_		FAC species x 3 =
Liquidabar Styraciffia		/_	FAC	FACU species x 4 =
Orneras Falcata			FACU	UPL species x 5 =
Ilex opaca	5_		FAC	Column Totals: (A)
(lethra alnifolia	15	/	FACW	Prevalence Index = B/A =
Giospyras Virginian	10		FAC	Hydrophytic Vegetation Indicators:
	5		FAC	1 - Rapid Test for Hydrophytic Vegetation
Vaccinium Stammium				✓ 2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.01
	Carter Control of the	= Total Cov		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: _e	28,5 20% of	total cover	11.4	
(Plot size:)		1		¹ Indicators of hydric soil and wetland hydrology mus
/			from .	
	>_	~	FAC	be present, unless disturbed or problematic.
Browns arvensis	5	$\overline{}$	FACU	
Brown arvensis	5	$\stackrel{\checkmark}{=}$	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm
Browns arvensis		<u> </u>	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless:
Brown arvensis			_FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.
Brown arvensis			<u> FACU</u>	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, le
Browns arvensis			<u> FACU</u>	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.
Brown arvensis			<u> FACU</u>	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless.
Brown arvensis			FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.
Brown arvensis			FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
Browns arvensis			FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.
Browns arvensis			FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
Brown arvensis	5	= Total Cov	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
Brown arvensis	5		FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
O	5	= Total Cov	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
Donne arvensis  50% of total cover:  Society Vine Stratum (Plot size:  Soc	5 10 5 20% of 8	= Total Cover total cover	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
O	5 10 5 20% of	= Total Cov	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
Smilar Cotangers	5 	= Total Covertotal cover	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft
Sonis arvensis  50% of total cover:  Sonilar Cotangifica	5 	= Total Covertotal cover	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.
Voody Vine Stratum (Plot size: )	5 10 5 20% of 8	= Total Cover total cover	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless is and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.
Drown arvensis  50% of total cover:  Voody Vine Stratum (Plot size:  Smilan Cotangi Folio	5 10 5 20% of 8	= Total Covertotal cover	FACU	be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.  Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.

Depth	ription: (Describe to Matrix				x Features						
(inches)	Color (moist)	%	Colo	r (moist)	_ %	Type1	_Loc ²	Texture		Remar	ks
0-4	2.54614							f-54ad,	lun		
4-16	2.546/4		2.5	Y 5/8	<7%			lonn			
	- 10/4		L1/	1 / 10					-		
								-	-		
						Z-111		X-77			
							·	2,			97. 02.040.0
	ncentration, D=Deple ndicators: (Application						ains.			re Lining, M=N	
		Die to an L					DDCTI				inc sons .
_ Histosol (	ipedon (A2)			Polyvalue Be Thin Dark St						9) (LRR O) 10) (LRR S)	
Black His				Loamy Muck				200000000000000000000000000000000000000		The state of the s	de MLRA 150A,E
	Sulfide (A4)			Loamy Gley			,				19) (LRR P, S, T
	Layers (A5)			Depleted Ma		0000		100		ight Loamy So	
	Bodies (A6) (LRR P,	T, U)	_ 1	Redox Dark	Surface (F	6)			LRA 153	70 S	
	cky Mineral (A7) (LRI		(	Depleted Da	rk Surface	(F7)		_		aterial (TF2)	
	esence (A8) (LRR U)			Redox Depr		3)				Dark Surface (	TF12)
	ck (A9) (LRR P, T)		-	Marl (F10) (I				_ Othe	r (Explain	in Remarks)	
	Below Dark Surface	(A11)		Depleted Oc				<b>T</b> \ 31	Nanton of	hadaaala die u	
	rk Surface (A12) airie Redox (A16) (Mi	DA 150A)		Iron-Mangar Umbric Surfa				1.70		nyaropnytic v drology must t	egetation and
	ucky Mineral (S1) (LF	STAN SHE STORES	_	Delta Ochric			, 0,		37	urbed or probl	
	leyed Matrix (S4)	(ICO, 0)		Reduced Ve			OA. 150B		ilidaa ulat	arbed or probl	ciliano.
_ Sandy R	[전통하는다 이 경기·경기·경기 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										
Juliuy IV	BUUN (SS)		1	Piedmont Fl	oodolain S	oils (F19)	(MLRA 14	49A)			
	Matrix (S6)			Piedmont Fl Anomalous I				49A) RA 149A, 153	C, 153D)		
Stripped		T, U)							C, 153D)		
Stripped Dark Sur	Matrix (S6)	T, U)							sC, 153D)		
Stripped Dark Sur	Matrix (S6) face (S7) (LRR P, S,	T, U)							sC, 153D)		~
Stripped Dark Sur Restrictive L Type:	Matrix (S6) face (S7) (LRR P, S,							RA 149A, 153	***	nt? Yes	
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		<u>\</u>
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		<u>X</u>
Stripped Dark Sur Restrictive L Type: Depth (incomerks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		<u>\</u>
Stripped Dark Sur Restrictive L Type: Depth (incomerks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No_ <u>×</u>
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No_ <u>×</u>
Stripped Dark Sur estrictive L Type: Depth (incomerks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur estrictive L Type: Depth (incomerks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur restrictive L Type: Depth (incommrks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur restrictive L Type: Depth (incommrks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur restrictive L Type: Depth (incommrks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur Restrictive L Type: Depth (incomerks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur Restrictive L Type: Depth (incomerks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur testrictive L Type: Depth (incommerce)	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
Stripped Dark Sur restrictive L Type: Depth (incommrks:	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X
_ Stripped _ Dark Sur estrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S, ayer (if observed): hes):			Anomalous I	Bright Loan	ny Soils (	F20) <b>(MLF</b>	RA 149A, 153	***		No X

### wnrg001_u



WNRG001-u – Adjacent Upland



WNRG001_u – Adjacent Road and Upland

## wnrg001 soils



WNRG001 – Representative Wetland and Upland Soils

## WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Southeast Reliability Project City/County: North Account on Sampling Date: 7-1-12  Applicant/Owner: Dome Man State: NC Sampling Point: WNRGOU Investigator(s): Dowest G Section, Township, Range:  Landform (hillslope, terrace, etc.): Bottom Land Local relief (concave, convex, none): Slope (%):  Subregion (LRR or MLRA): Lat: 36°29′47.299 Long: 17°31′54.349″ Datum:  Soil Map Unit Name: North Account of the site typical for this time of year? Yes No (If no, explain in Remarks.)  Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	- - -
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks:    Sompled Area   Within a Wetland?   Yes   No   Within a Wetland?   Yes   Ye	
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)Aquatic Fauna (B13)Sparsely Vegetated Concave Surface (B8)High Water Table (A2)Marl Deposits (B15) (LRR U)Drainage Patterns (B10)Saturation (A3)Hydrogen Sulfide Odor (C1)Moss Trim Lines (B16)Water Marks (B1)Oxidized Rhizospheres along Living Roots (C3)Dry-Season Water Table (C2)Sediment Deposits (B2)Presence of Reduced Iron (C4)Crayfish Burrows (C8)Drift Deposits (B3)Recent Iron Reduction in Tilled Soils (C6)Saturation Visible on Aerial Imagery (C9)Algal Mat or Crust (B4)Thin Muck Surface (C7)Geomorphic Position (D2)Iron Deposits (B5)Other (Explain in Remarks)Shallow Aquitard (D3)Hundation Visible on Aerial Imagery (B7)FAC-Neutral Test (D5)Water-Stained Leaves (B9)Sphagnum moss (D8) (LRR T, U)	
Surface Water Present? Yes No _ \subseteq Depth (inches):  Water Table Present? Yes No _ \subseteq Depth (inches):  Saturation Present? Yes No _ \subseteq Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Hydrology present, distant topo breaks to adjacent upland.	

Francis Pennsylvinea  Francis Pennsylvinea  Soct Liquidado - Stynistlya  Liriadendron tulipitera  Ilse spece	% Cover 25 25 15 15	Species		Total Number of Dominant Species Across All Strata:	ies 7	_ (A)
Liviadendron tulipitera  The apeca	15		FAC FAC	That Are OBL, FACW, or F Total Number of Dominant Species Across All Strata:	FAC:	_ (A)
The apeca	15		FAC	Total Number of Dominant Species Across All Strata:	ALIENS SERVICE SOME	_ (/\)
Ille oper			FAC	Species Across All Strata:	8	
Ille oper				10000000		(D)
				Percent of Dominant Speci		_ (B)
				The A Continuant Speci	ies 87	
				That Are OBL, FACW, or F	AC:	_ (A/
				Prevalence Index worksh	eet:	-1
	20			Total % Cover of:		
11		= Total Co		OBL species		
50% of total cover:		total cove		FACW species		
oling/Shrub Stratum (Plot size:)	20% 01	total cove	r:	FAC species		
Liquidanta- Styracitlesa	10	./	cn.	FACU species		
Livindendon tulpitera	- 10		FAC	I .		
Ilex Opera	- 10	7	FACU		_ x 5 =	
Coletha alrifoles	-10		FAC	Column Totals:	_ (A)	(B
			FACW	Prevalence Index = E	3/A =	
				Hydrophytic Vegetation Ir		
				1 - Rapid Test for Hydro		
				2 - Dominance Test is	S50%	
				3 - Prevalence Index is		
2	<u> 60 =</u>	Total Co	/er	Problematic Hydrophyti		
50% of total cover: 3	20% of t	otal cover	: 12	i robiematic riydrophyti	c vegetation (Expla	un)
Carety inty messens	<u>lo</u>		OBL FACW	¹Indicators of hydric soil and be present, unless disturbed	d or problematic.	must
			Tricvo	Definitions of Four Vegeta	ition Strata:	
				Tree - Woody plants, exclud	ding vines, 3 in. (7.6	cm) c
				more in diameter at breast height.	eight (DBH), regard	less o
				neight.		
		_		Sapling/Shrub - Woody pla	ants, excluding vines	, less
				than 3 in. DBH and greater t	han 3.28 ft (1 m) tall	
				Herb - All herbaceous (non-	-woody) plants, rega	rdless
				of size, and woody plants les	ss than 3.28 ft tall.	alco.
		0.15		Woody vine - All woody vin	oc grooter than 2 20	
				height.	es greater triair 5.20	II IN
7		Total Cov				
50% of total cover:	20% of to	otal cover:	2.4			
dy Vine Stratum (Plot size:)	$\Gamma$	/				
Vitiz rutuaditalia	5_	$\checkmark$	FAC			
	F-12-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1					
				PPC Programme		
	5 = 1	Total Cove	ar .	Hydrophytic Vegetation	7	
50% of total cover: 2-5	20% of to			Present? Yes	No	
arks: (If observed, list morphological adaptations below	20 70 OI (O	tai cover:				
, adaptations below	N).					

Sampling Point: 002_w

Depth Matrix	sued to document the indicator or confir	m the absence of indicators.)
The state of the s	Redox Features	the absence of maleators.)
1 0 0	olor (moist) % Type ¹ Loc ²	
0-3 2.543/1		FSL
3-8 2.546/2		FSL
8-16 2.546/2 10	YR 5/6 15	5/1
		360
		)
¹Type: C=Concentration, D=Depletion, RM=Reduc	ced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs,	unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T,	U) 1 cm Muck (A9) (LRR O)
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
O	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	(MLRA 153B)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	<ul><li>Red Parent Material (TF2)</li><li>Very Shallow Dark Surface (TF12)</li></ul>
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	A Q M
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	T) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR 0, S)	Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
0	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
	Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 14	)
1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Anomalous Bright Loamy Soils (F20) (MLRA 12)	49A)
Dark Surface (S7) (LRR P, S, T, U)	with the season of the season	(A 149A, 153C, 153D)
Restrictive Layer (if observed):		
Type:		
туре		
Depth (inches):		Hydric Soil Present? Yes X No
		Hydric Soil Present? Yes No
Depth (inches):		Hydric Soil Present? Yes No
Depth (inches):Remarks:		
Depth (inches):Remarks:	matrix with	
Depth (inches):	matrix with	
Depth (inches):		
Depth (inches):Remarks:		
Depth (inches):		

## wnrg002f_w



WNRG002f_w – Forested Wetland



WNRG002f_w – Forested Wetland

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: Southeast Reliability Project City/County: Northhampton Sampling Date: 7-1-14 Applicant/Owner: Dominion Investigator(s): DDWEST Section, Township, Range: Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Lat: 36°29' 47.838" Long: 77°31'53.859" Subregion (LRR or MLRA): Soil Map Unit Name: Craven fine sandy NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No ____ (If no, explain in Remarks.) __, 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? Is the Sampled Area Hydric Soil Present? No × within a Wetland? Wetland Hydrology Present? No 🗸 Remarks: 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) ___ Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) __ Marl Deposits (B15) (LRR U) __ Drainage Patterns (B10) __ Saturation (A3) — Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) __ Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) __ Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) __ Crayfish Burrows (C8) ___ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) __ Iron Deposits (B5) Other (Explain in Remarks) _ Shallow Aquitard (D3) ___ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes ____ No _X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No hydroly) present. indicators present.

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

Sampling Point: WNRGOOZ-4

				Sampling Foint,
Tree Stratum (Plot size:)	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	Species?	from 10	Number of Dominant Species
1. Totaledron Talipitera	25		1-140	That Are OBL, FACW, or FAC: (A)
2. Ilex open	15	1/	FAC	
0. 4				Total Number of Dominant
3. Pinus Facila	10		FAC	Species Across All Strata: (B)
4. Liquidambar styraciflua	10	112	FAC	
5. Acer FUBRUM			FAC	Percent of Dominant Species
			1190	That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	12			
-77-77	(0)	= Total Cov	/er -	OBL species x 1 =
50% of total cover: 32.	5 20% of	total cover	: 13	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1 The same offices	15	/		FACU species x 4 =
1. Ilen opaca	13	$\rightarrow$	FAC	
2. Acer rubrism	15	1	FAC	UPL species x 5 =
3. Vaccinery Stamineum	10	1/	FACU	Column Totals: (A) (B)
1				(0)
4				Prevalence Index = B/A =
5				
6.				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8			AL WILL DIEA	
	110	Total Cov	· · · · · · · · · · · · · · · · · · ·	3 - Prevalence Index is ≤3.01
2.0	70=	otal Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 20	20% of	total cover:	8	, , , , , , , , , , , , , , , , , , , ,
Herb Stratum (Plot size:)			College and a second	140 120 10 1 1 120 10 10 10 10 10 10 10 10 10 10 10 10 10
1. Mitchella repens	47		FACU	¹Indicators of hydric soil and wetland hydrology must
" - reteries epen				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3			V	
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4			A	more in diameter at breast height (DBH), regardless of
5				height.
6				
7				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Harb Allerday ( )
9				Herb – All herbaceous (non-woody) plants, regardless
10				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				no-ign.
	7			i
4 9	=	Total Cove	er  -	
50% of total cover:	20% of t	otal cover:	0.4	
Woody Vine Stratum (Plot size:		0101 00101.		
1 of size.	1 15	1	500	
1. Lancera japaniea	(0		FAC	
2. Imilak rotund. Folia	5-	V	FAC	
3. Vitiz Gotyadifolsa	-	J	Too	
o. Viril Vorandinolog			THE	
4				
5				
	22			Hydrophytic
	20 =	Total Cove	er /	Vegetation
50% of total cover:	_ 20% of to	otal cover:	4	Present? Yes / V No
Remarks: (If observed, list morphological adaptations below		4		
protegration below	7-			

Sampling Point: WNRGOOZ_4

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators )
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type¹ Loc²	
3-8 2:05	10cm
20 20012/3	1000
8-16 2.54 5/4	1000
	10,10
	230 - 100 - 2
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	
<ul> <li>Histic Epipedon (A2)</li> <li>Black Histic (A3)</li> <li>Thin Dark Surface (S9) (LRR S, T, U)</li> <li>Loamy Mucky Mineral (F1) (LRR O)</li> </ul>	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)	<ul><li>Reduced Vertic (F18) (outside MLRA 150A,B)</li><li>Piedmont Floodplain Soils (F19) (LRR P, S, T)</li></ul>
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U) Redox Depressions (F8)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)  Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A12)	T) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P. T. II)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Sandy Redox (S5)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Piedmont Floodulain Soils (F19) (MLRA 150A)	N. 17
· is an incite i to deplate College (i 15) (MERA 145	9A)
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA Dark Surface (S7) (LRR P, S, T, U)	A 149A, 153C, 153D)
Restrictive Layer (if observed):	
Type:	
Depth (inches):	Hydric Soil Present? Yes No_ X
Remarks:	, , , , , , , , , , , , , , , , , , ,
	0
No hydroz soil indicators preso	ent
100 Marie 3011	



WNRG002_u – Adjacent Upland



WNRG002_u – Adjacent Upland

## wnrg002 soils



WNRG002 – Representative Wetland and Upland Soils

## WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Southeast Reliability City/County:	Voith Hampton Sampling Date: 7-1-15
Applicant/Owner: Dominion	State: NC Sampling Point: Warg 003
	ship, Range:
Landform (hillstone towner at )	
Subregion (LRR or MLRA): Lat: 36°29'37. J	12" Long: 77"31"58.073" Datum:
Subregion (LRR of MLRA): Lat: 36 29 31-1	12 Long: 113158.013 Datum:
Soil Map Unit Name: Wehadkee	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No  Yes No  Within a	ampled Area Wetland? YesX No
Praince pattern with wetland	
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	▲ Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Presence of Reduction in Tilled Soil	Crayfish Burrows (C8)
	3., (3.,
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No _X_ Depth (inches):	
Saturation Present? Yes No > Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	
ottodini gauge, monitoring well, aeriai priotos, previous inspe	ections), if available:
Remarks:	
Hydrology present - Strong topogra upland.	phic relief to adjacent
upland.	

T 01	Absolute Dom	ninant Indicator	Dominance Test worksheet:	mpling Point:3
Tree Stratum (Plot size:)	0/ 0 0	cies? Status	Number of Dominant Species	
1. Lini-dendra tulipitara	25_1	FACU	That Are OBL, FACW, or FAC	: (A
Befule nigra	<u> 10 \</u>	- FACW	Total Number of Dominant	
Ace rubrum	<u> </u>	/ FAC	Species Across All Strata:	(B
Liquidamber styracifikue	10	FAC	10 20 10	0 - 0
·			Percent of Dominant Species That Are OBL, FACW, or FAC	: 40% (A
			Prevalence Index worksheet	
			Total % Cover of:	
			OBL species	
E00/ -f1-1-1	$\frac{55}{20\% \text{ of total}} = \text{Total}$	al Cover	FACW species	
apling/Shrub Stratum (Plot size:	20% of total	cover: 1 1	FAC species	
11/		500	FACU species	
Lieu of co	$-\frac{3}{10}$	FAC	UPL species	
Dig a contract of year the	$-\frac{\omega}{2}$	- FAC		
Liquidamber AyraciAna Acer rubina Clethra alrifolia	$-\frac{3}{2}$	FAC	Column Totals:	(A)(E
		_ FACW	Prevalence Index = B/A	=
			Hydrophytic Vegetation India	cators:
			1 - Rapid Test for Hydroph	ytic Vegetation
			1 - Rapid Test for Hydroph 2 - Dominance Test is >50	%
	110		3 - Prevalence Index is ≤3.	.01
50% of total covers	$\frac{45}{20\% \text{ of total c}} = \text{Total}$	I Cover a	Problematic Hydrophytic V	egetation¹ (Explain)
erb Stratum (Plot size:)	<u> </u>	cover:		
Woodward a sideta		OBL	Indicators of hydric soil and we	etland hydrology must
Attigrium felix-vimina	avai LI		be present, unless disturbed or	
The time	- COS L	- FAC	Definitions of Four Vegetation	n Strata:
Cerix intropesses		- FACW	Tree - Woody plants, excluding	vines, 3 in. (7.6 cm)
			more in diameter at breast heig	ht (DBH), regardless
			height.	
			Sapling/Shrub - Woody plants	, excluding vines, less
			than 3 in. DBH and greater than	1 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-wo	ody) plants, regardles
)			of size, and woody plants less t	han 3.28 ft tall.
			Woody vine - All woody vines	greater than 3.28 ft in
			height.	5. out of their 0.20 ft in
50% -51 I	1 = Total	41 /		
50% of total cover: <u>L</u>	( · S 20% of total co	over: 7.6		
Compsit Bradicans	10	1 500		
	$-\frac{10}{10}$	FAC		
Vitas rotundicolla		- FAC		
Lankva je ponica	5	FAC		
			Hydrophytic	
	= Total	Cover	Vegetation \( \square\)	
50% of total cover:	20% of total co	over:	Present? Yes /\	No
marks: (If observed, list morphological adaptations	below).			

Sampling Point: 603_w

Profile Description: (Describe to the de	epth needed to docum	nent the	indicator	or confirm	n the absence of	indicators )
Depth Matrix	Redox	x Feature				marcators.)
(inches) Color (moist) %	Color (moist)	%	_Type ¹	_Loc ²	Texture	Remarks
8-8 104R4/2 100					Lam	
8-18+ 107F 5/2 60°	10 YR 3/6	715			SCL	
	10 YR 54				SCC	
Part 1 200						
		_	-			<del></del>
	-					
1_						
Type: C=Concentration, D=Depletion, RM	M=Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to a  Histosol (A1)					Indicators for	Problematic Hydric Soils ³ :
Histic Epipedon (A2)	Polyvalue Bel	ow Surfa	ce (S8) (L	RR S, T, L		(A9) (LRR O)
Black Histic (A3)	Thin Dark Sur Loamy Mucky	Mineral	(E1) (LDD	(, U)		(A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleyed			0)	Reduced \	/ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	∠ Depleted Matr		,			s Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S				(MLRA 1	California de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya del companya de la companya del companya de la companya
5 cm Mucky Mineral (A7) (LRR P, T, L Muck Presence (A8) (LRR U)						t Material (TF2)
1 cm Muck (A9) (LRR P, T)	Redox Depres Marl (F10) (LF		8)			ow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Och	ric (F11)	(MLRA 15	1)	Other (Exp	lain in Remarks)
Thick Dark Surface (A12)	Iron-Mangane	se Masse	es (F12) (L	RR O, P,	T) ³ Indicator	s of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150	A) Umbric Surfac	e (F13) (	LRR P, T,	U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4)		F17) (ML	RA 151)			disturbed or problematic.
Sandy Redox (S5)	Reduced Verti Piedmont Floor	ic (F18) (I	MLRA 150	A, 150B)	2.41	
Stripped Matrix (S6)	Anomalous Br	ight Loan	nv Soils (F	20) (MI P.	9A) A 149A, 153C, 153	20)
Dark Surface (S7) (LRR P, S, T, U)		3	., (1	LO) (MILIO	1437, 1330, 133	,,,,
Restrictive Layer (if observed):						
Type:	144					SS 840
Depth (inches):					Hydric Soil Pres	sent? Yes X No
Remarks:						100
	0 2 00					
Dog	sleted ma	a Di	1	(4)	18'	11 -1
24	nerco nic	ZVI C	× (	win	in 10	of Soul
9.	irfoce.					
200	4 ABCE.					

## wnrg003f_w



WNRG003f_w – Forested Wetland



WNRG003f_w – Forested Wetland

WEILAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region $7-1-\chi$
Project/Site: Southoast Reliabilities City/	County: Northhampton Sampling Date: Wargoo3
Applicant/Owner: Dominion	State: NC Sampling Point:
	State. 10 Sampling Point.
	on, Township, Range:
Landform (hillslope, terrace, etc.): Hillslope Local	relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: 36°29°	36-726 "Long: 77°31' 57-763" Datum:
Soil Map Unit Name: Gxb Gritney sandy loan	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing san	npling point locations, transects, important features, etc.
<b>~</b>	
Hydrophytic Vegetation Present?  Yes No  Hydric Soil Present?  Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No X	within a Wetland? Yes NoX
Remarks:	
Charles And Charles	
HYDROLOGY	
Wetland Hydrology Indicators:	Connection to the test of the
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1) Aquatic Fauna (B13)	Surface Soil Cracks (B6)
High Water Table (A2)  Marl Deposits (B15) (LRF	Sparsely Vegetated Concave Surface (B8)
Saturation (A3)  Hydrogen Sulfide Odor (C	
Water Marks (B1) Oxidized Rhizospheres al	
Sediment Deposits (B2)	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	opriagram moss (bb) (ERR 1, 0)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No X Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:
Remarks:	
Do hydrology indicators pres	enf

VEGETATION	(Four St	rata) – Us	e scientific	names o	f plants
	L. Cal Or	ulu, Co	C OCICITUIO	TIGITICS O	i piarito.

	007
Sampling Point:	003-4

		Dominant Indi		Dominance Test worksheet:
Tree Stratum (Plot size:)			tatus	Number of Dominant Species
1. fine teda	_30_		AC	That Are OBL, FACW, or FAC: (A)
2. Griodendron telipitera	18		1CU	Total Number of Dominant
3. Prenus serotine	10	FF	1CU	Species Across All Strata: (B)
4. Her reboun	10	J FI	AC	Descript of Descriptor 1
5. Thy opencer	10		AC	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6. Nyssa sylvatica	_5	F	AC	
7. Querus progoda	10	V FX	XW	Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	85	= Total Cover		OBL species x 1 =
50% of total cover: 42	5 20% of	total cover:	7	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: )	2076 01	total cover		FAC species x 3 =
1. Dyse stylvefice	5	V E	AC	FACU species x 4 =
2. Premue cerotina	-5		ACU	UPL species x 5 =
				Column Totals: (A) (B)
3. Candamba- Styraciflua 4. Dethra alm, colin			AC.	<del></del>
	15_		ACW	Prevalence Index = B/A =
5. Vaccinium stiminium			ICU I	Hydrophytic Vegetation Indicators:
6. Hex ogney	_5_		AC	1 - Rapid Test for Hydrophytic Vegetation
7. Querus niegra	5_		PC	2 - Dominance Test is >50%
8. Querce alber	_5_		ACU	3 - Prevalence Index is ≤3.0¹
Sasatres albidum	25	= Total Cover	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27	_ 50% of	total cover:		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. PTeridium aqualinum	5	VEV	ACU	be present, unless disturbed or problematic.
2. Arundinasia afantoa	10	V FU	XW	Definitions of Four Vegetation Strata:
3	70			
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 iii. DBT and greater than 3.20 it (1 iii) taii.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		<u> </u>		Woody vine - All woody vines greater than 3.28 ft in
11				height.
12		-		
	15	= Total Cover	$\neg$	
50% of total cover: 7.5	20% of	total cover:	3	
Woody Vine Stratum (Plot size:)		1		
1. Ditre potendifolia	_5_	_ V F	AC	
2		SATURDAY OF THE		
3				
4				
5.				Unidentify 4th
	5	= Total Cover		Hydrophytic Vegetation
50% of total cover: 2-5	_	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations belo		total cover.		
	· • • j -			
				3

Sampling Point: 003-4

(inches)	Matrix	9.79	Dada	- F	muicator	or confirm	the absence of i	idicators.)	
100	Color (moist)	% (	Color (moist)	x Feature %	-	Loc²	Texture	D	
10/103	10 YR4/2		None and the second				**L	Remarks	
7-11	2078512								
A wat	1-10	100 -		• ()			FSC_		
10-181	10/1-7/3	100					SCL	12	
	WC 1997 W								
· ·	- Jul			W					
				72					
Type: C=Cond	centration, D=Deple	tion, RM=Red	uced Matrix, MS	S=Masked	Sand Gra	ine	2l continue DI -	D	2
ydric Soil Ind	licators: (Applicat	ole to all LRR	s, unless other	wise note	ed.)		Indicators for F	Pore Lining, M=Matr Problematic Hydric	IX.
_ Histosol (A	1)		_ Polyvalue Bel			RRSTI			Solis :
_ Histic Epipe			_ Thin Dark Su	rface (S9)	(LRR S. 1	r. U)	0	(A9) (LRR 0) (A10) (LRR S)	
_ Black Histic		119	_ Loamy Mucky	/ Mineral (	(F1) (LRR	O)	Reduced V	ertic (F18) <b>(outside</b> l	MI DA 450A
_ Hydrogen S	Sulfide (A4)	_	_ Loamy Gleye	d Matrix (I	F2)	-/	Piedmont F	oodplain Soils (F19)	VILKA 150A,
_ Stratified La	ayers (A5)		_ Depleted Mat				Anomalous	Bright Loamy Soils (	(LKK P, 3,
_ Organic Bo	dies (A6) (LRR P, 1	r, u)	_ Redox Dark S				(MLRA 15		120)
_ 5 cm Mucky	Mineral (A7) (LRR	P, T, U)	_ Depleted Dark					Material (TF2)	
_ IVIUCK Prese	ence (A8) (LRR U)	-	_ Redox Depres	ssions (F8	3)			w Dark Surface (TF1	2)
_ 1 cm Muck	(A9) (LRR P, T)		_ Marl (F10) <b>(LF</b>					ain in Remarks)	-/
_ Depleted Be	elow Dark Surface ( Surface (A12)	(A11)	Depleted Och	ric (F11) <b>(</b>	MLRA 15	1)			
		DA 4504) —	Iron-Mangane	se Masse	s (F12) <b>(L</b>	RR O, P, T	) ³ Indicators	of hydrophytic veget	ation and
_ Coast Frain	ie Redox (A16) <b>(ML</b> ky Mineral (S1) <b>(LR</b>	RA 150A)	Umbric Surfac	e (F13) <b>(L</b>	RR P, T,	U)	wetland h	ydrology must be pr	esent,
Sandy Glev	ed Matrix (S4)		Delta Ochric (	F17) (MLI	RA 151)		unless di	sturbed or problema	tic.
Sandy Redo	ox (S5)		Reduced Verti	ic (F18) (N	VILRA 150	A, 150B)			
_ Stripped Ma			Piedmont Floo	odplain So	oils (F19) (I	MLRA 149	A)		
	e (S7) (LRR P, S, T	- us —	Anomaious Br	igni Loam	ly Solls (F2	20) <b>(MLRA</b>	149A, 153C, 153E	<b>)</b> )	
estrictive Lay	er (if observed):	, 0,							
Туре:	,								B1 113
Depth (inches	2).					- 1			X
emarks:	o)						Hydric Soil Prese	ent? Yes	No
amarks:		7							
10	hydria	car	1 :0:	-1-	, ,	200 10	-+		
100	" your	) 30" (	Indic	atol	5 8	11254			

## wnrg003_u



WNRG003_u – Adjacent Upland



WNRG003_u – Adjacent Upland

## wnrg003 soils



WNRG003 – Representative Upland and Wetland Soil

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

	City/County: North Hampton Sampli	ng Date: <u>Mar 5, 2015</u>
Applicant/Owner: Dominion	State: NC Sa	mpling Point: wnrh015f_w
Investigator(s): DDWest		
Landform (hillslope, terrace, etc.) drainage swale Loc	cal relief (concave, convex, none): concave	Slope (%): 1
Subregion (LRR or MLRA): LRR S (MLRA 149A) Lat: 36°29'29.1	" N Long: 77°32'3.7" W	Datum: wgs 84
Soil Map Unit Name: Wehadkee	NWI Classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remark	(S.)
Are Vegetation , Soil , or Hydrology significantly disturbed	? Are "Normal Circumstances" presei	nt? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sar	npling point locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes X	No
Wetland Hydrology Present? Yes X No		
Remarks:		
HYDROLOGY Westernd Hydrology Indicators	Casandan Indiantan	- (i-i
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)	<u>Secondary Indicator</u> Surface Soil Cr	s (minimum of two required) acks (B6)
X Surface Water (A1) Aquatic Fauna (B13	) Sparsely Veget	ated Concave Surface (B8)
X High Water Table (A2) — Marl Deposits (B15) X Saturation (A3) — Hydrogen Sulfide O		
	res on Living Roots (C3) Dry-Season Wa	ater Table (C2)
Sediment Deposits (B2)  Presence of Reduce	ed Iron (C4) Crayfish Burrov	vs (C8)
Drift Deposits (B3) Recent Iron Reducti Algal Mat or Crust (B4) Thin Muck Surface (		ole on Aerial Imagery (C9)
Iron Deposits (B5) Other (Explain in Re	emarks) Shallow Aquitai	rd (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	X FAC-Neutral Te Sphagnum mos	est (D5)
Water-Staffed Leaves (D9)	Opriagrium mos	
Field Observations:		55 (D6) (LRK 1, U)
Field Observations:  Surface Water Present? Yes X No Denth (inches): surface Water Present?	iace	S (D6) (LRK 1, U)
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Sampling Point __W

				Dominance Test worksheet:	
	Absolute	Dominant	Indicator		
Tree Stratum (Plot size: 30 )	% Cover		Status	Number of Dominant Species	
Betula nigra (Birch,river)	25	<u> </u>	FACW	That Are OBL, FACW, or FAC:4 (A)	
Salix nigra (Willow,black)	15	Y	OBL		
3				Total Number of Dominant Species Across All Strata: 4 (B)	
4				- Opecies Across Air Strata (b)	
5				Percent of Dominant Species	
6				That Are OBL, FACW, or FAC: 100 (A/B	3)
7				-	
8				Prevalence Index worksheet: Total % Cover of: Multiply by:	
	40	= Total Cov			
50 % of total cover: 20	_ 20 % c	of total cover:	8	OBL species x 1 =	
Conling/Chruh Ctratum / Diet aize: 20				FACW species X 2 =	
Sapling/Shrub Stratum (Plot size: 30 )	20	V	<b>EAC</b>	FAC species X 3 =	
Ligustrum sinense (Privet,chinese) 2.		Y	FAC	FACU species X 4 =	
2				UPL species X 5 =	
A				Column Totals: (A) (B	٤١
4				Column rotals (A) (E	'
5				-	
6				Prevalence Index = B/A =	
7		-		Hydrophytic Vegetation Indicators:	
8		= Total Cov		1 – Rapid Test for Hydrophytic Vegetation	
15	30			X 2 – Dominance Test is > 50%	
	_ 20 % 0	of total cover:	6	3 – Prevalence Test is ≤ 3.0 ¹	
Herb Stratum (Plot size: 10 )				Problematic Hydrophytic Vegetation¹ (Explain)	
1				¹ Indicators of hydric soil and wetland hydrology mu	ıst
2				be present, unless disturbed or problematic.	
3				Definitions of Vegetation Strata:	
4					
5				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.	
6				(7.6 cm) or larger in diameter at breast height (DBH)	
7				- ( o o) ogo a.ao.o. a. ooaoo.g (22)	
8				Sapling – Woody plants, excluding woody vines,	
9				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
10				-   than 3 iii. (7.0 cm) DBH.	
11				Shrub – Woody plants, excluding woody vines,	
12				approximately 3 to 20 ft (1 to 6 m) in height.	
	0	= Total Cov		<b>Herb</b> – All herbaceous (non-woody) plants, including	,
50 % of total cover:0	20 % c	of total cover:	0	herbaceous vines, regardless of size. Includes wood	
				plants, except woody vines, less than approximately	
Woody Vine Stratum (Plot size: 30 )				3 ft (1 m) in height.	
Smilax rotundifolia (Greenbrier,common)	10	<u> </u>	FAC	Woody vine – All woody vines, regardless of height	
2				- Woody vine - All woody vines, regardless of neight	•
3				-	
4				-	
5				Hydrophytic	
	10	= Total Cov	er	Vegetation Present? Yes X No	
50 % of total cover:5	20 % c	of total cover:	2	1103CH: 103 <u>X</u> 110	
Remarks: (Include photo numbers here or on a separate	sheet)				
Tremarks. (molade priote nambers here of on a separate	oncoi.)				

SOIL Sampling Point: wnrh015f_w

	ription: (Describe	to the depth				r confirm t	he absence	of indicators.)			
Depth	Matrix	0/		edox Featur		1.002	Tarduna		D	4	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	-	Remar	KS	
0-4	2.5y4/2	100			N/A	N/A	Loam				
4-18	2.5y4/2	85	10yr4/4	15	N/A	N/A	Sandy	-			
¹Type: C=Co	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, (	CS=Covered	or Coate	d Sand Gra	ins. ² l	Location: PL=P	ore Lini	ng, M=Matrix.	
Hydric Soil I	ndicators:						Indica	ators for Proble	matic I	Hydric Soils³:	
Histosol (	A1)		Polyvalue B	elow Surface	e (S8) <b>(LF</b>	RR S, T, U)	1 cm	Muck (A9) (LRF	R O)		
Histic Epi	pedon (A2)		Thin Dark S	uface (S9) (	LRR S, T,	, U)	2 cm	Muck (A10) (LR	RS)		
Black His	tic (A3)		Loamy Gley	ed Matrix (F	1) <b>(LRR (</b>	<b>)</b>	Redu	ced Vertic (F18)	(outsi	de MLRA 150	A,B)
Hydroger	Sulfide (A4)		Loamy Gley	ed Matrix (F	2)		Piedr	mont Floodplain	Soils (F	19) <b>(LRR P, S</b>	, T)
Stratified	Layers (A5)		X Depleted Ma	atrix (F3)			Anon	nalous Bright Lo	amy So	ils (F20)	
Organic E	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F6	6)		(M	LRA 153B)			
5 cm Mud	cky Mineral (A7) (LR	R P, T, U)	Depleted Da	ark Surface (	(F7)		Red I	Parent Material (	(TF2)		
Muck Pre	sence (A8) (LRR U	)	Redox Depr	essions (F8)	)		Very	Shallow Dark Si	urface (	TF12)	
1 cm Mud	ck (A9) <b>(LRR P, T)</b>		Marl (F10) (	LRR U)			Othe	r (Explain in Rer	narks)		
Depleted	Below Dark Surface	e (A11)	Depleted O	chric (F11) <b>(I</b>	MLRA 15	1)					
Thick Da	k Surface (A12)		Iron Mangar	nese Masses	s (F12) <b>(L</b>	RR O, P, T	) ³ Indic	ators of Hydrop	hvtic ve	netation and	
Coast Pra	airie Redox (A16) (N	ILRA 150A)	Umbric Surf	ace (F13) <b>(L</b>	RR P, T,	U)		nd hydrology mi			
	ucky Mineral (S1) <b>(L</b>	.RR O, S)	Delta Ochrid	(F17) <b>(MLF</b>	RA 151)		distu	rbed or problema	atic.		
	eyed Matrix (S4)		Reduced Ve								
Sandy Re			Piedmont Fl				-				
	Matrix (S6)	<b>T</b>	Anomalous	Bright Loam	y Soils (F	20) <b>(MLRA</b>	149A, 153C	, 153D)			
Dark Sun	face (S7) <b>(LRR P, S</b>	, 1, 0)									
Restrictive I	_ayer (if observed)	:									
Type:			_		Hyd	ric Soil Pre	esent?	Yes	X	No	
Depth (in	ches):		<del>_</del>								
Remarks:											

# wnrh015f_w



wnrh015f_w facing north



wnrh015f_w facing east

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: North Hampton	Sampling Date: Mar 5, 2015
Applicant/Owner: Dominion	State: NC	Sampling Point: wnrh015_u
Investigator(s): DDWest	Section, Township, Range:	
Landform (hillslope, terrace, etc.) Hill Slope		Slope (%): 4
Subregion (LRR or MLRA): LRR S (MLRA 149A) Lat: 36°29	28.1" N Long: <u>77°32'3.9" W</u>	Datum: wgs 84
Soil Map Unit Name: Caroline	NWI Classification: nor	ne
Are climatic / hydrologic conditions on the site typical for this time of year	r? Yes X No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	bed? Are "Normal Circumstances"	present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transect	ts, important features, etc.
Hydrophytic Vegetation Present? Yes X No		
Hydric Soil Present? Yes No X	Is the Sampled Area	No X
Wetland Hydrology Present? Yes No X		
Remarks:		
Sediment Deposits (B2) Presence of Re	B13) Surface Sparsely B15) (LRR U) Drainage e Odor (C1) Spheres on Living Roots (C3) Dry-Sease duced Iron (C4) Suction in Tilled Soils (C6) Remarks)  Wetland Hydrology Present	dicators (minimum of two required) Soil Cracks (B6) Vegetated Concave Surface (B8) Patterns (B10) Im Lines (B16) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (C9) Phic Position (D2) Aquitard (D3) Lutral Test (D5) Lum moss (D8) (LRR T, U)  ##?  Yes NoX
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:	
Remarks:		

Sampling Point __u

				Dominance Test worksheet:
	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:4 (A)
2				
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100 (A/B)
7				
8				Prevalence Index worksheet:
	0	= Total Cov		Total % Cover of: Multiply by:
50 % of total cover:0	_ 20 % c	of total cover:	0	OBL species x 1 =
Capling/Chruh Stratum (Diet size: 20				FACW species X 2 =
Sapling/Shrub Stratum (Plot size: 30 )	20	V	FAC	FAC species X 3 =
Acer rubrum (Maple,red)     Clether shrifelia (Panner hugh sepert)	20	Y	FAC	FACU species X 4 =
Clethra alnifolia (Pepper-bush,coast)     Ilex opaca (Holly,american)	<u>15</u> 15	<u>Y</u> Y	FACW FAC	UPL species X 5 =
			FAC	Column Totals: (A) (B)
4 5.				(1)
6.				Prevalence Index = B/A =
7.				Hydrophytic Vegetation Indicators:
8	50	= Total Cov		1 – Rapid Test for Hydrophytic Vegetation
10 25				X 2 – Dominance Test is > 50%
10 <u>25</u>	_ 20 % (	of total cover:	10	3 – Prevalence Test is ≤ 3.01
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation ¹ (Explain)
1				
				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or probl matic.
				Definitions of Vegetation Strata:
				Tree – Woody plants, excluding woody vines,
5. 6.				approximately 20 ft (6 m) or more in height and 3 in.
7.				(7.6 cm) or larger in diameter at breast height (DBH).
8.				Sapling – Woody plants, excluding woody vines,
9.				approximately 20 ft (6 m) or more in height and less
10.				than 3 in. (7.6 cm) DBH.
11				Shrub – Woody plants, excluding woody vines,
12.				approximately 3 to 20 ft (1 to 6 m) in height.
	0	= Total Cov	er	opproximately a to be in ( ) to a my minergine
50 % of total cover: 0	-	of total cover:		Herb – All herbaceous (non-woody) plants, including
	_			herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately
Woody Vine Stratum (Plot size: 30 )				3 ft (1 m) in height.
Smilax rotundifolia (Greenbrier, common)	5	Υ	FAC	
2.	·			<b>Woody vine</b> – All woody vines, regardless of height.
3.				
4.				
5.				Hydrophytic
	5	= Total Cov	er	Vegetation
50 % of total cover: 2.5				Present? Yes X No
30 % of total cover	_ 20 /0 0	or total cover.		
Remarks: (Include photo numbers here or on a separate	choot \			
recent clear cut. Replanted with loblolly pine saplings.	Silect.)			
, , , , ,				

SOIL Sampling Point: wnrh015_u

		to the depth i	needed to document to		r confirm	the absence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Redox Fe		Loc ²	Texture	D-	marks	
(inches)	Color (moist)		Color (moist) %					IIIaiks	
0-3	10yr4/3	100		N/A	N/A	<u>Loam</u> Sandy			
3-18	10yr4/4	100		N/A	N/A				
¹Type: C=C	oncentration, D=De	pletion, RM=R	educed Matrix, CS=Cov	ered or Coate	d Sand Gr	ains. ² l	ocation: PL=Pore	Lining, M=Ma	atrix.
Hydric Soil	Indicators:						tors for Problema	tic Hydric So	oils³:
Histosol	` '		Polyvalue Below St	urface (S8) <b>(L</b> l	RR S, T, U)	1 cm	Muck (A9) (LRR O	)	
	ipedon (A2)		Thin Dark Suface (	S9) <b>(LRR S, T</b>	, U)	2 cm	Muck (A10) (LRR \$	S)	
Black His	stic (A3)		Loamy Gleyed Mat	rix (F1) <b>(LRR</b>	<b>)</b>	Redu	ced Vertic (F18) (o	utside MLRA	150A,B)
	n Sulfide (A4)		Loamy Gleyed Mat	rix (F2)		Piedr	nont Floodplain Soi	ls (F19) <b>(LRF</b>	R P, S, T)
Stratified	Layers (A5)		Depleted Matrix (F3	3)		Anon	nalous Bright Loam	y Soils (F20)	
Organic I	Bodies (A6) (LRR P	, T, U)	Redox Dark Surfac	e (F6)		-	LRA 153B)		
	cky Mineral (A7) <b>(Li</b>	-	Depleted Dark Surf	` ,			Parent Material (TF:	,	
	esence (A8) (LRR U	1)	Redox Depressions				Shallow Dark Surfa		
	ck (A9) (LRR P, T)		Marl (F10) (LRR U)			Othe	(Explain in Remar	ks)	
	Below Dark Surfac	e (A11)	Depleted Ochric (F		-	_			
	rk Surface (A12)		Iron Manganese Ma			³ Indic	ators of Hydrophyti	c vegetation	and
	airie Redox (A16) <b>(N</b>	-	Umbric Surface (F1		U)		nd hydrology must		nless
	ucky Mineral (S1) (I	LRR (), S)	Delta Ochric (F17)		A 450D)	aistui	bed or problematic	•	
	leyed Matrix (S4)		Reduced Vertic (F1		-	١٨١			
	edox (S5) Matrix (S6)		Piedmont Floodplai Anomalous Bright I			-	152D)		
	face (S7) <b>(LRR P, S</b>	S, T, U)	Anomalous Bright L	Loanly Solis (i	20) (WILK)	1 143A, 133C	, 1330)		
	Layer (if observed)	<b>)</b> :							
Type:			_	Hyd	ric Soil Pr	esent?	Yes	No _	X
Depth (in	iches):		=						
Remarks:				<u> </u>					

# wnrh015_u



wnrh015_u facing south



wnrh015_u facing west

## wnrh015 soil



wnrh015 soil

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A C P City/C	
	County: NOVTH ham Pton Sampling Date: 10/21/15
Applicant/Owner: DOminion	State: NC Sampling Point: Which D23e
Investigator(s): ESI-R. TUMBUIL, K. MUIPHTEY Section	
Landform (hillslope, terrace, etc.): Nanagelnay Loca	I relief (concave, convex, none): LUNCAVE Slope (%): U-2
	8 432 Long: <u>~77, 54 9 3 3</u> Datum: W 6 5 8
Soil Map Unit Name: Bethera Sit (Oam, 0-1"10	StoreS NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
M. C. C. C. C. C. C. C. C. C. C. C. C. C.	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hudsophutia Vanatatian Process Van	
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No No No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1)Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	D-
Surface Water Present? Yes No Depth (inches): No Depth (inches): No Depth (inches): 2	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
	4

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

Sampling Point: WnrpD23e_w

3001 41661	Absolute Dominant Indicator	Dominance Test worksheet:
1. One Present	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2 3		Total Number of Dominant Species Across All Strata: (B)
4.		100 C 200 C
5		Percent of Dominant Species That Are OBL, FACW, or FAC:
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species x 1 =
5004 of total amore	= Total Cover	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft X ( SF4 )	20% of total cover:	FAC species x 3 =
ADDO Dreson		FACU species x 4 =
		UPL species x 5 =
2		Column Totals: (A) (B)
3		Colonia rotals (A) (B)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1-Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 3084X15Ff)	-	¹ Indicators of hydric soil and wetland hydrology must
1. Phytolacca americana	5 N FACU	be present, unless disturbed or problematic.
2. Saccharum gigantea	30 Y. FACW	Definitions of Four Vegetation Strata:
3. Persicavia hydropiperoides	20 N OBL	
4. Dichonthelium Scoparium	70 Y. FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. BIAPOS Frondosa	5 N FACW	height.
6. Cyperus erythrornizos	2 N OBL	
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		than 5 m. Don and greater than 5.25 k (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12	12.0	
	132 = Total Cover	
	20% of total cover: <u>26.H</u>	_
Woody Vine Stratum (Plot size: 3084X1584)		
1. None Present		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

	V	nrp	023	e D
Sampling	Point: _			_

1	cription: (Describe	to the depth r				or confirm	the absence	of Indicators.	.)		
Depth (inches)	Color (moist)					Loc ²	Texture		Remarks		
0-8	2,5114/2		4R 5/6	13	C	PL	SL	-			
4-20	244/1		4RS/6	10)	-	01	<1				
0 10	4.19-111	10 10	1911 3/6	10		1 1	31				
***************************************					200						
¹Type: C=C	oncentration, D=Dep	letion DM-De	duced Matrix M	C-Masked	Cand Cr	ine .	21 continu	DI = Doro Linis	a M-Matrix		
	Indicators: (Applic					11115.		PL=Pore Linir for Problema			
Histoso	and a second second second second second second second second second second second second second second second	abio to all Eith	Polyvalue Be		Warrange and	PP S T III		luck (A9) (LRF			
	pipedon (A2)	-	Thin Dark Su								
	istic (A3)	-	Loamy Muck				2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)				
	en Sulfide (A4)		Loamy Gleye			-/	Piedmont Floodplain Soils (F19) (LRR P, S, T)				
Stratifie	d Layers (A5)		Depleted Ma				Anomalous Bright Loamy Soils (F20)				
Organic	Bodies (A6) (LRR P	, T, U) _		(MLRA 153B)							
	ucky Mineral (A7) (LF		Depleted Da					arent Material	The state of the s		
	resence (A8) (LRR U	) -	Redox Depre		)			hallow Dark S			
	uck (A9) (LRR P, T)	- (044)	Marl (F10) (L				Other (	Explain in Rer	narks)		
	d Below Dark Surfac ark Surface (A12)		Depleted Oct Iron-Mangan				r) ³ India	ators of hydro	phytic vegetal	ion and	
	rairie Redox (A16) (N		Iron-Mangan Umbric Surfa					and hydrology			
	Mucky Mineral (S1) (I		Delta Ochric			0,		ess disturbed of			
	Gleyed Matrix (S4)		Reduced Ver		,	0A, 150B)					
	Redox (S5)		Piedmont Flo	odplain So	ils (F19)	(MLRA 149	A)				
Stripped	d Matrix (S6)		Anomalous E	Bright Loam	y Soils (F	20) (MLRA	149A, 153C,	153D)			
	rface (S7) (LRR P, S										
Restrictive	Layer (if observed):	:									
Type:	The Control of the Co	100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 miles   100 mi	_						1		
Depth (in	ches):		_				Hydric Soil	Present? Y	es	No	
Remarks:											

#### Environmental Field Surveys Wetland Photo Page



Wetland data point wnrp023e_w facing west.



Wetland data point wnrp023e_w facing southeast.

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: Northampton Sampling Date: 10/21/15 Project/Site: A CP Applicant/Owner: Dominion State: NC Sampling Point: Wnrp 023f-w Investigator(s): ESI-R. TUYNDUIL, IS. MUYPHYRY ___ Section, Township, Range: _ \ \ \ \ \ \ Landform (hillslope, terrace, etc.): drainageway Local relief (concave, convex, none): CONCAVE Subregion (LRR or MLRA): LRR P Lat: 36.48519 Long: -77.54967 Soil Map Unit Name: Bethera Silt luam, 0-1% Slupes ___ NWI classification: _PF 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 _ 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? NCWAM: Headwoter FureSt 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) ___ Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) ___ High Water Table (A2) ___ Marl Deposits (B15) (LRR U) Drainage Patterns (B10) __ Moss Trim Lines (B16) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) ___ Dry-Season Water Table (C2) Water Marks (B1) __ Sediment Deposits (B2) __ Crayfish Burrows (C8) Presence of Reduced Iron (C4) ___ Drift Deposits (B3) ___ Saturation Visible on Aerial Imagery (C9) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4) __ Thin Muck Surface (C7) Geomorphic Position (D2) ___ Iron Deposits (B5) __ Shallow Aquitard (D3) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5)

Yes ____ No ___ Depth (inches): NA

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Yes ____ No ___ Depth (inches): 720

No Depth (inches):

US Army Corps of Engineers

Water-Stained Leaves (B9)

Field Observations:

Surface Water Present?

(includes capillary fringe)

Water Table Present?

Saturation Present?

Remarks:

Sphagnum moss (D8) (LRR T, U)

Wetland Hydrology Present? Yes

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

Sampling Point: WTTP023fa

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 308+ X 308+)		Species?		
1. Betala nigra	25	V	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2. Lividdendrun tulipifera	20	4	FACU	(A)
	10		_	Total Number of Dominant
3. QUEKLUS Phellos	10		FACW	Species Across All Strata: (B)
4. Dinus tacka	_5	N	FAC	Descrit of Reminent Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				That A e OBE, FACW, of FAC.
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
	60	= Total Co	/er	
50% of total cover: 30	20% of	total cover	: 12	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+X3064)	ASSUM TO SERVE		// <del>***********************************</del>	FAC species x 3 =
1. Liquidambor Starocisius	10	Y	FAC	FACU species x 4 =
			FACU	UPL species x 5 =
2. Liviohendrun tulipifera				
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				1_Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
·	25	= Total Cov	/er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 12 4	5 20% of	total cover	. 5	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 308+ X 308+)		total bover		
	10	1/	CACIA	¹ Indicators of hydric soil and wetland hydrology must
1. Buehmeria cylindrica				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3			27,000,000,000,000,000	Too Mantaglanta avaludin aviana 2 in (7.6 and )
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	(0	= Total Cov	/er	
50% of total cover:5	20% of	total cover	. 2	
Woody Vine Stratum (Plot size: 3084 X 3084)				
	10	Y	TAC	
1. Toxicodendrun radicons	-10		FAC.	
2. Smilax returnifolia	10	<u> </u>	FA(	
3				
4.				
5.				
J	20			Hydrophytic
10		= Total Cov	1 .	Vegetation   Present?   Yes   No
50% of total cover:	20% of	total cover	-4	165 - NO
Remarks: (If observed, list morphological adaptations below	w).			
r.				e e
				59
	55 MeG 4255 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

Profile Des	cription: (Describe to the d	epth needed to docur	ment the indicato	r or confirm	the absence of Ind	cators.)	
Depth	Matrix 0		ox Features				
(inches)	Color (moist) %	Color (moist)	% Type	_Loc ²		Remarks	
0-4	104R3/2 100				SL		
4-15	2.544/1 80	104RS/6	30 C	PL	CL		
15-20	2.51/5/1 80	10hRS/6	20 C	PL	CL		
	,	, .					
		•					
		-					
							-
1							
	oncentration, D=Depletion, R Indicators: (Applicable to a			Grains.		ore Lining, M=Matrix oblematic Hydric S	
				I DD C T III		and the same same and the same same same same same same same sam	olis":
Histosol	pipedon (A2)		elow Surface (S8) urface (S9) (LRR S		) 1 cm Muck (A 2 cm Muck (A		
	istic (A3)		y Mineral (F1) (LR			ic (F18) (outside M	LRA 150A.B)
	en Sulfide (A4)		ed Matrix (F2)	,		odplain Soils (F19) (	
	d Layers (A5)	Depleted Mai	trix (F3)			right Loamy Soils (F	
DOWN THE PARTY	Bodies (A6) (LRR P, T, U)	Redox Dark S			(MLRA 153		
The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	ucky Mineral (A7) (LRR P, T, resence (A8) (LRR U)	No.	rk Surface (F7)		Red Parent M		,
	uck (A9) (LRR P, T)	Redox Depre Marl (F10) (L				Dark Surface (TF12 n in Remarks)	)
	d Below Dark Surface (A11)		hric (F11) (MLRA	151)	Other (Explain	riii (Ciliaiks)	
	ark Surface (A12)		ese Masses (F12)		T) ³ Indicators o	f hydrophytic vegeta	tion and
	rairie Redox (A16) (MLRA 15		ice (F13) (LRR P,			drology must be pre	
	Mucky Mineral (S1) (LRR O, S		(F17) (MLRA 151	S	unless dist	urbed or problemati	C.
	Gleyed Matrix (S4) Redox (S5)		rtic (F18) (MLRA 1		243		
	Matrix (S6)		oodplain Soils (F19 Bright Loamy Soils		A 149A, 153C, 153D)		
	rface (S7) (LRR P, S, T, U)		origin Edamy Coms	(1 20) (111211)	1400, 1000, 1000,		
	Layer (if observed):						
Type:						./	
Depth (in	ches):				Hydric Soil Presei	nt? Yes	No
Remarks:							



Wetland data point wnrp023f_w facing southwest.



Wetland data point wnrp023f_w facing southeast

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A C C	alosthhampton - 10/21/1				
Project/Site: TY C1	County: Northhampton Sampling Date: 10/21/1				
Applicant/Owner: State: N Sampling Point: Wnrp 023-					
Investigator(s): ESI-R. TURN DULL, K. MURPHIRE! Section					
	al relief (concave, convex, none): Onvex Slope (%):				
Subregion (LRR or MLRA): LRR P Lat: 36. 48	532 Long: -77, 54964 Datum: W65				
Soil Map Unit Name: Bethera Silt lown, 0-1%	SIOPES 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 distu					
Are Vegetation, Soil, or Hydrology naturally problem					
	mpling point locations, transects, important features, etc.				
Hudrophytic Versteller Present					
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No Yes No	Is the Sampled Area				
Wetland Hydrology Present?	within a Wetland? Yes No				
Remarks:					
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Marl Deposits (B15) (LR	R U) Drainage Patterns (B10)				
Saturation (A3) Hydrogen Sulfide Odor (	C1) Moss Trim Lines (B16)				
Water Marks (B1) Oxidized Rhizospheres a					
Sediment Deposits (B2) Presence of Reduced Iro					
Drift Deposits (B3) Recent Iron Reduction in					
Algal Mat or Crust (B4) Thin Muck Surface (C7)					
Iron Deposits (B5) Other (Explain in Remark					
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	FAC-Neutral Test (D5)				
Field Observations:	Sphagnum moss (D8) (LRR T, U)				
Surface Water Present? Yes No Depth (inches): N	IA A				
	20				
Saturation Present? Yes No Depth (inches):	20 Wetland Hydrology Present? Yes No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:				
Remarks:					
e e	2				

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

Sampling Point:

2-6. 12-6.	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 308+X308+)  1. Pinus taeda	% Cover	Species?	Status FA C	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4				
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8		-		Total % Cover of: Multiply by:
0	80	= Total Cov		OBL species x 1 =
50% of total cover: HO	200/ =	total cover	16	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 305+ X 305+)	20% 01	total cover		FAC species x 3 =
1. Lighidambor Staraci Flyo	50	Y	FAC	FACU species x 4 =
	5	7	FACW	UPL species x 5 =
2. Magnolia Virginiana	10			Column Totals: (A) (B)
3. Acer rubrum	10	<u>N</u>	FAC	(5)
5. QUERCUS Phellos	10	7	FACW	Prevalence Index = B/A =
			111000	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
1.5	<u> 90</u>	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 45	20% of	total cover:	18	
Herb Stratum (Plot size: 3084 X 3084)  1. NONE P(eSEn+				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m. 551 and greater than 5.25 h (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size; and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	:	= Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 308+ X 3084)	-	$\vee$	TAC	
1. Vitis ruturdifolia			FILC	
2. Smilar rutundiforia		7	+ AC	
3				
4				
5				Hydrophytic
	10:	Total Cov	er	Vegetation
50% of total cover:5	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below				

-	-	•

Sampling Point:

Profile Des	cription: (Describe	to the depth r	needed to docur	nent the Ind	icator or confirm	n the absence of Ind	icators.)	
Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)	%	Type Loc2	Texture	Remarks	
0-3	2,54 3/2	100				SL		
3-8	2.5114/2	150				SL		
4-20	2 565/4	90 11	) UR5/6	10	C 00	<1		
0 00	0109017	10 10	711010	10	cn	> L		
¹Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked Sa	and Grains.	² Location: PL=Pc	ore Lining, M=Matri	x.
Hydric Soll	Indicators: (Applic	able to all LRI	Rs, unless other	wise noted.	)	Indicators for Pr	oblematic Hydric	Solls ³ :
Histoso		-			(S8) (LRR S, T, L	U) 1 cm Muck (A	(9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark Su	rface (S9) (L	RR S, T, U)	2 cm Muck (A	(10) (LRR S)	
Black H	istic (A3)	_	Loamy Muck	Mineral (F1	) (LRR O)	Reduced Ver	tic (F18) (outside l	MLRA 150A,B)
	en Sulfide (A4)	_	Loamy Gleye		Ĺ	Piedmont Flo	odplain Soils (F19)	(LRR P, S, T)
	d Layers (A5)	_	Depleted Mat	rix (F3)		Anomalous B	right Loamy Soils (	F20)
	Bodies (A6) (LRR P	_	Redox Dark S			(MLRA 153		
	ucky Mineral (A7) (LF		Depleted Dar		7)	Red Parent M		
	resence (A8) (LRR U	) _	Redox Depre				Dark Surface (TF1	2)
	uck (A9) (LRR P, T)	-	Marl (F10) (L			Other (Explain	n in Remarks)	
	d Below Dark Surface	e (A11) _	Depleted Och			2		
	ark Surface (A12)				F12) (LRR O, P,		f hydrophytic vege	
	rairie Redox (A16) (M		Umbric Surfa				drology must be p	
	Mucky Mineral (S1) (L	.RR O, S) _	Delta Ochric				turbed or problema	tic.
	Sleyed Matrix (S4)	-			RA 150A, 150B)			
	Redox (S5)	-			(F19) (MLRA 14			
	l Matrix (S6) rface (S7) (LRR P, S		Anomalous B	right Loamy	Solis (FZU) (NILK	RA 149A, 153C, 153D	)	
	Layer (If observed):							
	Layer (II observed).							
Type:			-					
Depth (in	ches):		_			Hydric Soil Prese	nt? Yes	No
Remarks:								



Upland data point wnrp023_u facing northeast.



Upland data point wnrp023_u facing northwest.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A C P City/C	10/21/15
	County: NOVTH ham Pton Sampling Date: 10/21/15
Applicant/Owner: DOminion	State: NC Sampling Point: Which D23e
Investigator(s): ESI-R. TUMBUIL, K. MUIPHTEY Section	
Landform (hillslope, terrace, etc.): Nanagelnay Loca	I relief (concave, convex, none): LUNCAVE Slope (%): U-2
	8 432 Long: <u>~77, 54 9 3 3</u> Datum: W 6 5 8
Soil Map Unit Name: Bethera Sit (Oam, 0-1"10	StoreS NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
M. C. C. C. C. C. C. C. C. C. C. C. C. C.	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hudsophutia Vanatatian Process Van	
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No No No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1)Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	D
Surface Water Present? Yes No Depth (inches): No Depth (inches): No Depth (inches): 2	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
	4

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

Sampling Point: WnrpD23e_w

3001 41661	Absolute Dominant Indicator	Dominance Test worksheet:
1. One Present	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2 3		Total Number of Dominant Species Across All Strata: (B)
4.		100 C 200 C
5		Percent of Dominant Species That Are OBL, FACW, or FAC:
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species x 1 =
5004 of total amore	= Total Cover	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft X ( SF4 )	20% of total cover:	FAC species x 3 =
ADDO Dreson		FACU species x 4 =
		UPL species x 5 =
2		Column Totals: (A) (B)
3		Colonia rotals (A) (B)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1-Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 3084X15Ff)	-	¹ Indicators of hydric soil and wetland hydrology must
1. Phytolacca americana	5 N FACU	be present, unless disturbed or problematic.
2. Saccharum gigantea	30 Y. FACW	Definitions of Four Vegetation Strata:
3. Persicavia hydropiperoides	20 N OBL	
4. Dichonthelium Scoparium	70 Y. FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. BIAPOS Frondosa	5 N FACW	height.
6. Cyperus erythrornizos	2 N OBL	
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		than 5 m. Dorrand grouter than 5.25 k (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12	12.0	
	132 = Total Cover	
	20% of total cover: <u>26.H</u>	_
Woody Vine Stratum (Plot size: 3084X1584)		
1. None Present		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Sampling Point: ______

Profile Description: (Describe to ti			r confirm the	absence of India	cators.)
Depth Matrix (inches) Color (moist)	% Color (moist)	eatures % Type ¹	Loc ² To	exture	Remarks
0-8 2,5114/28		5 C	PL S	SL	
4-20 2.44/1 9	0 104RS/6	10)	01 <	<u> </u>	
2.1717	0 10011010	10	don't	> -	
¹ Type: C=Concentration, D=Depletion	n. RM=Reduced Matrix. MS=	Masked Sand Grai	ins. ² l	ocation: PL=Po	re Lining, M=Matrix.
Hydric Soil Indicators: (Applicable					blematic Hydric Solls ³ :
Histosol (A1)	Polyvalue Belov	w Surface (S8) (LR	RR S, T, U) _	_ 1 cm Muck (As	9) (LRR O)
Histic Epipedon (A2)	Thin Dark Surfa	ice (S9) (LRR S, T	r, u)	_ 2 cm Muck (A	10) (LRR S)
Black Histic (A3)		Mineral (F1) (LRR	0) _		c (F18) (outside MLRA 150A
Hydrogen Sulfide (A4)	Loamy Gleyed		_		odplain Soils (F19) (LRR P, S,
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T,		1	-	_ Anomalous Br (MLRA 153E	ight Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR F				_ Red Parent Ma	
Muck Presence (A8) (LRR U)	Redox Depress				Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRI	•		Other (Explain	
Depleted Below Dark Surface (A		(F11) (MLRA 151		2	
Thick Dark Surface (A12)		e Masses (F12) (L			hydrophytic vegetation and
Coast Prairie Redox (A16) (MLR Sandy Mucky Mineral (S1) (LRR		(F13) (LRR P, T, 17) (MLRA 151)	u)	100 CO CO CO CO CO CO CO CO CO CO CO CO CO	drology must be present, urbed or problematic.
Sandy Gleyed Matrix (S4)		(F18) (MLRA 150	A. 150B)	unicas disk	arbed or problematic.
Sandy Redox (S5)		plain Soils (F19) (			
Stripped Matrix (S6)		ht Loamy Soils (F	20) (MLRA 149	9A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T,	U)				
Restrictive Layer (if observed):					
Type:				dd - 8-11 B	12 Van V
Depth (inches):			ну	dric Soil Presen	t? Yes No
Remarks:					



Wetland data point wnrp023e_w facing west.



Wetland data point wnrp023e_w facing southeast.

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: Northampton Sampling Date: 10/21/15 Project/Site: A CP Applicant/Owner: Dominion State: NC Sampling Point: Wnrp 023f-w Investigator(s): ESI-R. TUYNDUIL, IS. MUYPHYRY ___ Section, Township, Range: _ \ \ \ \ \ \ Landform (hillslope, terrace, etc.): drainageway Local relief (concave, convex, none): CONCAVE Subregion (LRR or MLRA): LRR P Lat: 36.48519 Long: -77.54967 Soil Map Unit Name: Bethera Silt luam, 0-1% Slupes ___ NWI classification: _PF 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 _ 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? NCWAM: Headwoter FureSt 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) ___ Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) ___ High Water Table (A2) ___ Marl Deposits (B15) (LRR U) Drainage Patterns (B10) __ Moss Trim Lines (B16) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) ___ Dry-Season Water Table (C2) Water Marks (B1) __ Sediment Deposits (B2) __ Crayfish Burrows (C8) Presence of Reduced Iron (C4) ___ Drift Deposits (B3) ___ Saturation Visible on Aerial Imagery (C9) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4) __ Thin Muck Surface (C7) Geomorphic Position (D2) ___ Iron Deposits (B5) __ Shallow Aquitard (D3) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5)

Yes ____ No ___ Depth (inches): NA

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Yes ____ No ___ Depth (inches): 720

No Depth (inches):

US Army Corps of Engineers

Water-Stained Leaves (B9)

Field Observations:

Surface Water Present?

(includes capillary fringe)

Water Table Present?

Saturation Present?

Remarks:

Sphagnum moss (D8) (LRR T, U)

Wetland Hydrology Present? Yes

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

Sampling Point: WTTP023fa

20611/2061	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3084 X 3084)	% Cover	Species?		Number of Dominant Species
1. Betula nigra	20	<del></del>	FACW	That Are OBL, FACW, or FAC: (A)
2. Lividdendran tulipitera	20		FACU	Total Number of Dominant
3. QUEICUS Phellos	10	N	FACW	Species Across All Strata: (B)
4. Pinas tarda	_5_	N	FAC	Percent of Deminant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6				
7				Prevalence Index worksheet:
8	St			Total % Cover of: Multiply by:
	60	= Total Cov	er	OBL species x 1 =
50% of total cover: _ 30			-	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+ X308+)		total outer.		FAC species x 3 =
1. Liquidambor Starocifica	10	Y	FAC	FACU species x 4 =
2. Liviodendrun tulipifera	15	y	FACU	UPL species x 5 =
				Column Totals: (A) (B)
3				, , , , , , , , , , , , , , , , , , , ,
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1_Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	25	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 12 6	5 20% of	total cover:	5	robicinate riyaropriyae vegetation (Explain)
Herb Stratum (Plot size: 308+ X 308+)				Notice to a control of the state of the stat
1. Buehmeria cylindrica	10	Y	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
				Definitions of Four Vegetation Strate.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Marada Allana de dia dia dia dia dia dia dia dia dia dia
11				Woody vine - All woody vines greater than 3.28 ft in height.
12				1.0.9
	(0)	= Total Cov		
50% of total cover:5		total cover:		
007001101110011	20% 01	total cover.		
Woody Vine Stratum (Plot size: 30F4 X 30F4)	10	Y	TAC	
1. Toxicodendion radicons	10		FAC	
2. Smilax rutardifolia	10	<del></del>	FAC	
3.				
4				
5				Hydrophytic
	20 :	= Total Cov	er	Vegetation
50% of total cover:		total cover:	1 .	Present? Yes No No
Remarks: (If observed, list morphological adaptations below				
Training (if observed, its merphological adaptations belo	,.			
				2
				,
	23mg 4277 - 37 - 00			

Profile Des	cription: (Describe to the d	epth needed to docur	ment the indicato	r or confirm	the absence of Ind	cators.)	
Depth	Matrix 0		ox Features				
(inches)	Color (moist) %	Color (moist)	% Type	_Loc ²		Remarks	
0-4	104R3/2 100				SL		
4-15	2.544/1 80	104RS/6	30 C	PL	CL		
15-20	2.51/5/1 80	10hRS/6	20 C	PL	CL		
	,	, .					
		•					
		-					
							-
1							
	oncentration, D=Depletion, R Indicators: (Applicable to a			Grains.		ore Lining, M=Matrix oblematic Hydric S	
				I DD C T III		and the same same and the same same same same same same same sam	olis":
Histosol	pipedon (A2)		elow Surface (S8) urface (S9) (LRR S		) 1 cm Muck (A 2 cm Muck (A		
	istic (A3)		y Mineral (F1) (LR			ic (F18) (outside M	LRA 150A.B)
	en Sulfide (A4)		ed Matrix (F2)	,		odplain Soils (F19) (	
	d Layers (A5)	Depleted Mai	trix (F3)			right Loamy Soils (F	
DOWN THE PARTY	Bodies (A6) (LRR P, T, U)	Redox Dark S			(MLRA 153		
The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	ucky Mineral (A7) (LRR P, T, resence (A8) (LRR U)	No.	rk Surface (F7)		Red Parent M		,
	uck (A9) (LRR P, T)	Redox Depre Marl (F10) (L				Dark Surface (TF12 n in Remarks)	)
	d Below Dark Surface (A11)		hric (F11) (MLRA	151)	Other (Explain	riii (Ciliaiks)	
	ark Surface (A12)		ese Masses (F12)		T) ³ Indicators o	f hydrophytic vegeta	tion and
	rairie Redox (A16) (MLRA 15		ice (F13) (LRR P,			drology must be pre	
	Mucky Mineral (S1) (LRR O, S		(F17) (MLRA 151	S	unless dist	urbed or problemati	C.
	Gleyed Matrix (S4) Redox (S5)		rtic (F18) (MLRA 1		243		
	Matrix (S6)		oodplain Soils (F19 Bright Loamy Soils		A 149A, 153C, 153D)		
	rface (S7) (LRR P, S, T, U)		origin Edamy Coms	(1 20) (111211)	1400, 1000, 1000,		
	Layer (if observed):						
Type:						./	
Depth (in	ches):				Hydric Soil Presei	nt? Yes	No
Remarks:							



Wetland data point wnrp023f_w facing southwest.



Wetland data point wnrp023f_w facing southeast

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A C C	alosthhampton - 10/21/1				
Project/Site: TY C1	County: Northhampton Sampling Date: 10/21/1				
Applicant/Owner: State: N Sampling Point: Wnrp 023-					
Investigator(s): ESI-R. TURN DULL, K. MURPHIRE! Section					
	al relief (concave, convex, none): Onvex Slope (%):				
Subregion (LRR or MLRA): LRR P Lat: 36. 48	532 Long: -77, 54964 Datum: W65				
Soil Map Unit Name: Bethera Silt lown, 0-1%	SIOPES 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 distu					
Are Vegetation, Soil, or Hydrology naturally problem					
	mpling point locations, transects, important features, etc.				
Hudrophytic Versteller Process 2					
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No Yes No	Is the Sampled Area				
Wetland Hydrology Present?	within a Wetland? Yes No				
Remarks:					
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Marl Deposits (B15) (LR	R U) Drainage Patterns (B10)				
Saturation (A3) Hydrogen Sulfide Odor (	C1) Moss Trim Lines (B16)				
Water Marks (B1) Oxidized Rhizospheres a					
Sediment Deposits (B2) Presence of Reduced Iro					
Drift Deposits (B3) Recent Iron Reduction in					
Algal Mat or Crust (B4) Thin Muck Surface (C7)					
Iron Deposits (B5) Other (Explain in Remark					
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	FAC-Neutral Test (D5)				
Field Observations:	Sphagnum moss (D8) (LRR T, U)				
Surface Water Present? Yes No Depth (inches): N	IA A				
	20				
Saturation Present? Yes No Depth (inches):	20 Wetland Hydrology Present? Yes No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:				
Remarks:					
e e	2				

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

Sampling Point:

2-6. 12-6.	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 308+X308+)  1. Pinus taeda	% Cover	Species?	Status FA C	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4				
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8		-		Total % Cover of: Multiply by:
0	80	= Total Cov		OBL species x 1 =
50% of total cover: HO	200/ =	total cover	16	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 305+ X 305+)	20% 01	total cover		FAC species x 3 =
1. Lighidambor Staraci Flyo	50	Y	FAC	FACU species x 4 =
	5	7	FACW	UPL species x 5 =
2. Magnolia Virginiana	10			Column Totals: (A) (B)
3. Acer rubrum	10	<u>N</u>	FAC	(5)
5. QUERCUS Phellos	10	7	FACW	Prevalence Index = B/A =
			111000	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
1.5	<u> 90</u>	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 45	20% of	total cover:	18	
Herb Stratum (Plot size: 3084 X 3084)  1. NONE P(eSEn+				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m. 551 and groater than 5.25 h (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size; and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	:	= Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 308+ X 3084)	-	$\vee$	TAC	
1. Vitis ruturdifolia			FILC	
2. Smilar rutundiforia		7	+ AC	
3				
4				
5				Hydrophytic
	10:	Total Cov	er	Vegetation
50% of total cover:5	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below				

-	-	•

Sampling Point:

Profile Des	cription: (Describe	to the depth r	needed to docur	nent the Ind	icator or confirm	n the absence of Ind	icators.)	
Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)	%	Type Loc2	Texture	Remarks	
0-3	2,54 3/2	100				SL		
3-8	2.5114/2	150				SL		
4-20	2 565/4	90 11	) UR5/6	10	C 00	<1		
0 00	0109017	10 10	711010	10	cn	> L		
¹Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked Sa	and Grains.	² Location: PL=Pc	ore Lining, M=Matri	x.
Hydric Soll	Indicators: (Applic	able to all LRI	Rs, unless other	wise noted.	)	Indicators for Pr	oblematic Hydric	Solls ³ :
Histoso		-			(S8) (LRR S, T, L	U) 1 cm Muck (A	(9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark Su	rface (S9) (L	RR S, T, U)	2 cm Muck (A	(10) (LRR S)	
Black H	istic (A3)	_	Loamy Muck	Mineral (F1	) (LRR O)	Reduced Ver	tic (F18) (outside l	MLRA 150A,B)
	en Sulfide (A4)	_	Loamy Gleye		Ĺ	Piedmont Flo	odplain Soils (F19)	(LRR P, S, T)
	d Layers (A5)	_	Depleted Mat	rix (F3)		Anomalous B	right Loamy Soils (	F20)
	Bodies (A6) (LRR P	_	Redox Dark S			(MLRA 153		
	ucky Mineral (A7) (LF		Depleted Dar		7)	Red Parent M		
	resence (A8) (LRR U	) _	Redox Depre				Dark Surface (TF1	2)
	uck (A9) (LRR P, T)	-	Marl (F10) (L			Other (Explain	n in Remarks)	
	d Below Dark Surface	e (A11) _	Depleted Och			2		
	ark Surface (A12)				F12) (LRR O, P,		f hydrophytic vege	
	rairie Redox (A16) (M		Umbric Surfa				drology must be p	
	Mucky Mineral (S1) (L	.RR O, S) _	Delta Ochric				turbed or problema	tic.
	Sleyed Matrix (S4)	-			RA 150A, 150B)			
	Redox (S5)	-			(F19) (MLRA 14			
	l Matrix (S6) rface (S7) (LRR P, S		Anomalous B	right Loamy	Solis (FZU) (NILK	RA 149A, 153C, 153D	)	
	Layer (If observed):							
	Layer (II observed).							
Type:			-					
Depth (in	ches):		_			Hydric Soil Prese	nt? Yes	No
Remarks:								



Upland data point wnrp023_u facing northeast.



Upland data point wnrp023_u facing northwest.

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Northampton Sampling Date: 6/24/15
Applicant/Owner: Dominion	State: NC Sampling Point: Wnr P0194
Investigator(s): ESI (Roper, Markham)	
	Local relief (concave, convex, none): Loncave Slope (%): 0-4/.
	0.46536 Long: -77,55156 Datum: W6584
Soil Map Unit Name: Wehadkee loam, fre	equently flooded WI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of ye	rear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes No
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?  Hydric Soil Present?  Westerd Hydrophytic Present?  Yes No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	-
LIVEROLOGY	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply  Surface Water (A1)  Aquatic Fauna (B	· · · · · · · · · · · · · · · · · · ·
High Water Table (A2)  Addance Patria (E)  Marl Deposits (B)	
Saturation (A3)	
	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	duction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surfa  Other (Explain in	<u> </u>
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	./^
Surface Water Present? Yes No Depth (inch	nes): NH
Water Table Present? Yes No Depth (Inch	nes);
Saturation Present? Yes No Depth (incl (includes capillary fringe)	hes): 12 Wetland Hydrology Present? Yes V No No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	hotos, previous inspections), if available:
Remarks:	
ļ	!
1	

/EGETATION (Four Strata) – Use scientific r	-			S	sampling Point: V	<u>r                                     </u>
Tree Stratum (Piot size: 30ft x 30ft )		Dominant		Dominance Test workshe	et:	
Acer rubrum	<u>% Cover</u> フ.カ	Species?	FAC	Number of Dominant Specie	es 7	
	_ 20	$\frac{1}{\sqrt{1}}$		That Are OBL, FACW, or Fa	AC:	(A)
Liquidambar styraciflua	_ 13		FAC	Total Number of Dominant	_	
				Species Across All Strata:		(B)
·				Percent of Dominant Specie	20	
· <u> </u>	<del></del>			That Are OBL, FACW, or F.	AC: 100	(A/B)
·						· ,
			1	Prevalence Index worksh		
·				Total % Cover of:		
	35	= Total Co	ver	OBL species		
50% of total cover: _ l	7,5 20% 0	f total cove	r: 7	FACW species	_ x 2 =	
Sapling/Shrub Stratum (Plot size: 30ft ×30ft)				FAC species	_ x3=	_
Ilex opaca	10	У	FAC	FACU species		
Ilex opaca Liquidambor styraciflua		Ý	FAL	UPL species		
3		-/	1	Column Totals:		
					v /	<-/
1.				Prevalence Index = 1	B/A =	
5				Hydrophytic Vegetation I	ndicators:	
S			<del></del>	1 - Rapid Test for Hyd	rophytic Vegetation	
7				2 - Dominance Test is	>50%	
B				3 - Prevalence Index i		
	15	= Total Co	over _	Problematic Hydrophy		ain)
50% of total cover:	7.5 _{20% c}	of total cove	an_ <u>3</u>	robicinado riyulopiny	no vegetation (Expir	*11 I)
Herb Stratum (Plot size: 30Hx30f+)				11		
1. Microstegium vimineum	45	У	FAL	¹ Indicators of hydric soil ar be present, unless disturb	ia wettana nyarotogy ed or problematic	must
2. Woodwardia areolata	<u> </u>	N	OBL	Definitions of Four Vege	•	
3. Athyrium asplenioides	— <u> </u>	- 1	FAC	Deminitions of Four Vege	tation Strata:	
1		14		Tree - Woody plants, exc	luding vines, 3 in. (7.6	cm) or
4				more in diameter at breas	t height (DBH), regar	dless of
5				height.		
6			<del></del>	Sapling/Shrub - Woody	plants, excluding vine	s, less
7				than 3 in. DBH and greate	er than 3.28 ft (1 m) to	ail.
8				Herb - All herbaceous (no	on-woody) plants, red	ardless
9				of size, and woody plants		,
10				Mondy vine All words		004:-
11.				Woody vine – All woody height.	vines greater trian 5.	26 II III
12				.		
	55	_ = Total 0	Cover	-		
50% of total cover:						
Woody Vine Stratum (Plot size: 30ff x 30ff )	<u>- 1.5</u> 20%	OI (OLEI CO	vei	-		
1. Vitis cotundifolia	6	V	EAC			
	— <del>-&gt;</del>	- <del>'</del>	180	- [		
2. Smilax rotundifolia	<u> </u>		<u>rhc</u>	= [		
3				_		
4				_		
5.				1 li religa m la religi		
	10	= Total	Cover	<ul> <li>Hydrophytic</li> <li>Vegetation</li> </ul>	,	
PONT - 21-11-1			_	Present? Yes	No	
50% of total cover: _		of total co	over:	-		
Remarks: (If observed, list morphological adaptation	s below).			<del></del>		

	ription: (Describe	to the depth	needed to docur	nent the ir	ndicator	or confirm	n the absence of	indicators.)	
Depth (inches)	Matrix Color (moist)	<del></del>	Redo Color (moist)	x Features %	Type	Loc ²	Taulusa	D-	
0 - 6	10 YR 3/2	98 - 18	10 Y R 4/6	- <del>2</del>	TAbe	PL	Texture	Re	marks
	1 1		10 / K / 6		$\frac{\sim}{\sim}$				
10-50	107K4/2	<u>90</u>	2.57K46	10		PL			
						·			
· ·									
							<del></del>		
Type: C=C	oncentration, D=Dep	pletion, RM=	Reduced Matrix, M	S=Masked	Sand G	rains.	² Location: P	L=Pore Lining,	M=Matrix.
lydric Soil	Indicators: (Applic	cable to all L	RRs, unless othe	rwise note	ed.)			r Problematic	
Histoso	I (A1)		Polyvalue B	elow Surfa	ce (S8) (	LRR S, T, I	U) 🛄 1 cm Mu	ck (A9) (LRR C	) )
Histic E	pipedon (A2)		Thin Dark S					ck (A10) (LRR	
Black H	listic (A3)		Loamy Mucl						outside MLRA 150A,B)
Hydrog	en Sulfide (A4)			ed Matrix (	(F2)				ils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma				L Anomalo	ous Bright Loam	ny Soils (F20)
	Bodies (A6) (LRR I		Redox Dark		•		1 1	153B)	
	ucky Mineral (A7) (L		Depleted Da					ent Material (Ti	
	resence (A8) (LRR		Redox Depr		8)			allow Dark Surf	
	uck (A9) (LRR P, T)		Mari (F10) (		/861 D.A.	4543	U Other (E	xplain in Rema	rks)
= '	ed Below Dark Surfa Park Surface (A12)	ce (ATT)	Depleted Or Iron-Manga				31-41-		ulia varadadian and
	Prairie Redox (A16)	(MI DA 450A					•		ytic vegetation and nust be present,
	Mucky Mineral (S1)		Delta Ochri					ss disturbed or	•
	Gleyed Matrix (S4)	(2.0.0)	Reduced V					aa diatarbea di	problematic.
_	Redox (S5)		Piedmont F		-		•		
_	d Matrix (S6)		_		-		RA 149A, 153C,	153D)	
	urface (S7) (LRR P,	S, T, U)	<del></del>	·	•	. ,.		,	
	Layer (if observed								
Type: _							]		
	nches):						Hydric Soil I	Present? Ye	s No.
Remarks:							1.7	-	<u> </u>
, torrior									
[									
1									
]									



Wetland data point wnrp019f_w facing southeast.



Wetland data point wnrp019f_w facing north.

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Northam pton Sampling Date: 6124115
Applicant/Owner: <u>Pominion</u>	State: NC Sampling Point: wnrp019_a
Investigator(s): ESI (Roper, Markham)	Section, Township, Range: none
Landform (hillslope, terrace, etc.): 10pe	Local relief (concave, convex, none): Convex Slope (%): 0-41,
Subregion (LRR or MLRA): LPRP Lat: 36	.46525 Long: -77.55163 Datum: W6584
Soil Map Unit Name: Caroline Sandy loam	1, 2-6% SIDDES NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year	ear? Yes No (If no explain in Remarks )
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	
	, , , , , , , , , , , , , , , , , , , ,
SUMMARY OF FINDINGS – Attach site map snowing	g 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
Wetland Hydrology Present? Yes No	No. V
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	_
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2)  Marl Deposits (B1)	
☐ Saturation (A3) ☐ Hydrogen Sulfide	
Water Marks (B1) Oxidized Rhizosp	oheres along Living Roots (C3)
Sediment Deposits (B2)	uced Iron (C4)
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface	
Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in	· · · · · · · · · · · · · · · · · · ·
Water-Stained Leaves (B9)	☐ FAC-Neutral Test (D5) ☐ Sphagnum moss (D8) (LRR T, U)
Field Observations:	Springfillit moss (bo) (Ett. 1, 0)
Surface Water Present? Yes NoDepth (inche	es): NA
Water Table Present? Yes No Depth (inche	es): >20
Saturation Present? Yes No Depth (inch	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial ph	ofce previous inspections) if availables
besonder Recorded Data (stream gadge, monitoring wen, aenar pri	otos, previous inspections), ii avaitable.
Remarks:	
	1
<b>\</b>	
1	

/EGETATION (Four Strata) Use scientific na	mes of pl	ants.		Sam	pling Point: White
Tree Stratum (Plot size: 30ftx30ft)		Dominant Species?		Dominance Test worksheet:	
1. Liriodendron tulipifera	₩ Cover ℓ O	Species?	FACU	Number of Dominant Species That Are OBL, FACW, or FAC	<b>6</b> (A)
2. Acer rubrum	20	<del>-</del>	FAC		(4)
3. Liquidambar styraciflua	10	Ż	FAL	Total Number of Dominant Species Across All Strata:	& _(B)
4 Ilex chara		$\overline{\mathcal{N}}$	FAC	opedies Adioss All Oliala.	(B)
5. Carya illinoinensis	<u>5</u>	N	FACU	Percent of Dominant Species	75 (A/B)
6.	.*;		. 1	That Are OBL, FACW, or FAC	:/ (A/B)
7				Prevalence Index worksheet	
8				Total % Cover of:	
	50	= Total Co	ver	OBL species	
50% of total cover: <u>2.5</u>				FACW species	
Sapling/Shrub Stratum (Plot size: 30ftx30ft)				FAC species	
1. Ilex opaca	- <u>5</u>	<u> </u>	<u>FAC</u>	FACU species	
2. Quercus nigra		_ N	FAC	UPL species	
3. Juniperus Virginiana	5	<u> </u>	FACU	Column Totals:	(A) (B)
4			· <del></del>	Prevalence Index = B/A	=
5				Hydrophytic Vegetation Indi	
6				1 - Rapid Test for Hydrop	
7		· ·		2 - Dominance Test is >5	nytic vegetation
8			·	3 - Prevalence Index is ≤	
	12	= Total Co	ver	Problematic Hydrophytic	
50% of total cover: b	20% c	of total cove	r. 2.4		regeration (Express)
Herb Stratum (Plot size: 30F4 x 30F4)	,			Indicators of hydric soil and v	vetland hydrology must
1. Microstegium vimineum	<u> </u>	<u> </u>	FAL	be present, unless disturbed	or problematic.
2. Vitis rotundifolia	10	N	FAL	Definitions of Four Vegetat	on Strata:
3. Asplenium platyneuron	<u>5</u>	<u> </u>	<u>faw</u>	Tree - Woody plants, excludi	navince 2 in (7.6 cm) or
4				more in diameter at breast he	
5				height.	
6				Sapling/Shrub - Woody plan	nts, excluding vines, less
7				than 3 in. DBH and greater th	nan 3.28 ft (1 m) tall.
8			- — <u> </u>	Herb - All herbaceous (non-	woody) plants, regardless
9				of size, and woody plants les	s than 3.28 ft tall.
10				Woody vine – All woody vin	es greater than 3.28 ft in
11				height.	5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5
12	- <del></del>		- <del></del>	.	
1		_ = Total C			
50% of total cover: 3	<b>5</b> 20%	of total cov	er: <u>                                    </u>	.	
Woody Vine Stratum (Plot size: 30f+x30f+)	~		د ۵		
1. Vitis rotundifolia	보	) <u> </u>	_ <u> </u>		
2. Smilax rotundifolia	5		<u> FAC</u>	<u> </u>	
3				-	
4				_	
5.				- Hydrophytic	
	_ 15	= Total (	Cover	Vegetation	
50% of total cover: 7	<u>.5                                    </u>	of total co	ver: <u>3</u>	Present? Yes _\	✓ No
Remarks: (If observed, list morphological adaptations by	elow).			1	
}	•				

Profile Desci Depth	ription: (Describe Matrix	ille deptn		c Features		rne apsence of in	aicators.)
inches)	Color (moist)	%	Color (moist)		e¹ Loc²	<u>Texture</u>	Remarks
ما - (	10YR4/3	100				<u> 5L</u> _	
0-20	104R5/6	100				SL	
						<del></del>	
		·					
					<del></del>		
	naarteettee D-De-		Name of Stat			21 (1 5)	
	oncentration, D=Dep Indicators: (Applic				Grains.		Pore Lining, M=Matrix.  Problematic Hydric Soils³:
Histosol		able to all L	_	· ·	)// DD C T I	<u> </u>	
	pipedon (A2)			low Surface (Sa Irface (S9) (LRF		· —	(A9) (LRR O) (A10) (LRR S)
	stic (A3)			y Mineral (F1) (			ertic (F18) (outside MLRA 150A,B
	n Sulfide (A4)			ed Matrix (F2)	Little Oj	Piedmont F	Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		Depleted Ma				Bright Loamy Soils (F20)
<del></del>	Bodies (A6) (LRR F	P, T, U)	Redox Dark	· •		(MLRA 1	- · · · · · · · · · · · · · · · · · · ·
	icky Mineral (A7) (L			rk Surface (F7)			t Material (TF2)
	esence (A8) (LRR l		Redox Depre				ow Dark Surface (TF12)
	ick (A9) (LRR P, T)			.RR U)			lain in Remarks)
Deplete	d Below Dark Surfac	ce (A11)		hric (F11) (MLF			
	ark Surface (A12)			ese Masses (F		, T) ³ Indicator	s of hydrophytic vegetation and
	rairie Redox (A16) (		· <del></del>	ace (F13) (LRR			l hydrology must be present,
	Mucky Mineral (S1) (	(LRR O, S)		(F17) (MLRA 1	•		disturbed or problematic.
	Gleyed Matrix (S4)		_	rtic (F18) (MLR		•	
	Redox (S5)			oodplain Soils (			
	d Matrix (S6) urface (S7) (LRR P,	(II Z	Anomaious	Bright Loamy S	olis (FZU) (IVIL	RA 149A, 153C, 15	30)
	Layer (if observed					<del>-</del> -	
		•					
						10.11.00	
	nches):					Hydric Soil Pre	esent? Yes No
Remarks:							
	•						



Upland data point wnrp019_u facing west.



Upland data point wnrp019_u facing south.

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Southeastern Reliability City/County: North Hampton Sampling Date: 7-2-2014
Applicant/Owner: Dominion State: WC Sampling Point: WNRG-005
Investigator(s): DD WEST Section, Township, Range:
Landform (hillslope, terrace, etc.): Bottom land Local relief (concave, convex, none): Concave Slope (%):
Subregion (LRR or MLRA): Lat: 36° 26° 41. 488 Long: 77° 32° 58. 653 Datum:
Soil Map Unit Name: Raups 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 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?  Wetland Hydrology Present?  Remarks:  Yes X No Is the Sampled Area within a Wetland?  Yes X No Is the Sampled Area within a Wetland?
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)       □ Aquatic Fauna (B13)             Secondary Indicators (minimum of two required)         □ Surface Soil Cracks (B6)         Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)
Saturation (A3)  Hydrogen Sulfide Odor (C1)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Remarks) ☐ Shallow Aquitard (D3) ☐ Inundation Visible on Aerial Imagery (B7) ☐ FAC-Neutral Test (D5)
Water-Stained Leaves (B9)  Sphagnum moss (D8) (LRR T, U)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No X Depth (inches):
Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

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

WNRG	005f
Sampling Point:	W

Tree Stratum (Plot size:  1. Populus de foides  2. Liquidamber styraciflua  3. Aler rubrum  4.  5.  6.  7.  8.		Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:
Sapling/Shrub Stratum (Plot size:)  1. Acer rubrum  2. Magnolia Virginiana  3. Ligustrum sinense  4. Juni perus Virginiana  5. Hypericum hypericoides  6	2 FACU FACU FACU	OBL species       x 1 =         FACW species       x 2 =         FAC species       x 3 =         FACU species       x 4 =         UPL species       x 5 =         Column Totals:       (A)         Mydrophytic Vegetation Indicators:         1 - Rapid Test for Hydrophytic Vegetation         2 - Dominance Test is >50%
Herb Stratum (Plot size:  1. Lycs pus Virginicus  2. Murdania Keisak  3. Glyceria melicuma  4. Onoclea sensibilis  5. Boehmeria cylindrica	S OBL S OBL I FACK	3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Woody Vine Stratum (Plot size:  1. Smilax aurisola.  2. Vilis rotundida lid.  3	2 FACW 2 FAC  2 FACW 2 FAC  2 Total Cover 20% of total cover:	Hydrophytic Vegetation Present?  Yes No

Sampling Point: _____

Profile Description	(Describe to t	the depth n	eeded to docum	nent the i	ndicator	or confirm	the absence of inc	dicators.)	
Depth	Matrix			x Features			22 0		
	or (moist)	% (	Color (moist)	%	Type ¹	Loc ²		Remarks	
480	R3/2						Loan	<del></del>	-
200	YR 5/2						5 L		
9-18+ 10	YR 4/1		DYR 5/6	10		M	SCL		
						0			
30 49									
									_
1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Tabl	110-200-0-000								
¹Type: C=Concentra	stion D=Donloti	on DM=Doo	lugged Matrice MC	Salda alsa d	C1 C		21		
Hydric Soil Indicate						ains.		ore Lining, M=Matri	
Histosol (A1)		Γ	Polyvalue Be		97	RR S. T. U		A9) (LRR O)	30113 .
Histic Epipedon	(A2)	Ī	Thin Dark Su				보는 그를 요하는 없이 걸 가게 되었습니다.	A10) (LRR S)	
Black Histic (A3		Ţ	Loamy Muck					rtic (F18) (outside I	
Hydrogen Sulfid		Ē	Loamy Gleye		F2)			oodplain Soils (F19)	
Stratified Layers Organic Bodies		*	Depleted Mar Redox Dark S		C)			Bright Loamy Soils (	F20)
5 cm Mucky Min		CATCHERON CO.	Depleted Dar				☐ (MLRA 15	Material (TF2)	3
Muck Presence		· · · 1	Redox Depre		Carrier and Control			v Dark Surface (TF1	2)
1 cm Muck (A9)		Ī	Marl (F10) (L					in in Remarks)	- 19-X-11
Depleted Below Thick Dark Surfa		(11) <u> </u>	Depleted Och				- 3, <i>.</i>		
Coast Prairie Re		RA 150A) T	☐ Iron-Mangan ☐ Umbric Surfa					of hydrophytic vegel	enneen my jaranna
Sandy Mucky M			Delta Ochric			. 07		sturbed or problema	
Sandy Gleyed M		Ξ	Reduced Ver			0A, 150B)		Ψe	
Sandy Redox (S	997	+	Piedmont Flo						
Stripped Matrix  Dark Surface (S		IN L		right Loan	ny Soils (F	(MLRA	A 149A, 153C, 153D	0)	
Restrictive Layer (in		, 0)					<u> </u>		
Type:									
Depth (inches):							Hydric Soil Prese	ent? Yes X	No
Remarks:	are the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s								
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	Out of bear								
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# wnrg005f_w



WNRG005f_w – Forested Wetland



 $WNRG005f_w-Forested\ Wetland$ 

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: Southonston Reliability City/County: North Homoton Sampling Date: 7-2-2014 Applicant/Owner: State: NC Sampling Point: WNRG 005 () Investigator(s): DDWSST Section, Township, Range: _ Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): 42.028 Long: 77° 32' 58.15 Subregion (LRR or MLRA): Soil Map Unit Name: Len Oir 51 + Som NWI classification: NONE, Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes_ 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: **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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? Saturation Present? No Depth (inches): Wetland Hydrology Present? Yes _____ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Only one secondary indicator present.

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

Sampling Point: WNRG 005

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Liquidambar styraei flua	25		FAC	That Are OBL, FACW, or FAC: (A)
2. After ruhrum	30		FAC	
3. Pinus tarda	10		FAC	Total Number of Dominant
3. TIMOS TAPOLA	10			Species Across All Strata: (B)
4				Down of Down on A Down
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	65	= Total Co	ver	OBL species x 1 =
50% of total cover: 32.	€ 20% of	total cover	.13	FACW species x 2 =
	2070 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	10	1	FM.	FACU species x 4 =
1. Ulmus alata	15		FACU	
2. Liaustrum sinense	5	$\vee$	FALU	UPL species x 5 =
3. Liquidambor styper the	K		FAC	Column Totals: (A) (B)
4. Ilex opaca	K		FAC	
4. Lien opaca		-4		Prevalence Index = B/A =
5. Acer rubrum	_5_	$\overline{}$	FAC	Hydrophytic Vegetation Indicators:
6		0.11		1 - Rapid Test for Hydrophytic Vegetation
7				
				2 - Dominance Test is >50%
8	71			3 - Prevalence Index is ≤3.01
	35	= Total Cov	/er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	5 20% of	total cover	: 7	· · · · · · · · · · · · · · · · ·
Herb Stratum (Plot size:)				4
				¹ Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				STOREST AND A CONTROL OF THE STOREST AND AND AND AND AND AND AND AND AND AND
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
		- Total O		
		= Total Cov		
50% of total cover:	20% of	total cover		
Woody Vine Stratum (Plot size:				
1. Vitis rotunditolia			FAC	
2. Smilax rotundifolia	1		FAC.	
2. STATION TOTAL			1110	
3				
4				
5				Under abution \$
ys ( <del>2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - </del>	$\overline{}$	= Total Cov	0.5	Hydrophytic Vegetation
			1.1	Present? Yes No
50% of total cover:	20% of	total cover	•	
Remarks: (If observed, list morphological adaptations below	w).		West III	
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	.,			
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	,			

Sampling Point: NRG 0050

Profile Description: (Describe to the depth needed to document the indicator or c	confirm the absence of indicators.)
Depth   Matrix   Redox Features   (inches)   Color (moist)   %   Color (moist)   %   Type ¹   L	
(inches) Color (moist) % Color (moist) % Type¹ L	.oc² Texture Remarks
5-9 2.5 / 5/3	FSL
9-10 2.5 4 6/3	FSL
	2
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U	(1) : [ - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	└── Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	Under (Explain in Remarks)
Thick Dark Surface (A12)  Thick Dark Surface (A12)  Iron-Manganese Masses (F12) (LRR	R O, P, T) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	, , ,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A,	150B)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (ML	
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20)	(MLRA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):	
Type:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
M	indicators present
100 rayoure Soil	marcaro s preserve
	*

# wnrg005_u



WNRG005_u – Adjacent Upland



WNRG005_u – Adjacent Upland

# wnrg005_u



WNRG005 – Representative Wetland and Upland Soils

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Dominion	City/County: North Lange to Sampling Date: 07/03/14					
Applicant/Owner:	State: // Sampling Point: UNR G 00 6 f M					
0.15	Section, Township, Range: Sampling Point:					
	Local relief (concave, convex, none): Slope (%):					
Subregion (LRR or MLRA): Lat: 36°	26 16.88 Long: 77° 33° 07.056 Datum:					
Soil Map Unit Name: We had kee	NWI classification: PFO					
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	P					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No  Remarks:  Bottom land hand wood	Is the Sampled Area within a Wetland? Yes No					
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) High Water Table (A2) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)						
	Stantage ratterns (D10)					
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)						
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)						
Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)						
Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface of Other (Explain in Ref	=()					
Inundation Visible on Aerial Imagery (B7)	emarks)					
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)					
Field Observations:						
Surface Water Present? Yes No Depth (inches):						
Water Table Present? Yes No Depth (inches):	DATE:					
Saturation Present? Yes No Depth (inches): (includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:					
Remarks:						
Hydrology Present						

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

Sampling Point: _____

Tana Charles (Dist.)		Dominan		Dominance Test worksheet:	
Tree Stratum (Plot size:)		Species'		Number of Dominant Species	
1. Acer rubrum	30	$\overline{}$	FAC	That Are OBL, FACW, or FAC:	(A)
2. Fraximes pense yumpica	20	$\overline{}$	FACW	Total Number of Dominant	
3. Liguracem box styracifica	10		FAC	Species Across All Strata:	(B)
4. Tlex opera	_5		FAC		(5)
1.6				Percent of Dominant Species	
6				That Are OBL, FACW, or FAC:	(A/B)
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by:	
S	1=			OBL species x 1 =	_
21	<u></u>	= Total Co	ver 12	FACW species x 2 =	
50% of total cover: 32.	<u>3</u> 20% of	total cover	:_13		
Sapling/Shrub Stratum (Plot size:	15	1	1.00	FAC species x 3 =	
1. Liquidambur styrocitua	10		FAC	FACU species x 4 =	
2. Liquistrum sinense	_5_	$\overline{}$	EALU	UPL species x 5 =	
3. Magnolia virginiana	2		FACW	Column Totals: (A)	_ (B)
4				Provolence Index - B/A -	
5				Prevalence Index = B/A =	
6			**************************************	Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8				2 - Dominance Test is >50%	
o	17			3 - Prevalence Index is ≤3.01	
O E		= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain	1)
50% of total cover:	20% of	total cover	2.7		
Herb Stratum (Plot size:		/		¹Indicators of hydric soil and wetland hydrology m	net
1. Athyrium folix-fimina	10	-	FACW	be present, unless disturbed or problematic.	ust
2. Avindinaria gigantea	5	~	FACIN		
3. Viburnum mandenan dentato	2		FACIN		
4. Viola atinis	2		FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 c	m) or
				more in diameter at breast height (DBH), regardle height.	ss of
5				<del></del>	
6				Sapling/Shrub - Woody plants, excluding vines,	less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb - All herbaceous (non-woody) plants, regard	dless
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine - All woody vines greater than 3.28	a :_
11				height.	it in
12	man and an area			ganna <del>-</del> erec	
	19 =	Total Cov	er _		
50% of total cover: 9.5	20% of	total cover:	3.8		
Woody Vine Stratum (Plot size:)					- 10
1. CAMPOSIS FORDICALS	5		FA		- 1
2 Smilax rational Palice	==	V	CAC		
3. Lanicera 1000012a		<del>`</del> /	FAC		- 1
s. Lonitera Jayonta		<u></u>	J-AC		
4					
5				Hydrophytic	
	_15_=	Total Cov	er	Vegetation	
50% of total cover: 7.5	_ 20% of t	otal cover:	_3_	Present? Yes /\ No	
Remarks: (If observed, list morphological adaptations below					
	5.0				

Sampling Point: <u>G 006</u> _ w

Histosol (A1)  Histosol (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  1 cm Muck (A9)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Histosol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Mucky Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Mucky Mineral (F1) (LRR O)  Redox Depleted Matrix (F2)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Wery Shallow Dother (Explain)  Depleted Ochric (F11) (MLRA 151)  Trinck Dark Surface (A12)  Umbric Surface (F13) (LRR P, T, U)  Very Shallow Dother (Explain)  Jindicators of wetland hydroxy Mineral (A2) (LRR P, T, U)  Wetland hydroxy Mineral (A2) (LRR P, T, U)	10) (LRR S) ic (F18) (outside MLRA 150A, idplain Soils (F19) (LRR P, S, ight Loamy Soils (F20) 3) aterial (TF2) Dark Surface (TF12)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Pro	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Pro	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)    Histosol (A1)	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Histosol (A1)	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Histosol (A1)	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Histosol (A1)	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Histosol (A1)	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Histosol (A1)	oblematic Hydric Soils ³ :  9) (LRR O)  10) (LRR S)  oc (F18) (outside MLRA 150A,  odplain Soils (F19) (LRR P, S,  ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and  drology must be present,
Histosol (A1)  Histosol (A2)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, T, U)  Sandy Redox (S5)  Depleted Matrix (F3)  Depleted Ochric (F11) (MLRA 151)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hyd  unless disturates (S7) (LRR P, T, U)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present	9) (LRR O) 10) (LRR S) ic (F18) (outside MLRA 150A, idplain Soils (F19) (LRR P, S, ight Loamy Soils (F20) 3) aterial (TF2) Dark Surface (TF12) in Remarks) hydrophytic vegetation and drology must be present,
Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Mucky Mineral (F1) (LRR O)  Redox Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Wery Shallow Dother (Explain Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hyd unless disturble disturbed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Thin Dark Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O, S)  Thin Dark Surface (S9) (LRR S, T, U)  Reduced Vertic (F13) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hyd unless disturble disturbed Matrix (S6)  Defit Ochric (F17) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present	10) (LRR S) ic (F18) (outside MLRA 150A, idplain Soils (F19) (LRR P, S, ight Loamy Soils (F20) 3) aterial (TF2) Dark Surface (TF12) in Remarks) hydrophytic vegetation and drology must be present,
Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Straw Mucky Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR U)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox Osh (Surface (F17) (MLRA 151)  Thick Dark Surface (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Depth (inches):  Depth (inches):  Loamy Mucky Mineral (F1) (LRR O)  Reduced Vertic (F18) (LRR O)  Reduced Vertic (P19 (MLRA 150A)  Reduced Vertic (P19 (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Hydric Soil Present	ic (F18) (outside MLRA 150A, odplain Soils (F19) (LRR P, S, ight Loamy Soils (F20) B) aterial (TF2) Oark Surface (TF12) in Remarks) hydrophytic vegetation and drology must be present,
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A7)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR U)  Tom Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present	odplain Soils (F19) (LRR P, S, ight Loamy Soils (F20)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and drology must be present,
Organic Bodies (A6) (LRR P, T, U)  Standing Cayers (A5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Depleted Matrix (F3)  Redox Dark Surface (F7)  Red Parent Mark Very Shallow Dother (Explain Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hydrounless disturbles of the more of	ight Loamy Soils (F20)  3)  aterial (TF2)  Dark Surface (TF12)  in Remarks)  hydrophytic vegetation and drology must be present,
Som Mucky Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 1518  Red Parent Material Martin (F10) (LRR U)  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hyde unless disturble of the surface (F13) (LRR P, T, U)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present	aterial (TF2) Dark Surface (TF12) in Remarks) hydrophytic vegetation and drology must be present,
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Redox Depressions (F8)  Very Shallow Dother (Explain  Very Shallow Dother (Explain  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Jepth (Inches):  Redox Depressions (F8)  Very Shallow Dother (Explain  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Jepth (Inches):  Redox Depressions (F8)  Very Shallow Dother (Explain  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hyd  unless distu  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (MLRA 150A)  Namid (F10) (LRR P, T, U)  Wetland hyd  unless distu  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Netland (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid (F10) (MLRA 150A)  Namid	Dark Surface (TF12) in Remarks) hydrophytic vegetation and drology must be present,
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type: Depth (inches):  Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR O, P, T) Wetland hyd unless distu Wetland hyd unless distu Mark (F10) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present	in Remarks) hydrophytic vegetation and drology must be present,
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Depth (inches):  Depth	hydrophytic vegetation and drology must be present,
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Iron-Manganese Masses (F12) (LRR O, P, T)  Wetland hyd  wetland hyd  unless distu  Meduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present	frology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Depth (inches):  Wetland hyd unless disturates (F13) (LRR P, T, U)  Wetland hyd unless disturates (F13) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present	frology must be present,
Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Sestrictive Layer (if observed):  Type:  Depth (inches):  Delta Ochric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed): Type: Depth (inches):  Hydric Soil Present	
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed): Type: Depth (inches):  Hydric Soil Present	
estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present	
Type:	
Depth (inches): Hydric Soil Present	
nyuric Soil Present	- F
emarks:	t? Yes <u> </u>
LI 1 . 5° . 1 A	
Hydrie Soil Present	
i de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	

#### wnrg006f_w



WNRG006f_w – Forested Wetland



 $WNRG006f_w-Forested\ Wetland$ 

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: North agree - Sampling Date: 7-3-2014 Applicant/Owner: Panimin-State: V C Sampling Point: Wnrg00624 Investigator(s): DDWest _____ Section, Township, Range: ____ Landform (hillslope, terrace, etc.): _______ Local relief (concave, convex, none): ______ Slope (%): _____ Subregion (LRR or MLRA): _____ Long: ____ Datum: _ Soil Map Unit Name: Contton fine sundy bouton NWI classification: Up No _____ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Hilleide - distanct took break 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) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Other (Explain in Remarks) Shallow Aguitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) ☐ Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes _____ No ____ Depth (inches): ____ Water Table Present? Yes _____ No ____ Depth (inches): ___ Saturation Present? Yes _____ No ____ Depth (inches): _____ Wetland Hydrology Present? Yes _____ No ____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No hydrology indicators present

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

Sampling Point:

	р			Sampling Point:
Tree Stratum (Blot size)			nt Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species	? Status	Number of Dominant Species
1. Quercus aba	10	_ / /	FACU	That Are OBL, FACW, or FAC: (A)
2. Wyssa sylvatica	0)	/	FAC	(A)
3. Pinus taeda	10	1		Total Number of Dominant
TI			FAC	Species Across All Strata: (B)
4. Ilex oprica	_5		FAC	The state of the s
5. Liriodondron tulipitera	_5		FACU	Percent of Dominant Species
C Dear L	-	-/		That Are OBL, FACW, or FAC: (A/B)
6. Acer rubrum	20		FAC	
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	-/-			
Nove Naziri	60	= Total Co	over	OBL species x 1 =
50% of total cover: 30				FACW species x 2 =
	_ 2070 01	total cove		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	10			
1. Jeeccinsum stouminnum	01		FACU	FACU species x 4 =
2. Acer rubrum	2			UPL species x 5 =
17			FAC	
3. Liquidambour styrucifluce			FAC	Column Totals: (A) (B)
. 0				
4				Prevalence Index = B/A =
5			-	Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8			<u> </u>	3 - Prevalence Index is ≤3.01
			Wer	
				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	_ 20% of	total cove	r:	
Herb Stratum (Plot size:)				Indicators of budgie as it and and a state of
1. Clethra alnifolia	2		FACW	Indicators of hydric soil and wetland hydrology must
	5		FROW	
2. Hexastylus arifolia			FACU	Definitions of Four Vegetation Strata:
3			100-100-100	
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				2
7				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9.				Herb - All herbaceous (non-woody) plants, regardless
9		70.00		of size, and woody plants less than 3.28 ft tall.
10				Monday day All
11			112-17-24-111 <del>1-4</del> 1	Woody vine – All woody vines greater than 3.28 ft in height.
12				neight.
12				
	=	Total Cov	ver _	
50% of total cover:	20% of	total cover		
Woody Vine Stratum (Plot size:)	_ 2070 011	/ /	.——	
, 111, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	V	/		
1. Vitis rotunditolia	2	~	FAC	
2. Parthenocissus quinquelona	7	.,	FAC	
A			- B-00-	
3				
4				
5				
·				Hydrophytic /
	=	Total Cov	/er , ,	Vegetation
50% of total cover: 3.5	20% of t	otal cover	. (.4)	Present? Yes No
그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그렇게 되었다. 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그렇게 되었다. 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 아니는 그리고 얼마나 그런 그런 그런 그런 그런 그런 그런 그런 그런 그런 그런 그런 그런		ver		
Remarks: (If observed, list morphological adaptations below	).			
				I I

Sampling Point: 6006 = 4

Debut	Matrix	he depth needed to docu Red	ox Features	or comm	ule absence of it	idicators.)	
(inches)	Color (moist)	% Color (moist)	%Type¹	_Loc ²	Texture	Remark	KS
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5-6	1048 5/3	-1-1	_		1000	1, FEE H11/24 F	
6->16	2.546/4				( es an		
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T 0 0		Walter Street					=====
lydric Soil In	dicators: (Applicable	n, RM=Reduced Matrix, M to all LRRs, unless othe	S=Masked Sand Gr	ains.	² Location: PL=	Pore Lining, M=M	atrix.
Histosol (A		-			Indicators for F	roblematic Hydr	ic Soils³:
Histic Epip		Thin Dark St	elow Surface (S8) (L urface (S9) (LRR S,	RR S, T, U)		(A9) (LRR O)	
Black Histi		Loamy Muck	ky Mineral (F1) (LRR S,	1, 0)	2 cm Muck	(A10) (LRR S)	
Hydrogen	Sulfide (A4)	Loamy Gleye	ed Matrix (F2)	0)	Piedmont F	rtic (F18) (outsid	e MLRA 150A,E
Stratified L	ayers (A5)	Depleted Ma	trix (F3)		Anomalous	oodplain Soils (F1 Bright Loamy Soil	9) (LRR P, S, T
Organic Bo	odies (A6) (LRR P, T, L		Surface (F6)		(MLRA 15	3B)	S (F2U)
Muck Proc	ky Mineral (A7) (LRR P. ence (A8) (LRR U)		rk Surface (F7)		Red Parent	Material (TF2)	
1 cm Muck	(A9) (LRR P, T)	Redox Depre	essions (F8)			V Dark Surface (Ti	F12)
Depleted E	Below Dark Surface (A1	Mari (F10) (L	hric (F11) <b>(MLRA 1</b> 5	41	U Other (Expla	in in Remarks)	
Thick Dark	Surface (A12)	☐ Iron-Mangan	ese Masses (F12) (L	RROPT	3Indicators	of building by	engaga ayan da iliy
Coast Prai	rie Redox (A16) (MLRA	150A)   Umbric Surfa	ce (F13) (LRR P, T,	U)		of hydrophytic veo ydrology must be	etation and
Sandy Muc	cky Mineral (S1) (LRR	O, S)	(F17) (MLRA 151)		unless di	sturbed or problem	present,
Sandy Gle	yed Matrix (S4)	Reduced Ver	tic (F18) (MLRA 150	A, 150B)			14.10.
Stripped M		Anomalous P	odplain Soils (F19) (	MLRA 149	A)		
	ce (S7) (LRR P, S, T, L	J)	right Loamy Soils (F	20) (MLRA	149A, 153C, 153E	))	
Restrictive Lay	ver (if observed):						
Туре:		-					
Depth (inche	es):				Hydric Soil Prese	nt? Yes	No X
emarks:					,	100	
4	y ( )	not present					
(170	rie Soil	not not					
		pereson					

# wnrg006_u



WNRG006_u – Adjacent Upland



WNRG006_u – Adjacent Upland

# wnrg006



WNRG006 – Representative Wetland and Upland Soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region abilifycity/County: North Hompston Sampling Date: 7-3-2014 State: NC Sampling Point: wnrh005f_w Applicant/Owner: Doyninion Investigator(s): DD UDES Section, Township, Range: Slope (%): -Local relief (concave, convex, none): Landform (hillslope, terrace+etc.): _ 30.04 ( Datum: Subregion (LRR or MLRA): NWI classification: P Soil Map Unit Name: Wehad (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. No Hydrophytic Vegetation Present? Is the Sampled Area No Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Surface Water (A1) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) High Water Table (A2) Moss Trim Lines (B16) Hydrogen Sulfide Odor (C1) Saturation (A3) Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Crayfish Burrows (C8) Presence of Reduced Iron (C4) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3) Geomorphic Position (D2) Thin Muck Surface (C7) Algal Mat or Crust (B4) Shallow Aguitard (D3) Other (Explain in Remarks) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Depth (inches): Wetland Hydrology Present? Saturation Present? Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: (includes capillary fringe) Remarks: significant rise in topography to adjacent upland \$15% slopes

Absolute Dominant Indicator Tree Stratum (Plot size:) , % Cover Species? Status	Dominance Test worksheet:
	Number of Dominant Species
1. Fraxinus panstyvamen 15 V FACI	That Are OBL, FACW, or FAC: (A)
2. Accor ruboum 25 V FAC	Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book and Tatal Number of Book
3. Carpinus Caroliniana 20 V FAC	Total Number of Dominant Species Across All Strata:  (B)
4. Quercus mi chauxii 10 FACW	Species Across Air Strata. (B)
The state of the s	Percent of Dominant Species 1777
5. Liquidambour styraciflua & FAC	That Are OBL, FACW, or FAC: (A/B)
6	70 25 San Carlo
7	Prevalence Index worksheet:
8	Total % Cover of: Multiply by:
	OBL species x 1 =
$\frac{75}{2}$ = Total Cover	
50% of total cover: 37. \(\sum_{20\%}\) of total cover: \(\sum_{20\%}\)	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	FAC species x 3 =
1. Compiner caroliniana 20 V FAC	FACU species x 4 =
Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manager and Manage	
2. Acer rubrum 10 V FAC	VACUUM - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 - 2011 -
3. Liquid anyloge styracity 16 V FAC	Column Totals: (A) (B)
4. Dospyros virginiana 5 FAC	PLEASE LINE STOPMENT AV. P. SOURK
	Prevalence Index = B/A =
5	Hydrophytic Vegetation Indicators:
6	1 - Rapid Test for Hydrophytic Vegetation
7	2 - Dominance Test is >50%
8	
	3 - Prevalence Index is ≤3.0 ¹
$\frac{45}{22}$ = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 22.5 20% of total cover:	
Herb Stratum (Plot size:)	Madiantan of house and a second of the secon
1. Savrms cernua 15 V OBL	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Boehmeria cylindrica 10 EWW	I N. A. H. Tripe Control of the Cont
	Definitions of Four Vegetation Strata:
3. Woodwardig acreplate 20 V OBL	Troe Woody plants evaluation visus 2 is (7.0 )
4. Atyrium felix-fimina 20 V FACN	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. tolygonum virginiana S FAC	height.
Color of division 3	
6. Cares inhumoscens 5 FACW	Sapling/Shrub - Woody plants, excluding vines, less
7.	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8. le tondre virginia 5 BBL	
0	Herb – All herbaceous (non-woody) plants, regardless
	of size, and woody plants less than 3.28 ft tall.
10	Woody vine - All woody vines greater than 3 28 ft in
	Woody vine – All woody vines greater than 3.28 ft in height.
11	Woody vine – All woody vines greater than 3.28 ft in height.
11	Woody vine – All woody vines greater than 3.28 ft in height.
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11	Woody vine – All woody vines greater than 3.28 ft in height.
11	Woody vine – All woody vines greater than 3.28 ft in height.
11	height.
11	Hydrophytic
11	Hydrophytic Vegetation
11	Hydrophytic
11	Hydrophytic Vegetation

Sampling Point:	wnrh005f_w
ators.)	
Remarks	
n	

Profile Description: (Describe to the depth needed to document the indicator or confile	rm the absence of indicators.)
Depth Matrix Redox Features	_
(inches) Color (moist) % Color (moist) % Type¹ Loc²	Texture Remarks
- 1 101K 4/2 10VK 5/6 2 C M	Sandy Joan
4-8 104R 4/2 7054R 4/65 C M	
8-16 104R 5/1 7.54R 4/6 75 C m,1	PL
1T C-C	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	² Location: PL=Pore Lining, M=Matrix.
	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8)	Red Parent Material (TF2)
	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)  Depleted Ochric (F11) (MLRA 151)	∴ Other (Explain in Remarks)
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P	P, T) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P. T. U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B	0)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 1 Stripped Matrix (S6) Anomalous Bright Learny Soils (F20) (MLRA 1	
☐ Stripped Matrix (S6) ☐ Anomalous Bright Loamy Soils (F20) (MLI ☐ Dark Surface (S7) (LRR P, S, T, U)	RA 149A, 153C, 153D)
Restrictive Layer (if observed):	1
Type:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	nyana dan radam. Tes _/_ No
D-1100	
Depleted matrix within	1000
, , , , , , , , , , , , , , , , , , , ,	10 of sort
Surfra	
soulde.	

# wnrh005f_w



WNRH005f_w – Forested Wetland



 $WNRH005f_w-Forested\ Wetland$ 

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region  Project/Site: Suth Ecastern Policibility City/County: Dath Hampton Sampling Date: 7-3-20  Applicant/Owner: Dam Linu Dn State: NC Sampling Point: WINRH Conversing State: NC Sampling Point: WINRH Conversing State: NC Sampling Point: WINRH Conversion (hillslope, terrace, etc.): Hill Since Local relief (concave, convex, none): Slope (%): Subregion (LRR or MLRA): Lat: 36-25-23.3 (long: 77°33'29.995) Datum: Soil Map Unit Name: Winter State State: No (If no, explain in Remarks.)  Are Climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)  Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  No X  No X  Is the Sampled Area  within a Wetland?  Yes No X  No X  Wetland?  Wetland?  Wetland  Wetland?  Wetland  Wetland?
HYDROLOGY  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Inon Deposits (B5)  Water-Stained Leaves (B9)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Sphagnum moss (D8) (LRR T, U)
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:
No hydrology indicators present

VEGETATION (Four Strata) – Use scientific nar	nes of pl	ants.		Sampling Point: W/UK
Tena Stratum (Diet si		Dominant		Dominance Test worksheet:
1. Su Quercy forcator	% Cover	Species?	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2. Lignichamber styraciflue	1.5	V.	FAC	
3. Dxy Dendron arborea	15		FACU	Total Number of Dominant Species Across All Strata: (B)
4. Fagus amandifolia	10		PACU	Species Across All Strata: (B)
5. Queteus of ba	IK		FAW	Percent of Dominant Species 22
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	70	= Total Cov	er	OBL species x 1 =
50% of total cover: 35	20% of	total cover	14	FACW species x 2 =
Sanling/Shrub Stratum (Plot size:		total oo tol.		FAC species x 3 =
1. Fagus granditolia	10		FACU	FACU species x 4 =
2. Acer ryhrun	15		FAC	UPL species x 5 =
3. hipurdambar styracithia	15	7	FAC	Column Totals: (A) (B)
4. Company		<del></del>	1110	
5. Ilax opies	- 2		FAC	Prevalence Index = B/A =
6. Morus rubra	=		FACE	Hydrophytic Vegetation Indicators:
7 100 000 000	~		FACU	1 - Rapid Test for Hydrophytic Vegetation
7. Queran alba			PMCO	2 - Dominance Test is >50%
0	武匹	Total Cov		3 - Prevalence Index is ≤3.01
50% of total cover: 27.5	==	Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
TO THE STATE OF TH	20% of	total cover:	11	
Herb Stratum (Plot size:)  1. Polystrchum acrostoides	K		FAW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Smilacina racemosa	=	./	UPL	
3. Vaccinion Staminium	7	7	PACU	Definitions of Four Vegetation Strata:
4 Conduction	<del></del>	UPL	Conner	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Goodyera pupescens.	<del></del> -			more in diameter at breast height (DBH), regardless of height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 lif. DBH and greater than 3.28 ft (1 m) fall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11			-	height.
12	17 -			
500 - (11)		Total Cove	0 7	
50% of total cover:	_ 20% of t	otal cover:	2.7	
Woody Vine Stratum (Plot size:)				
1,				
2				
3				
4				
5				Hydrophytic
-	=	Total Cove	er	Vegetation
50% of total cover:	_ 20% of t	otal cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below	).			CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CONTRACTOR OF THE SOUTHWARE CO
	5.3			

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51	111	

WURH ODS

Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  O-6 IDYR5/4  Sund	11174 1-11032 7 3 - 11032
	7
- 16-104R64	
<del></del>	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  2 Location: PL=Pore Lining, M=Matrix.	
ydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)  Indicators for Problematic Hydric Soils ³ Indicators for Problematic Hydric Soils ³ Indicators for Problematic Hydric Soils ³ Indicators for Problematic Hydric Soils ³	:
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S)	
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Reduced Vertic (F18) (outside MLRA	150A,E
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR	
Stratified Layers (A5)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)	
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2)	
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12)	
1 cm Muck (A9) (LRR P, T)	
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation	
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present unless disturbed or problematic.	t,
Sandy Gleyed Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)	
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U) sestrictive Layer (if observed):	
Type:	· ·
Depth (inches): No	X
emarks:	
omano.	
No hudric cal I a a	
No hydric soil indicators present	

# wnrh005_u



WNRH005_u – Adjacent Upland



WNRH005_u – Adjacent Upland

#### wnrh005 soils



WNRH005 – Representative Wetland and Upland Soils