WETLAND DETERMINATIO	N DATA FORM – Atlant	ic and Gulf C	coastal Plain Region
			Sampling Date: 10/06/ 2014
Applicant/Owner: Dominion		o up u	MC Sampling Point: WAah039e-4
Investigator(s): DDWest	Contine Township	Device	
Landform (hillslope, terrace, etc.):			Peprestion Slope (%):
Subregion (LRR or MLRA):	Lat: 31 6/10 29 10	ve, convex, none	Signa Slope (%);
Soil Map Unit Name: Rains	Lai. <u>28 00 21.60</u>	Long:	91 30,235" Datum: 000-589
	12 Hills		NWI classification:PEM
Are climatic / hydrologic conditions on the site typical for the Are Vegetation Soil or Hydrology	is time of year? Yes N	Vo (lf no.	explain in Remarks.)
Are Vegetation Soil, or Hydrology	significantly disturbed? No	Are "Normal Circu	imstances" present? Yes 📉 No
Are Vegetation, Soil, or Hydrology	naturally problematic? No (	If needed, explain	n any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point	nt locations,	transects, Important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: The point is within a	No Is the Sam No within a We	pled Area	Yes <u>K</u> No
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all	that apply	(marked)	undary Indicators (minimum of two required)
Surface Mater (AA)	Fauna (B13)	Property	Surface Soll Cracks (B6)
High Water Table (A2)	eposits (B15) (LRR U)		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Saturation (A3)	en Sulfide Odor (C1)		Moss Trim Lines (B16)
	ed Rhizospheres along Living R	toots (C3)	Dry-Season Water Table (C2)
	ce of Reduced Iron (C4)	protection of the second se	Crayfish Burrows (C8)
	Iron Reduction in Tilled Soils ( uck Surface (C7)	Process .	Saturation Visible on Aerial Imagery (C9)
L Iron Deposits (B5) Uther (I	Explain in Remarks)		Geomorphic Position (D2) Shallow Aquitard (D3)
L Inundation Visible on Aerial Imagery (B7)		Contraction of the second s	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)			Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No 🗡 De			
	epth (inches):		
Saturation Present? Yes No Ko De	apth (inches):		
(includes capillary fringe)			logy Present? Yes K No
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspect	tions), if available	1
Remarks			
Hud is provide			
Hydrology present.			
- /			

Sampling Point: What 039 EW

<u>Tree Stratum</u> (Plot size: <u>30</u> ) 1. <u>Salix nigura</u>	% Cover	Dominant Specjes?	Status GBL	Dominance Test worksheet:         Number of Dominant Species         That Are OBL, FACW, or FAC:
2 3 4				Total Number of Dominant Species Across All Strata: (B)
5	-			Percent of Dominant Species (00) (A/B)
1.				Prevalence Index worksheet:
8	10	= Total Cov		Total % Cover of;Multiply by: OBL species x 1 =
50% of total cover: 5	200/ 04	= Total Cov	7 -	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 50)	100	total cover		FAC species x 3 =
1. Lephalanthus occidentalis	5	Y	OBL	FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
**************************************				Prevalence Index = B/A =
J.				Hydrophytic Vegetation Indicators:
67				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	5	= Total Cov		3 - Prevalence Index is ≤3.0'
50% of total cover: 2.5	20% 01	total cover	. (	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size, 20				<sup>1</sup> Indiactors of hudein cell and with the training
2. Juncus Sp.	20	Y	FAL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic,
2. Juncus Sp.	20	Y_	FAW	Definitions of Four Vegetation Strata:
3 4 5.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
6				height.
6				Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
89				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 height.
12	110			
50% of total cover: 20		= Total Cov total cover		
Woody Vine Stratum (Plot size. 30)	20 % 01	total cover	1	
1 Campsis radicans	30	ĭ	FAL	
2. Taxicodendron radicans	20	Y	FAC	
3			understation of	
4			V CONTRACTOR OF THE OWNER	
5				Hydrophytic
05		= Total Cov		Vecetation
50% of total cover: 25	20% of	total cover	0	Present? Yes K No
Remarks (If observed, list morphological adaptations belo	ow).			
Hydrophate 11	~	1 .	,	
Hydrophytic vegetation	15 0	domin	aut.	

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Allantic and Gulf Coastal Plain Region - Version 2.0

Sampling Point: Lina	40390
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Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Features (inches) Color (moist) Color (moist) Type<sup>1</sup> 10 YR 4/4 100 Loc<sup>2</sup> Texture Remarks 1 am 218 2.544/2 80 loyp 20 sam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Histic Epipedon (A2) 1 cm Muck (A9) (LRR O) Thin Dark Surface (S9) (LRR S, T, U) Black Histic (A3) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Reduced Vertic (F18) (outside MLRA 150A,B) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) 5 cm Mucky Mineral (A7) (LRR P, T, U) (MLRA 153B) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Red Parent Material (TF2) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Very Shallow Dark Surface (TF12) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Other (Explain in Remarks) Depleted Ochric (F11) (MLRA 151) ] Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup>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) wetland hydrology must be present. Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Pledmont Floodplain Solls (F19) (MLRA 149A) 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 Soll Present? Yes X No Remarks Hydric soil, are present.

wnah039e\_w



Wetland data point wnah039e\_w facing east



Wetland data point wnah039e\_w facing south

Project/Site. <u>ACP</u>	City/County: Neich	Sampling Date: 10/6/14
Applicant/Owner: DOMINION		States NC Sampling Date: 190714
ivesigator(s).	0	
andform (hillslope, terrace, etc.): <u>Hill Ster E</u> Subregion (LRR or MLRA): <u>36°08° 29, 9999</u> Lat: <u>27</u> Soil Man Unit Name: Regist	Local relief (concave, convex	and and the
Subregion (LRR or MLRA): 36 08 29, 999" Lat. O.	2° 17'50 1211	None): Copyror Slope (%): Signed Slope (%): Sign
Soil Map Unit Name: Rains	4170:113 Long:	Datum: WG887
	Law Law	NWI classification: NWF
Are climatic / hydrologic conditions on the site typical for this time o	I year? Yes _X_ No	(If no, explain in Remarks.)
Are Vegetation, Soll, or Hydrology significal		
Are Vegetation, Soil, or Hydrology naturally		explain any answers in Remarks,)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locatio	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:		
The sampling point is	not located	in a wetland.
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that app	lu)	Secondary Indicators (minimum of two required)
Surface Water (A1)		Surface Soil Cracks (B6)
High Water Table (A2) Marl Deposits (		Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfic Waler Marks (B1) Oxidized Bhizo		Moss Trim Lines (B16)
Contraction of the second seco	spheres along Living Roots (C3)	Dry-Season Water Table (C2)
	duced Iron (C4) duction in Tilled Solls (C6)	Crayfish Burrows (C8)
Algal Mat or Crust (B4)	ace (C7)	Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain i		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 (incl		
Surface Water Present?       Yes No X       Depth (incl         Water Table Present?       Yes No X       Depth (incl	nes):	
Saturation Present? Yes No Depth (includes capillars) Yes Depth (includes capillars)		1. A
Inoldado capillary initiger		Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections), if ava	ilable:
Remarks		
Wetland hydrology not	present	
	1	

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Sampling Point: 1mah 039 u

<u>Tree Stratum</u> (Plot size: <u>30</u> ) 1) 2	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet: Number of Dominant Species 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)
7		Prevalence Index worksheet: 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: 30)		FAC species x 3 =
TANE		FACU species x 4 =
MUN		UPL species x 5 =
1 mary large second		Column Totals: (A) (B)
· ····································		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators;
		1 - Rapid Test for Hydrophytic Vegetation
· · · · · · · · · · · · · · · · · · ·		2 - Dominance Test is >50%
		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover	Total Cover	Problematic Hydrophytic Vegetation' (Explain)
<u>Serna</u> oblis, fal.a	20% of total cover:	
Senny ophisitial a	25 Y FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
NONE	- Al - PAcon	
Setaria pumila	- 76 V FOT	Definitions of Four Vegetation Strata:
Kanthing Strongingen	- BE - THE	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
·	2 1 1	more in diameter at breast height (DBH), regardless of height.
· · · · · · · · · · · · · · · · · · ·		Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
·		Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
0		Woody vine – All woody vines greater than 3.28 ft in height.
2	TR	
50% of total acres 2	75 = Total Cover 15	
Voody Vine Stratum (Plot size. 30)	7.5 20% of total cover: 15	
×		
	Total Occurs	Hydrophytic
50% of total cover	= Total Cover 20% of total cover:	Vegetation Present? Yes No
emarks (If observed, list morphological adaptations be	alow)	
Hydrophytic Vegetati		
3		

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#### Sampling Point: Mah039-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Features (inches) Color (moist) % Color (moist) Type1 Loc<sup>2</sup> R 5/4 Texture Remarks oun <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solls<sup>3</sup>: Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Histic Epipedon (A2) 1 cm Muck (A9) (LRR O) Thin Dark Surface (S9) (LRR S, T, U) Black Histic (A3) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Reduced Vertic (F18) (outside MLRA 150A,B) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) 5 cm Mucky Mineral (A7) (LRR P, T, U) (MLRA 153B) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Red Parent Material (TF2) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Very Shallow Dark Surface (TF12) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Other (Explain in Remarks) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Coast Prairie Redox (A16) (MLRA 150A) <sup>3</sup>Indicators of hydrophytic vegetation and Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) wetland hydrology must be present. Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) unless disturbed or problematic. 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) Restrictive Layer (If observed): Type: Depth (inches). Remarks Hydric Soll Present? Yes No X hydric soil not present

wnah039\_u



Upland data point wnah039\_u facing north



Upland data point wnah039\_u facing west

### wnah039 soils



Wetland/upland soils

Arip	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site:	City/County: Nash Sampling Date: 10/06/2014
pplicant/Owner: Dominio	State: NC Sampling Point: WAA0385_
nvestigator(s): DDWest	_ Section, Township, Range:
andform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Concave Slope (%): 4
Subregion (LRR or MLRA): Lat: Lat:	OR 19.385" Long: 7794757.417" Datum: WGS84
oil Map Unit Name: Kains	NWI classification: PSS
re climatic / hydrologic conditions on the site typical for this time of y	year? Yes 📈 No (If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significant	ly disturbed? 💋 Are "Normal Circumstances" present? Yes 📈 No
re Vegetation, Soil, or Hydrology naturally p	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes X       No         Hydric Soil Present?       Yes X       No         Wetland Hydrology Present?       Yes X       No	Is the Sampled Area
Remarks: The sampling point is locat	ed within a wetland.
IYDROLOGY	
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)	313) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) High Water Table (A2)	15) (LRR U)
Saturation (A3)	
2018년 2017년 - 1927년 - 1928년	oheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)     Presence of Reduction       Drift Deposits (B3)     Recent Iron Reduction	uced Iron (C4) uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Other (Explain in	· · · · · · · · · · · · · · · · · · ·
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
A-Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	2
Surface Water Present? Yes <u> / No</u> Depth (inche	
Water Table Present? Yes <u>Yes</u> No Depth (inche	
Saturation Present? Yes <u>/</u> No Depth (inche (includes capillary fringe)	es): <u>Sarface</u> Wetland Hydrology Present? Yes <u>K</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
Hydrology present.	

Sampling Point: WAah0385\_W

24	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)		Species?		Number of Dominant Species
	(0	1	FAC	That Are OBL, FACW, or FAC: (A)
2. Salix nigra	10	Y	OBL	Total Number of Dominant
3. Liquidanbar styraciflaa	5		FAC	Total Number of Dominant Species Across All Strata:
4	0.111			
5				Percent of Dominant Species 100 (A/P)
				That Are OBL, FACW, or FAC: (A/B)
6		$\rightarrow$		Prevalence Index worksheet:
7		$\rightarrow$	<u></u>	Total % Cover of: Multiply by:
8				OBL species         x1 =
1-	20	= Total Cov	ver c	
50% of total cover: 15	20% of	total cover	6	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)		11	La.	FAC species x 3 =
1. Quercus law Folin	10	Y	HAC	FACU species x 4 =
2. to the Cephalanthus occidentalis	10	Y	MAL	UPL species x 5 =
3. Acer rubrun		V	FACW	Column Totals: (A) (B)
		-1-		
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			<u> </u>	2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	30	= Total Cov	ver a	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 15		total cover		
Herb Stratum (Plot size: 30)				
1. Cares intronescent	In		FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Total ephalanthus occidentalis	16		OBL	
2. Dientephalauthus Occidentalis	20	~	LOOL	Definitions of Four Vegetation Strata:
3. Am Commelina Communis	10		FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Heating Marine acker	10	<u> </u>	FAC	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.
0				
				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		-		
	60	= Total Cov	ver la	
50% of total cover: 30	20% 01	total cover	12	
Woody Vine Stratum (Plot size: 30)	_	. 1		
1. Vitis votunditolia	10	Y	FAC	
	10		110	
2				
3	<u> </u>			
4				
5		_		Hydrophytic
	(0	= Total Co	/er	Vegetation
50% of total cover:		f total cover		Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations belo				
Remarks. (il observed, list morphological adaptations beic	w).			
Hydrophytic Vegetati	for 1	s p	rese	t-

(choc)	Color (moist)	%		ox Feature		1 2	-	Demode
iches)	104R4/1	90	Color (moist)	/0	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
1		90						
)->18	10 YR 31,	1>	10 1R 614	2			10au	
-								
_		. <u></u>			<u> </u>			
pe: C=C	oncentration, D=Dep	letion, RM	I=Reduced Matrix, M	IS=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
		able to al	I LRRs, unless othe		and the second second			for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic Er	bipedon (A2)		Polyvalue B					uck (A9) (LRR O) uck (A10) (LRR S)
Black Hi			Loamy Much					ed Vertic (F18) (outside MLRA 150A,I
	n Sulfide (A4)		🔲 Loamy Gley	ed Matrix	A			nt Floodplain Soils (F19) (LRR P, S, 1
the second se	d Layers (A5)	-	Depleted Ma	11.4			1	lous Bright Loamy Soils (F20)
the second second	Bodies (A6) (LRR P	And a second	Redox Dark					A 153B)
	icky Mineral (A7) (LF esence (A8) (LRR U		<ul> <li>Depleted Da</li> <li>Redox Depr</li> </ul>					rent Material (TF2) nallow Dark Surface (TF12)
	ick (A9) (LRR P, T)	·	Marl (F10) (		0)			Explain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangar				T) <sup>3</sup> Indica	ators of hydrophytic vegetation and
the second se	rairie Redox (A16) (N					, U)		and hydrology must be present,
L. Control of the Control of	Nucky Mineral (S1) (L Bleyed Matrix (S4)	.RR 0, S)		C				ss disturbed or problematic.
and the second sec	Redox (S5)		Reduced Ve					
Sandy F			- i loannon i i	ocupium	0110 (1 10)	finites of the		
and the second	Matrix (S6)		Anomalous	Bright Loa	my Soils (	20) (MLR	A CONTRACTOR OF A CONTRACT	153D)
Stripped Dark Su	Matrix (S6) rface (S7) (LRR P, S		Anomalous	Bright Loa	my Soils (I	20) (MLF	RA 149A, 153C,	153D)
Stripped Dark Su strictive	Matrix (S6)		Anomalous	Bright Loa	my Soils (I	=20) <b>(MLF</b>	A CONTRACTOR OF A CONTRACT	153D)
Stripped Dark Su strictive	Matrix (S6) rface (S7) <b>(LRR P, S</b> Layer (if observed):		Anomalous	Bright Loa	my Soils (	-20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in	Matrix (S6) rface (S7) <b>(LRR P, S</b> Layer (if observed):		Anomalous	Bright Loa	my Soils (I	-20) (MLF	A CONTRACTOR OF A CONTRACT	
Stripped Dark Su strictive	Matrix (S6) rface (S7) <b>(LRR P, S</b> Layer (if observed):		☐ Anomalous	Bright Loa	my Soils (l	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) <b>(LRR P, S</b> Layer (if observed):			Bright Loa	my Soils (i	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) <b>(MLF</b>	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su strictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	
Stripped Dark Su trictive I Type: Depth (in- marks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed): 			Bright Loa	my Soils (	20) (MLF	RA 149A, 153C,	

wnah038s\_w



Wetland data point wnah038s\_w facing east



Wetland data point wnah038s\_w facing south

Landform (hillslope, terrace, etc.):       HIISI.pc         Subregion (LRR or MLRA):       Lat:         Soil Map Unit Name:       Coins         Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation       Soil         Are Vegetation       Soil         Are Vegetation       Soil         Or Hydrology       naturally	City/County: <u>Mash</u> Section, Township, Range: Local relief (concave, conve <u>OB 'III. 951</u> Long: f year? Yes <u>No</u> ntly disturbed? Are "Norm problematic? (If needed	Sampling Date: <u>10/6/14</u> State: <u>10</u> Sampling Point: <u>Wnuh 0.36</u> <u>NA</u> x, none): <u>CONVEX</u> Slope (%): <u>2</u> <u>'77°4'7'5'7_623'</u> Datum: <u>165 64</u> NWI classification: <u>Name</u> (If no. explain in Remarks.) nal Circumstances" present? Yes <u>X</u> No <u></u> t, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showi Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No Z Wetland Hydrology Present? Yes No Z Remarks: The sampling point is	Is the Sampled Area within a Wetland?	YesNoX
Presence of Rec	B13) B15) (LRR U) le Odor (C1) spheres along Living Roots (C3) duced Iron (C4) duction in Tilled Soils (C6) ace (C7)	Secondary Indicators (minimum of two required)           Surface Soll Cracks (B6)           Sparsely Vegetated Concave Surface (B8)           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 (inch Water Table Present? Yes No Depth (inch Saturation Present? Yes No Depth (inch (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph Remarks: Wetland hydrolsgy net	nes): Wetland	I Hydrology Present? Yes No

US Army Corps of Engineers

Sampling Point: Whah 038.4

Tree Stratum (Plot size: <u>70</u> )	Absolute Dominant Indicator	Dominance Test worksheet:
	<u>% Cover Species? Status</u>	Number of Dominant Species (A)
V		Total Number of Dominant / (B)
4 5 6		Percent of Dominant Species 50 (A/B)
6 7 8		Prevalence Index worksheet;
8		Total % Cover of: Multiply by:
	= Total Cover	OBL species x1 =
	20% of total cover:	And the second se
Sapling/Shrub Stratum (Plot size: 30		FACW species $25$ $\times 2 =$ FAC species $25$ $\times 3 =$ $75$
1. 1. 1. 6		FACU species _25 x4 = 100
1001		UPL species x 5 =
		Column Totals: 5 (A) 175 (B)
The first function of the second se		Prevalence Index = $B/A = 3.5$
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
3		2 - Dominance Test is >50%
		☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover	≈ Total Cover 20% of total cover:	Problematic Hydrophytic Vegetation' (Explain)
iero stratum (Plot size.		
Texico dendors perhocens	5 FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Fecture Se protense	25 Y FAI	Definitions of Four Vegetation Strata:
Tritelium pratinge	25 Y FACU	
and the second party of the second party of the second s		Tree – Woody plants, excluding vines, 3 in. (7,6 cm) or more in diameter at breast height (DBH), regardless of
		height.
the second		Sonling/Charles Mission Internet
" The main sector management and a discovery of some sectores and the sect		Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3,28 ft (1 m) tall.
		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
0		Woody vine - All woody vines greater than 3.28 ft in
2		height.
50% of total cover:	20% of total cover:	
Nour		
POPE		
·		
		Hudrophušia
	= Total Cover	Hydrophytic Vegetation
50% of total cover:	20% of total cover:	Present? Yes No X
Remarks (If observed, list morphological adaptations	below),	
Hydrophytic vegetation	n is not down!	in act
J F J J C J C ATTO	- i vion a domi	man -
÷		
S Army Corps of Engineers		Atlantic and Gulf Coastal Plain Region - Version 2.0

#### Sampling Point: Wnuh 038\_u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Features Color (moist) (inches) Color (moist) % % Type<sup>1</sup> Loc<sup>2</sup> Texture 0-6 104R 5/2 Remarks ban DIS 10 YR GU Loan 'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solls3: 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) Black Histic (A3) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Reduced Vertic (F18) (outside MLRA 150A,B) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) 5 cm Mucky Mineral (A7) (LRR P, T, U) (MLRA 153B) 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) Other (Explain in Remarks) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup>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) wetland hydrology must be present. 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, 163D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches). Hydric Soll Present? Yes No Remarks Hydric Soil not present.

US Army Corps of Engineers

wnah038\_u



Upland data point wnah038\_u facing north



Upland data point wnah038\_u facing west

### wnah038 soils



Wetland/upland soils

PANAGOOIF\_W WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: Sampling Point: Applicant/Owner: \_\_\_\_\_\_\_ Investigator(s): \_\_\_\_ Section, Township, Range: NWI classification: PFO Soil Map Unit Name: No \_\_\_\_ (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? 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 Yes \_\_\_\_\_ No \_\_\_\_\_ <u>×\_\_\_\_</u> No \_\_\_\_\_ Hydric Soil Present? within a Wetland? Yes No Wetland Hydrology Present? 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) Oxidized Rhizospheres along Living Roots (C3) 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) Geomorphic Position (D2) Algal Mat or Crust (B4) Thin Muck Surface (C7) Shallow Aquitard (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: Yes \_\_\_\_\_ No \_\_\_\_ Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_\_\_\_ Depth (inches): \_\_\_\_\_ Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_ Depth (inches): \_\_\_\_///// Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology present

WONA60001F\_W

Sampling Point:

EGETATION (Four Strata) - Ose scientific	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 5 0/)	% Cover Species? Status	- Number of Dominant Species 7
1. Lirodindon techoora	<u></u>	That Are OBL, FACW, or FAC: (A)
2. Liquidensor strayaHac	10 V FAC	- Total Number of Dominant
3. Penus hald c	S FAC	_ Species Across All Strata:(B)
4. Acar rubran	S FAC	
5		Percent of Dominant Species (A/B)
6.		
		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8	= Total Cover	OBL species x 1 =
	25 20% of total cover: 10	FACW species x 2 =
50% of total cover: _	20% of total cover: $10%$	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:		FACU species x 4 =
1. Defler Alaus serru lata		
2. Ligstrom grange	<u> </u>	Column Totals: (A) (B)
3		_
4		Prevalence Index = B/A =
5	·····	<ul> <li>Hydrophytic Vegetation Indicators:</li> </ul>
6		— 1 - Rapid Test for Hydrophytic Vegetation
7		– 2 - Dominance Test is >50%
8		_ ] □ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: _	20% of total cover:	
Herb Stratum (Plot size:)		1 Indicators of hydric soil and wetland hydrology must
1. Annalynara ancientes	30 V FA	W be present, unless disturbed or problematic.
2. Woodwardin acelato	TO J/ DBL	Definitions of Four Vegetation Strata:
3. Demon Osmunda cinaamome		
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4		height.
5		
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		-
8		- Herb - All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		
11		height.
12		
	= Total Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size:)	) /	
1 Loncore Magics	' 🔊 🗸 FP	FC
	- ZO V FA	-C.
2. Som lass robundi (ola		
3		
4		-
5		
	= Total Cover	Vegetation Present? Yes No
50% of total cover:		
Remarks: (If observed, list morphological adaptatio	ns below).	

VENAGOOIF-W

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C	ling	Doint:	
Samu	pining	Point:	

	cription: (Describe t	o the dept				or confirm	the absence	of indicators.)
Depth (inches)	Matrix Color (moist)		Color (moist)	<u>x Features</u>	s Type1_	Loc <sup>2</sup>	Texture	Remarks
0-6	<u>257 2/1</u>	<u>    100                               </u>					Consectored	
<u>16 - 16</u>	<u>/0/15/2</u>	85	7.54K 416		<u> </u>	<u>fljør</u>	L	
		<u></u>						
		<u> </u>						
				. <u></u>				
							······	
								•••••
ype: C=C	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :
	Indicators: (Application	able to all I	RRS, unless other			RR S. T. U	<b>_</b>	fuck (A9) (LRR O)
] Histoso ] Histic E	pipedon (A2)		Thin Dark Su				2 cm N	/luck (A10) <b>(LRR S)</b>
	listic (A3)		Loamy Muck			R O)		ed Vertic (F18) (outside MLRA 150A,
	en Sulfide (A4)		Loamy Gleye		(F2)			ont Floodplain Soils (F19) <b>(LRR P, S, T</b> alous Bright Loamy Soils (F20)
	ed Layers (A5) c Bodies (A6) <b>(LRR P</b>	, T, U)	Redox Dark		F6)			RA 153B)
-	ucky Mineral (A7) (LF							arent Material (TF2)
<b></b>	Presence (A8) (LRR U	)	Redox Depre	-	8)			Shallow Dark Surface (TF12) (Explain in Remarks)
	luck (A9) ( <b>LRR P, T)</b> ed Below Dark Surfac	e (A11)	Depleted Oci		(MLRA 1	51)		
	Dark Surface (A12)		Iron-Mangan	iese Mass	ses (F12)	(LRR O, P,	· •	cators of hydrophytic vegetation and
	Prairie Redox (A16) (		<ul> <li>Umbric Surfa</li> <li>Delta Ochric</li> </ul>	• •	•			tland hydrology must be present, ess disturbed or problematic.
<b>_</b> `	Mucky Mineral (S1) (I Gleyed Matrix (S4)	LRR 0, 5)	Reduced Ver				Grit	
	Redox (S5)		Piedmont Flo	oodplain S	Soils (F19	) (MLRA 14		
	d Matrix (S6)	. <b>.</b>	Anomalous E	Bright Loa	imy Soils	(F20) <b>(MLR</b> .	A 149A, 153C	;, 153D)
	urface (S7) (LRR P, S Layer (if observed)							
Туре:								X
Depth (i	nches):						Hydric Soi	I Present? Yes No
Remarks:		, 1		· A		A		
		Auc	for so	JI	pre:	sont		
		5			1			

wnag001f\_w



Wetland data point wnag001f\_w facing east



Wetland data point wnag001f\_w facing south

W&NA6001 -u

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site:	City/County: Nush Sampling Date: 7/23/14
Applicant/Owner: Dogo mucon	State: Sampling Point:
- · · · · · · · · · · · · · · · · · · ·	Section, Township, Range:
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: 36°	Section, Township, Range:
Soil Map Unit Name: Rains	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X Remarks: Not all three paran	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Image: Surface Water (A1)     Image: Aquatic Fauna (B)       Image: High Water Table (A2)     Image: Aquatic Fauna (B)	
Saturation (A3)	
	heres along Living Roots (C3)
Sediment Deposits (B2)	
Image: Drift Deposits (B3)       Image: Recent Iron Redu         Image: Drift Deposits (B3)       Image: Recent Iron Redu         Image: Drift Deposits (B3)       Image: Drift Deposits (B3)         Image: Drift Deposits (B3)       Image: Drift Deposits	
☐ Iron Deposits (B5)	
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 (inche Water Table Present?       Yes No Depth (inche Water Table Present?	7/24
Saturation Present? Yes No Depth (inche	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	
Describe Recorded Data (silearin gauge, monitoring weil, achar pric	
Remarks: No Hydrology P	resent

WBNA6001 -U

Sampling Point: \_\_\_\_\_

Tree Stratum (Plot size: 30')	Absolute Dominant Indicator	Dominance Test worksheet:
	<u>% Cover Species? Status</u>	Number of Dominant Species
1. Drus keda	<u> </u>	That Are OBL, FACW, or FAC: (A)
2. Liquedanter Stracotlan	20 V FAC	Total Number of Dominant
3		Species Across All Strata:
4		Percent of Dominant Species 75 (A/B)
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species x 1 =
	= Total Cover	FACW species x 2 =
50% of total cover: <u>2-5</u>	20% of total cover: $U$	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)		· · ·
1. Concler Araba spinosa	10 V FACU	FACU species x 4 =
2. Lisuchan Brc Strachen		UPL species x 5 =
		Column Totals: (A) (B)
3		Durantanan ladar - D/A -
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 ≤3.0 <sup>1</sup>
	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:C	20% of total cover:	_
Herb Stratum (Plot size:\$ )		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. V tax rohand fola	2 FAC	be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
3. Aland Concerto argutus	Force	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4		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
		height.
11		10-g
12	Table Course	
, ,	= Total Cover	
50% of total cover: <u>l</u>	20% of total cover:	
Woody Vine Stratum (Plot size:)		
1. Longer japonica	_ <u>/o</u> V FAC	
2. Smiles variable	V FAC	
3		
4.		
	······································	Undrambytic
5	ZO = Total Cover	Hydrophytic Vegetation
	and a second	Present? Yes <u>No</u>
50% of total cover:		
Remarks: (If observed, list morphological adaptations be	low).	

W\$NA6001.

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<b>NO 1</b>	
00	_

Sampling Point: \_

Profile Desc	ription: (Describe	to the depth			ator or confirm	n the absence of ir	ndicators.)	
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	CFeatures	/pe <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks	
0-96	2.5Y 4/2	/00	<u> </u>			52		
6-16	7 (V C/2	/00						
<u></u>	4.212	. <u></u>						
				<u> </u>				
					······			
				<u></u>		2,	D 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	4
<sup>1</sup> Type: C=C	oncentration, D=Dep Indicators: (Applic	letion, RM=F	Reduced Matrix, MS	S=Masked Sau	nd Grains.		Pore Lining, M=Ma Problematic Hydri	
Histosol					58) (LRR S, T, I		(A9) (LRR O)	-
<b>~</b> /	pipedon (A2)		<u> </u>	rface (S9) (LF		2 cm Muck	(A10) (LRR S)	
<u>'</u>	istic (A3)		Loamy Muck		(LRR O)		/ertic (F18) (outside	
	en Sulfide (A4)		Loamy Gleye				Floodplain Soils (F1 s Bright Loamy Soils	
AUX IIII	d Layers (A5) Bodies (A6) <b>(LRR P</b>	τ II)	Depleted Mat Redox Dark			(MLRA 1	• ·	5 (1 20)
	ucky Mineral (A7) (LF			k Surface (F7	<b>'</b> )	Red Paren	t Material (TF2)	
	resence (A8) (LRR U		Redox Depre				ow Dark Surface (T	F12)
	uck (A9) (LRR P, T)	<i></i> .	Mari (F10) (L		04454)	U Other (Exp	lain in Remarks)	
<u> </u>	d Below Dark Surfac ark Surface (A12)	æ (A11)		nric (F11) <b>(ML</b> ese Masses (I	.RA 151) F12) (LRR O, P	T) <sup>3</sup> Indicator	s of hydrophytic ve	etation and
<u></u>	rairie Redox (A12)	MLRA 150A	÷	ice (F13) (LRI			I hydrology must be	
	Mucky Mineral (S1) (I		Delta Ochric	(F17) (MLRA	151)		disturbed or probler	natic.
=	Gleyed Matrix (S4)				RA 150A, 150B			
<b>1</b>	Redox (S5)				(F19) <b>(MLRA 1</b> 4 Soile (F20) <b>(ML</b>	49A) RA 149A, 153C, 15	3D)	
	d Matrix (S6) urface (S7) <b>(LRR P, \$</b>	S. T. U)		Signi Loaniy			,	
	Layer (if observed)							
Туре:								X
Depth (in	iches):					Hydric Soil Pre	sent? Yes	No
Remarks:								
1								

wnag001\_u



Upland data point wnag001\_u facing east



Upland data point wnag001\_u facing north

## wnag001 soils



Wetland/upland soils

JNA6002F-W

WETLAND DETERMINATION D	ATA FORM – Atlantic	and Gulf Coastal Pl	ain Region
Project/Site: SERP	City/County:	5h-	Sampling Date: 7/23/14
Applicant/Owner:		State:	Sampling Point:
	Section, Township, F	tange:	······································
	Local relief (concave	, convex, none):	Slope (%):
Landform (hillslope, terrace, etc.): <u>Stable</u> Subregion (LRR or MLRA): <u>Lat:</u> Lat:	36,13278	Long: 77.8043	<u> </u>
Soil Map Unit Name: <u>Rains</u>		NWI classific	cation:
Are climatic / hydrologic conditions on the site typical for this tim	ie of year? Yes <u>X</u> No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology signing		e "Normal Circumstances"	present? Yes 💹 No
Are Vegetation, Soil, or Hydrology natur		needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho		locations, transects	, important features, etc.
SUMMART OF FINDINGS - Attach site map site			
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       Yes No			< No
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)		I Cracks (B6)
Surface Water (A1)		- 40	egetated Concave Surface (B8)
	sits (B15) (LRR U)	Moss Trim I	atterns (B10) ines (B16)
	Sulfide Odor (C1) hizospheres along Living Ro		Water Table (C2)
	of Reduced Iron (C4)	Crayfish Bu	
	n Reduction in Tilled Soils (C	~ =	/isible on Aerial Imagery (C9)
	Surface (C7)		c Position (D2)
	lain in Remarks)	Shallow Aqu FAC-Neutra	
Inundation Visible on Aerial Imagery (B7)			moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X_ Depth	(inches):		
Water Table Present? Yes No Depth	(inches):		) e
	(inches):	Wetland Hydrology Prese	ent? Yes <u>X</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspecti	ons), if available:	
	• • •		
Remarks:			

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WNAGOOZEW

Sampling Point: \_\_\_\_\_

-22. 1	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Heel when	- <u>10</u> 8030		FAC FAC	That Are OBL, FACW, or FAC: (A)
2. Ligndanter Staretta	<u> </u>	<u> </u>		Total Number of Dominant
3. Pints barde			FAC	Species Across All Strata: (B)
4	<u></u>			Percent of Dominant Species 700
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
20		= Total Cov		FACW species x 2 =
50% of total cover: <u>27</u>	<u>ు</u> 20% ం	f total cover	:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	All and		EA(	FACU species x 4 =
1. Liquelanbar Stracitus_			FIGCIL	UPL species x 5 =
2. Magnoka Virginiana	- <u>20</u>	_ <u></u>	FILW	Column Totals: (A) (B)
3. One Myrica cerifera			FMC	
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	110 200	• • • • • •	. <u></u>	$\square$ 3 - Prevalence Index is $\leq 3.0^{1}$
	4 <u>0,<b>00</b> </u>	= Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: $2\dot{c}$	<u> </u>	of total cove	r:	
Herb Stratum (Plot size:)	en 1930		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. De alter Murdenia Leisnk				Definitions of Four Vegetation Strata:
2. <u>Nordwarda arcelate</u>			OBL FOCUL	
3. Konnera anderderder	- <u>6</u> 11	-	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. OSO Osminda Cinhamomea			<u>FACW</u> FACN	
5. annance agenter				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		". <u> </u>		
8	<u> </u>			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	- 7 60			
	7 1 40	_ = Total C	over	
50% of total cover: 24	20%	of total cov	er: <u>10, -1</u>	
Woody Vine Stratum (Plot size:)	-79		FIAC	
1. Snylay rotardifola	been		FAC	-
2				-
3				-
4				-
5.			<u> </u>	- Hydrophytic
		_ = Total C		Vegetation Present? Yes No
50% of total cover:	20%	of total cov	er:	
Remarks: (If observed, list morphological adaptations be	elow).			

WNAG 002 Frow

Sampling Point:

Depth (inches)	Matrix		Reut	ox Features	<u>}</u>			
	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
<u>1- (1)</u>	254311	<u></u> _	and Prime to					
<u>l = 16</u>	<u>ZAY SA</u>		7.54(5)Ç		<u></u>	<u>en</u>	have	
					<u></u>	<u> </u>		<b>MW</b> ANNE, 1000,000,000,000,000,000,000,000,000,0
					<u></u>	. <u> </u>		
		. <u> </u>						······································
							2	
ype: C=C	oncentration, D=Dep Indicators: (Applic	letion, RM=I able to all I	Reduced Matrix, M	IS=Masked	l Sand Gr ed.)	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue B			.RR S, T, U	<b>—</b>	fuck (A9) (LRR O)
	pipedon (A2)		Thin Dark S	urface (S9	) (LRR S,	T, U)	2 cm N	fuck (A10) (LRR S)
	istic (A3)		Loamy Muc	-		R O)		ed Vertic (F18) <b>(outside MLRA 150A,</b> ont Floodplain Soils (F19) <b>(LRR P, S,</b> *
_	en Sulfide (A4) d Layers (A5)		Depleted M		(*)		🔲 Anoma	alous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark	-				<b>RA 153B)</b> arent Material (TF2)
	ucky Mineral (A7) <b>(Lf</b> resence (A8) <b>(LRR U</b>		Redox Depr					hallow Dark Surface (TF12)
and the second se	uck (A9) (LRR P, T)	,	Mari (F10) (	LRR U)			D Other	(Explain in Remarks)
	d Below Dark Surfac	æ (A11)	Depleted O				T) <sup>3</sup> Indic	cators of hydrophytic vegetation and
	ark Surface (A12) Prairie Redox (A16) <b>(I</b>	MLRA 150A	<b>—</b>					land hydrology must be present,
Sandy N	Muck <b>y</b> Mineral (S1) (		🔲 Delta Ochri				unl	ess disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Vo	ertic (F18) Toodplain S	(MLRA 1 Soils (F19	50A, 150B) ) (MLRA 14	9A)	
	d Matrix (S6)	and F	Anomalous	Bright Loa	my Soils	(F20) <b>(MLR</b>	A 149A, 153C	;, 153D)
	urface (S7) (LRR P, S						T	
Type:	Layer (if observed)							
•• —								1
Depth (ir	nches):						Hydric Soi	l Present? Yes <u> </u>
							Hydric Soi	St. J. & B. C. Marcharles
							Hydric Soi	
							Hydric Soi	M. C. A. C. Marker
							Hydric Soi	St. J. & B. C. Marcharles
							· · · · · · · · · · · · · · · · · · ·	
				<u>.</u>			· · · · · · · · · · · · · · · · · · ·	M. C. & M. Margaria
							· · · · · · · · · · · · · · · · · · ·	
Depth (ir Remarks:							· · · · · · · · · · · · · · · · · · ·	
			7					
			s.	n n seine				
			s.					

Atlantic and Gulf Coastal Plain Region - Version 2.0

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wnag002f\_w



Wetland data point wnag002f\_w facing east



Wetland data point wnag002f\_w facing south

WNA6002. -4

WETLAN	D DETERMINATION DATA FO	RM – Atlantic and	Gulf Coastal Pl	ain Region	7/2/1
Project/Site: <u>SEPP</u>	City	//County: <u>Nash</u>		Sampling Date:	115114
Applicant/Owner: Dominio	~	-	_ State: <u> </u>	Sampling Point:	
Investigator(s): DrD		ction, Township, Range:			
Landform (hillalana tarraga ata);	Sidestore Loc	al relief (concave, conve	ex, none):	Slope (	%): <u>0 - 2</u>
Subregion (LRR or MLRA)	T 1at: 36. 137	245 Long	77.8045	 Datum	1:
Soil Map Unit Name: R @	ins	······································	NWI classific	cation:	****
Son Map Onit Name	s on the site typical for this time of year?				
Are climatic / nydrologic conditions	_, or Hydrology significantly dist	hurbed? Are "Nor	mal Circumstances"	present? Yes X	No
			d, explain any answe		
	_, or Hydrology naturally proble				
SUMMARY OF FINDINGS	<ul> <li>Attach site map showing sa</li> </ul>	ampling point loca	itions, transects	s, important feat	ures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	? Yes <u> </u>	Is the Sampled Are within a Wetland?	ea Yes	No <u>X</u>	
Remarks:					
HYDROLOGY			,		
Wetland Hydrology Indicators			Secondary Indic	ators (minimum of tw	o required)
Primary Indicators (minimum of	one is required; check all that apply)			l Cracks (B6)	_
Surface Water (A1)	Aquatic Fauna (B13)			getated Concave Su	rface (B8)
High Water Table (A2)	Marl Deposits (B15) (I		Moss Trim I	atterns (B10)	
Saturation (A3)	Hydrogen Sulfide Odo	s along Living Roots (C		Water Table (C2)	
Water Marks (B1)			Crayfish Bu		
Drift Deposits (B3)	Recent Iron Reduction			/isible on Aerial Imag	ery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C			c Position (D2)	
Iron Deposits (B5)	Other (Explain in Rem		Shallow Aq	uitard (D3)	
Inundation Visible on Aerial		,	FAC-Neutra	al Test (D5)	
Water-Stained Leaves (B9)			🔲 Sphagnum	moss (D8) <b>(LRR T, U</b>	1)
Field Observations:					
Surface Water Present?	Yes No Depth (inches): _				
Water Table Present?	Yes No $\underline{\times}$ Depth (inches): Yes No $\underline{\times}$ Depth (inches): _				. V
Saturation Present?	Yes No <u>X</u> Depth (inches): _	Wetlan	nd Hydrology Prese	ent? Yes	No <u>×</u>
(includes capillary fringe) Describe Recorded Data (strear	n gauge, monitoring well, aerial photos,	previous inspections), if	available:		
		AND STATE AND STATE			
Remarks:	No hys	Instanto	present	)	

WNA6002 in

Sampling Point:

EGETATION (Four Strata) - Ose scientific		Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )		Species?		Number of Dominant Species
1. Pinos tacda	30	$\sim$	FAC	That Are OBL, FACW, or FAC: (A)
. Liquidantar strachtur	15	$\sim$	FAC	Total Number of Dominant
L /				Species Across All Strata: (B)
ł				Percent of Dominant Species
ð			1	That Are OBL, FACW, or FAC: (A/B)
5			h	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
3				OBL species x 1 =
	<u>40</u>	= Total Cov	<sup>rer</sup>	FACW species x 2 =
50% of total cover: 🗾	<u>2.5</u> 20% o	f total cover	:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: <u>50</u> )		1		FACU species x 4 =
Acer rubrum	10		<u>HAC</u>	PACO species
Dece Babara Magnalia VITA	iniany 5		FACW	
3. Vaccinin Stamineun	~ 5	$\sim$	FACU	Column Totals: (A) (B)
				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				
5				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	10	= Total Co	ver Ll	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	<u> </u>	of total cover	:	
Herb Stratum (Plot size: 50)		1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Core Pferidium aquiline	1 <u>m 10</u>		FACU	be present, unless disturbed or problematic.
2. Cerep Cletter alnitolia	10	<u> </u>	FACW	Definitions of Four Vegetation Strata:
3. Vites rotundifolic	5	Ť	FAC	ment to the control discussion 2 in (7.6 cm) or
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4			·	height.
5			<u> </u>	
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
	······			height.
11			<u> </u>	
12		= Total Co		
50% of total cover:	20%	of total cove	# <u></u>	
Woody Vine Stratum (Plot size:)	/		FAC	
1. Vitus raturditala	<u></u>		- FAC	
2. Smilax roturditala		$-\underline{\vee}$	- THU	
3.				
4.				
£				Hydrophytic \
J	20	= Total C	over ,	Vegetation
PAAL STLLE		of total cove	1-1	Present? Yes 📈 No
50% of total cover:			···	
Remarks: (If observed, list morphological adaptation	is below).			

WNA6002 -4

Sampling Point

SOIL						Sampling Point.	
Profile Desc	ription: (Describe	to the depth	needed to document the	indicator or confirm	the absence of in	dicators.)	
Depth	Matrix		Redox Feature	es			
(inches)	Color (moist)	<u>%</u>	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks	
05	254 3/2	100			6		
<u> </u>	254 4/4	100		······································	Ĺ		
5-16	234 414	100-		<u></u>			
						<u> </u>	
							······
<sup>1</sup> Type: C=Co	ncentration D=Der	letion RM=R	educed Matrix, MS=Maske	d Sand Grains.	<sup>2</sup> Location: PL=F	Pore Lining, M=Matr	ix.
			Rs, unless otherwise no			roblematic Hydric	
Histosol				ace (S8) <b>(LRR S, T, U</b> )	1 cm Muck	(A9) <b>(LRR O)</b>	
	pipedon (A2)		Thin Dark Surface (SS			(A10) (LRR S)	
Black Hi	• • •		Loamy Mucky Mineral			ertic (F18) (outside	MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleyed Matrix		Piedmont F	oodplain Soils (F19)	) (LRR P, S, T)
	Layers (A5)		Depleted Matrix (F3)		Anomalous	Bright Loamy Soils	(F20)
Terran Contraction of	Bodies (A6) (LRR P	ν, Τ, U)	Redox Dark Surface (	F6)	(MLRA 1	•	
🗍 5 cm Mu	icky Mineral (A7) <b>(L</b>	RR P, T, U)	Depleted Dark Surfac	e (F7)		Material (TF2)	
Muck Pr	esence (A8) ( <b>LRR l</b>	J)	Redox Depressions (I	F8)		w Dark Surface (TF	12)
🔲 1 cm Mu	ick (A9) (LRR P, T)		Marl (F10) (LRR U)		U Other (Expl	ain in Remarks)	
Depleted	d Below Dark Surfac	e (A11)	Depleted Ochric (F11		3	<i>.</i>	
📘 🔲 Thick Da	ark Surface (A12)			ses (F12) <b>(LRR O, P,</b> <sup>-</sup>	.,	of hydrophytic vege	
	rairie Redox (A16) (	-	Umbric Surface (F13)			hydrology must be p	
	/lucky Mineral (S1) (	LRR O, S)	Delta Ochric (F17) (M		unless d	isturbed or problem	atic.
	Bleyed Matrix (S4)			(MLRA 150A, 150B)			
( )and (	Redox (S5)			Soils (F19) <b>(MLRA 14</b> amy Soils (F20) <b>(MLR</b> /		ח	
	Matrix (S6)	о <b>т</b> ну		amy Solis (F20) (MLRO	4 149A, 100C, 100	0)	
	rface (S7) (LRR P,				r		
	Layer (if observed)	•					
Type:			<u> </u>			( <b>0</b> ) X = -	<u>No_X</u>
Depth (in	ches):				Hydric Soil Pres	ent? Yes	NO <u>/</u>
Remarks:							
		1.3	$r \cap$	Υ O	ſ	1	
		NO	hydroz	Soul D	NO SOM	)	
		$1 - \bigcirc$	, yy	200 P	Ve selve		
			$\bigcirc$				

wnag002f\_u



Upland data point wnag002\_u facing east



Upland data point wnag002\_u facing north

## wnag002 soils



Wetland/upland soils



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

Project/Site:		that		Sampling Date: 7-23-14
	City/County:	<u>Ctot</u>	NT-	Sampling Point:
Applicant/Owner: <u>Dominion</u>	Section, Townshi			
Investigator(s):	Section, Townshi	p, Range	o):	Slope (%):
Investigator(s): Landform (hillslope, terrace, etc.): <u>5.de_slope</u> Subregion (LRR or MLRA):Lat: <u>36°</u>	Local relief (conca		· 48' 20	.021 <sup>°°</sup> Datum:
Subregion (LRR or MLRA):		Long. <u></u>		ation:PFO
Soil Map Unit Name: Norfolk		NI. //5 m		
Are climatic / hydrologic conditions on the site typical for this time of y			o, explain in R	present? Yes $\underline{\times}$ No
Are Vegetation, Soil, or Hydrology significantly		(If needed, expl		
Are Vegetation, Soil, or Hydrology naturally pr				
SUMMARY OF FINDINGS – Attach site map showing	g sampling po	int locations	, transects	, important features, etc.
Hydrophytic Vegetation Present?       YesXNo         Hydric Soil Present?       YesXNo         Wetland Hydrology Present?       YesXNo         Remarks:       No	within a V	npled Area Vetland?	Yes	× No
HYDROLOGY				
Wetland Hydrology Indicators:		Se	condary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	)	<u> </u>	-	I Cracks (B6)
Surface Water (A1)	-		7	egetated Concave Surface (B8)
High Water Table (A2)		É	Moss Trim I	atterns (B10) ines (B16)
Saturation (A3)	bheres along Living	Boots (C3)	7	Water Table (C2)
			Crayfish Bu	
	uction in Tilled Soil	s (C6)	] Saturation	visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)				c Position (D2)
Iron Deposits (B5) Other (Explain in	Remarks)	Ļ	Shallow Aq	
Inundation Visible on Aerial Imagery (B7)		Ļ	FAC-Neutra	
X. Water-Stained Leaves (B9)			_ Sphagnum	moss (D8) <b>(LRR T, U)</b>
Field Observations:				
Surface Water Present?     Yes No _X Depth (inche Water Table Present?       Yes No _X Depth (inche	es):	-		,
Water Table Present?     Yes No Depth (inching)       Saturation Present?     Yes No Depth (inching)	es): $\frac{7/2'}{7/2'}$	- Wetland Hy	drology Prese	ent? Yes $\underline{X}$ No
(includes conillant fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial ph	olos, previous insp			
Remarks: Hydrology pr	esent			

WNA6003EF\_W

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

Sampling Point: \_\_\_\_\_

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u> ) 1. Acer (wblum	% Cover 20	Species?	<u>Status</u> FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Dichall	10		FAC	$\sim$
2. Pinus tacda	20	<u> </u>	FAC	Total Number of Dominant (B)
3. Liquidantar Strayatan	$\underline{w}$	<u> </u>	FAC	Species Across All 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				OBL species x 1 =
	<u></u>	= Total Cov	/er	
50% of total cover: <u>2</u>	20% o	f total cover	· (0	FACW species x 2 =
Quality (Chartherne (Plat airs)				FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	10		FAC	FACU species x 4 =
1. Da mua			FACW	UPL species x 5 =
2. Gelley Magnatia Virgeniana		<u> </u>	FACW	Column Totals: (A) (B)
3	<u> </u>			
4.				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7		. <u></u>		2 - Dominance Test is >50%
8			·····	3 - Prevalence Index is ≤3.0 <sup>1</sup>
	20	= Total Co	ver , (	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	) 20% (	of total cove	r:	_
Herb Stratum (Plot size: 30 1)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Herb Stratum (Plot size:/	30	1	FACW	be present, unless disturbed or problematic.
1. Arundren Gignotea			OBL	Definitions of Four Vegetation Strata:
2. woodwarden hredata			Opt	Definitions of Four vegetation Strata.
3. Ofen () Emunda annacemonia	<u>1 5</u>			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				height.
5				Sapling/Shrub – Woody plants, excluding vines, less
6				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
				has the stars. All woody since greater than 3.28 ft in
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	45	_ = Total Co	over	
50% of total cover: 2	2.5 20%	of total cove	er:	
Solution (Classical SO		/		
Woody Vine Stratum (Plot size: 301)	15		FAC	
1. Smilax raturditala				
2			<u>.</u>	
3				
4			<u></u>	.
··				Hydrophytic
0		= Total C	over a	Vegetation
7				Present? Yes <u>No</u>
50% of total cover:(		of total cov		
Remarks: (If observed, list morphological adaptations be	elow).			

# WNA6003F-W

SOIL							Sampling Poir	n
Profile Desc	ription: (Describe	to the depth	needed to docur	ment the indicato	r or confirm	the absence o	of indicators.)	
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)		Color (moist)	<u>%</u> Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	<u>.</u>
0-8	251 3/2	100				<u> </u>		
8-16	2.54 5/1	75 /	TOYR 516	25 C	RM	lh		
<u></u>	0.01-1	·						
				<u> </u>				
<u></u>	<b></b>							
					<u> </u>			
		_ <u></u>						
						<sup>2</sup> Location:	PL=Pore Lining, M=Ma	atrix.
'Type: C=C	oncentration, D=Dep Indicators: (Applic	bletion, RM=F	Reduced Matrix, M	s=masked Sand (		Indicators	for Problematic Hydri	ic Soils <sup>3</sup> :
				elow Surface (S8)	(LRR S. T. U		uck (A9) (LRR O)	
Histosol	pipedon (A2)			urface (S9) (LRR S		2 cm M	uck (A10) (LRR S)	
	istic (A3)			ky Mineral (F1) (LI		Reduce	ed Vertic (F18) (outsid	
	en Sulfide (A4)			ed Matrix (F2)			ont Floodplain Soils (F1	
	d Layers (A5)		Depleted Ma	atrix (F3)			lous Bright Loamy Soil	s (F20)
🛛 🗖 Organic	Bodies (A6) (LRR F	P, T, U)	- wardy	Surface (F6)		· ·	A 153B)	
5 cm Mu	ucky Mineral (A7) <b>(L</b> i	RR P, T, U)	and the second se	ark Surface (F7)			irent Material (TF2) hallow Dark Surface (T	E12)
	resence (A8) <b>(LRR l</b>			ressions (F8)			Explain in Remarks)	1 12)
	uck (A9) (LRR P, T)		Marl (F10) (		151)			
1 2 2 2	d Below Dark Surfac	ce (A11)	=	chric (F11) <b>(MLRA</b> nese Masses (F12		T) <sup>3</sup> Indic	ators of hydrophytic ve	getation and
	ark Surface (A12) Prairie Redox (A16) <b>(</b>	MI RA 150A	=	face (F13) (LRR P			and hydrology must be	
	Mucky Mineral (S1) (			c (F17) (MLRA 15		unle	ess disturbed or proble	matic.
	Gleyed Matrix (S4)		Reduced Vo	ertic (F18) (MLRA	150A, 150B)			
	Redox (S5)			loodplain Soils (F1				
Strippe	d Matrix (S6)		Anomalous	Bright Loamy Soil	s (F20) <b>(MLR</b>	A 149A, 153C,	, 153D)	
	urface (S7) (LRR P,					T		
Restrictive	Layer (if observed	):						
Type:							Present? Yes $\underline{\times}$	No
Depth (ir	1ches):					Hydric Soil	Present? Yes	NO
Remarks:								
				N		0		
			11 0	soil y	~ ~ ~ ~	. + -		
			Hudriz	Sort #	preser	$\sim$		
			13-	í				

wnag003f\_w



Wetland data point wnag003f\_w facing east



Wetland data point wnag003f\_w facing south

WNA6003. \_u

	ETERMINATION DATA			
Project/Site:SERP		City/County: Nost		_ Sampling Date: <u>7 · 23 - (</u> L
Applicant/Owner: Voninor	<sup>م</sup> ــــــــــــــــــــــــــــــــــــ		State: <u>NC</u>	_ Sampling Point:
nvestigator(s):4/ _andform (hillslope, terrace, etc.):5 Subregion (LRR or MLRA): Soil Map Unit Name:N &	deslare	Local relief (concave, convex,	none):	Slope (%):
Subragian (I BB or MI BA):	Lat: 36°C	7'54.266" Long: T	7 481	8.979 Datum:
	TRUE	<u> </u>	NWI classi	fication:
Soil Map Unit Name: 100	JI FOIL		/If no explain in	Remarks )
Are climatic / hydrologic conditions on t			(il lio, explain il	" present? Yes <u>X</u> No
Are Vegetation, Soil, or				
Are Vegetation, Soil, or				vers in Remarks.)
SUMMARY OF FINDINGS - A	ttach site map showing	g sampling point locatio	ons, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> No <u>No X</u> Yes <u>No X</u> Yes <u>No X</u>	Is the Sampled Area within a Wetland?	Yes	No <u>×</u>
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:		<u></u>	Secondary Ind	icators (minimum of two required)
Primary Indicators (minimum of one i	s required; check all that apply	)	Surface S	oil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B			/egetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B1			Patterns (B10)
Saturation (A3)	Hydrogen Sulfide		=	n Lines (B16) on Water Table (C2)
Water Marks (B1)	Presence of Redu	heres along Living Roots (C3)		Burrows (C8)
Sediment Deposits (B2)		uction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Thin Muck Surfac			hic Position (D2)
Iron Deposits (B5)	Other (Explain in		Shallow A	quitard (D3)
Inundation Visible on Aerial Ima	gery (B7)			tral Test (D5)
Water-Stained Leaves (B9)			Sphagnu	n moss (D8) <b>(LRR T, U)</b>
Field Observations:		· • • • • • • • • • • • • • • • • • • •		
Surface Water Present? Yes	No∕∠ Depth (inche No∕_ Depth (inche	es):		
Water Table Present? Yes	No <u>X</u> Depth (inche	es): ////		sent? Yes No
	No <u>X</u> Depth (inche	es): Wetland	Hydrology Pre	
(includes capillary fringe) Describe Recorded Data (stream ga	uge, monitoring well, aerial pho	otos, previous inspections), if av	vailable:	
Remarks:	- ( )	1	$\cap$	
	No hydr	ology prese	NT	
	. 0	$\sim$ 1		

WNA6003\_U

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

Sampling Point: \_\_\_\_\_

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )		Species?		Number of Dominant Species
1. Pinus tacda	40	$\overline{}$	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambar Straya Hua	5		FAC	
3. Lirodendron fuliation	20	$\overline{\nabla}$	FACL	Total Number of Dominant
and data and a second se				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6		·		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x1 =
	( <u>5448</u> _	= Total Cov	/er	· · ·
50% of total cover: <u>3 2</u>	.5 20% 0	f total cover	: 15	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)		1		FAC species x 3 =
1. Adr when	5	$\sim$	FAC	FACU species x 4 =
2. Lirodendron Falipitera		$\overline{\mathbf{x}}$	FALU	UPL species x 5 =
		·		Column Totals: (A) (B)
3				
4			<u>,</u>	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			<u></u>	2 - Dominance Test is >50%
8		. <u></u>	<u></u>	3 - Prevalence Index is ≤3.0 <sup>1</sup>
	20	= Total Co	ver, (	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	0 20% 0	of total cove	r: <u></u>	
Herb Stratum (Plot șize:)		/		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Alter Pteridium aquilinum	30	$\sim$	FACU	be present, unless disturbed or problematic.
2. Teephage (bthry aln Adra			FACW	Definitions of Four Vegetation Strata:
			. <u></u>	
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.			. <u> </u>	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.
				and the state of t
10				Woody vine – All woody vines greater than 3.28 ft in height.
11				neight.
12				
		_ = Total Co		
50% of total cover: <u> </u>	<u>(.)</u> 20%	of total cove	er:	
Woody Vine Stratum (Plot size: 30 ')		/		
1. Lanicera vaponica			FAC	
2. Smilar rotundikila	10	$\mathcal{I}$	FAC	
3. Vitus rotundifola	- 10	$\overline{}$	FAC	
3. <u>0(10) 10[10]a0002</u>				
4				
5				- Hydrophytic Vegetation
-	~	_ = Total Co	~	Present? Yes No
50% of total cover:		of total cove	er:	-
Remarks: (If observed, list morphological adaptations	below).			

WNA6003 -u

Sampling Point:

SOIL					Sa	ampling Point:	
	cription: (Describe	to the depth	need	led to document the indicator or confirm t	he absence of indicato	rs.)	
Depth	Matrix	•		Redox Features			
(inches)	Color (moist)		Col	or (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks	
0-4	2.5Y 4/2	100			<u></u>		
4-16	104R 4/4	100			52		
<u></u>		• <u> </u>					
		·					
							· · · · · · · · · · · · · · · · · · ·
						·····	
Turnet Omf	Concentration D-Dor	lotion PM=P	aduc	ed Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matr	rix.
Type: C=C Hydric Soil	Indicators: (Applic	able to all LI	RRs.	unless otherwise noted.)	Indicators for Problem		
Histosc				Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (L	.RR 0)	
	pipedon (A2)			Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (		
	listic (A3)			Loamy Mucky Mineral (F1) <b>(LRR O)</b>	Reduced Vertic (F		
🔲 Hydrog	en Sulfide (A4)			Loamy Gleyed Matrix (F2)	Piedmont Floodpla		
	ed Layers (A5)		Н	Depleted Matrix (F3)	Anomalous Bright (MLRA 153B)	Loamy Sons	(F20)
	c Bodies (A6) (LRR P		Н	Redox Dark Surface (F6) Depleted Dark Surface (F7)	Red Parent Mater	ial (TF2)	
<b>_</b>	lucky Mineral (A7) <b>(L</b> Presence (A8) <b>(LRR L</b>			Redox Depressions (F8)	Very Shallow Dark		12)
	luck (A9) (LRR P, T)	,	Ħ	Marl (F10) (LRR U)	Other (Explain in I		
	ed Below Dark Surfac	æ (A11)	$\Box$	Depleted Ochric (F11) (MLRA 151)	_		
·	Dark Surface (A12)			Iron-Manganese Masses (F12) (LRR O, P, T			
	Prairie Redox (A16) <b>(</b>		Ц	Umbric Surface (F13) (LRR P, T, U)	wetland hydrol unless disturbe		
	Mucky Mineral (S1) (	LRR O, S)	Н	Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B)	uniess disturbe	a or problem	alic.
=	Gleyed Matrix (S4)		Η	Piedmont Floodplain Soils (F19) (MLRA 1997)	A		
-	Redox (S5) ed Matrix (S6)		Ħ	Anomalous Bright Loamy Soils (F20) (MLRA	(149A, 153C, 153D)		
	Surface (S7) (LRR P,	S, T, U)	_				
	Layer (if observed)						
Type:							V
-	nches):				Hydric Soil Present?	Yes	_ No <u>×</u>
Remarks:							

wnag003\_u



Upland data point wnag003\_u facing east



Upland data point wnag003\_u facing north

# wnag003 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site SERP City/County: N7454 T-30-19
Applicant/Owner Dominicon State: NC Sampling Point NAHO17 f
Investigator(s) DDUEST Section, Township, Range: N
Landform (hillslope, terrace, etc.)
Subregion (LRR or MLRA) Lat: 3607'48.68240ng: 77°48'25, 29("Datum:
Soil Map Unit Name RAINSNWI classification:PFD
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 📈 No (If no, explain in Remarks.) 💦 🔨 🖍
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No
HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
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)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)
Iron Deposits (B5) U Other (Explain in Remarks)
Inundation Visible on Aerial Imagery (B7)
Field Observations:
Surface Water Present? Yes No Depth (inches):
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: Hydrology present

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: %,Cover Species? Status Number of Dominant Species  $\odot$ veren 1 a De. That Are OBL, FACW, or FAC (A) 2 Horn V=AC Total Number of Dominant Species Across All Strata (B) Percent of Dominant Species 5 That Are OBL, FACW, or FAC (A/B)6. Prevalence index worksheet: 7 Total % Cover of Multiply by 8 OBL species \_\_\_\_\_ x 1 = \_\_\_\_ = Total Cover FACW species x 2 = 50% of total cover: 20% of total cover: FAC species x 3 = Sapling Stratum (Plot size) FACU species x 4 = lethor a niture UPL species x 5 = fer rubrum Column Totals (A) (B) Magnolia Virgeniance Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 6 1 - Rapid Test for Hydrophytic Vegetation  $\overline{X}$ 7 2 - Dominance Test is >50% 8  $3 - Prevalence Index is \leq 3.0^{\circ}$ = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 20% of total cover: 50% of total cover: Herb Stratum (Plot size Indicators of hydric soil and wetland hydrology must 1 STILLUL nora CULAN be present, unless disturbed or problematic. 2. hasmanthuns Definitions of Four Vegetation Strata: 3. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or ۵ 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 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 **りひ** = Total Cover, 50% of total cover. 20% of total cover: Woody Vine Stratum (Plot size Smilex ration 111 2 3 4. 5. Hydrophytic 1D Vegetation = Total Cover Present? 50% of total cover: 20% of total cover: Remarks: (If observed, list morphological adaptations below).

WNAHOITE-W

SOIL		Sampling Point:
Profile Description: (Describe to the dept	n needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-7 104R 3/1		Sondy kom
7-13 104124/2		Stoney loam
13-18 15YR 5/2	64R4/6 72 C M	SCE
	nan na an	
Type C=Concentration D=Depletion RM=F		Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	
Black Histic (A3)	Thin Dark Surface (S9) (LRR S, T, U) 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)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 1	r) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		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 149	
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Restrictive Layer (if observed):		
Type		
Depth (inches):		Hydric Soil Present? Yes 📐 No
Remarks		
. 1	$\cap \qquad \circ$	
Ayone	Soil present	
$\mathcal{O}$		

Wnah017f\_w



Wetland data point wnah017f\_w facing east



Wetland data point wnah17f\_w facing south

WETLAND DETERMINATION DATA FORM	– Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/Cou	unty: <u>Naish</u> Sampling Date:
Applicant/Owner: DOM I NIO N	State: State: Sampling Date:
DOVIECT	
	, Township, Range:
Landrolm (missiope, terrace, etc.): <u>Hitstop</u> Local re	lief (concave, convex, none): <u>CONVEX</u> Slope (%): 1-2
Subregion (LRR or MLRA):	48.331 Long: 71=48 25.404 " Datum:
Soit Map Unit Name	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	sNo (If no. explain in Remarks.)
Are Vegetation Soil or Hydrology significantly disturbe	Are "Normal Circumstances" present? Yes X No
Are Vegetation Soil or Hydrology naturally problematic	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.
: Hydric Soil Present? Yes No. X	s 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)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	
Saturation (A3) Hydrogen Sulfide Odor (C1	
Water Marks (B1)	ng Living Roots (C3)
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks)	Geomorphic Position (D2) 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)	2000), - 1 10 10 4 100 00
Saturation Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	ous inspections). if available
Remarks.	
Wetland hydrology inclue	tors are not present
1	

WWA H のワ・\_の Sampling Point:\_\_\_\_\_

VEGETATION (Four Strata) - Use scientific nar	nes of pl	ants.		w.	ling Point:	. 0
	-	Dominant Indic	cator D	Dominance Test worksheet:		
Tree Stratum (Plot size:)	% Cover	Species? Sta	atus N	lumber of Dominant Species	1	
1. Her rinbrum	<b>Q</b>		HC T	hat Are OBL, FACW, or FAC:	(e(#	A)
2. Cranidamber styraciting	10	<u>+</u>	FAC T	otal Number of Dominant	r	
	10	<u>F</u> #	ACU   s	Species Across All Strata:		B)
4. Quercas caba	\$10	<u>F</u> ¥	ACU _	Demonst of Demission Consistent		
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	100 (	A/B)
6				HINN	v	/
7			P	Prevalence Index worksheet:		
8				Total % Cover of:		
	90	= Total Cover	. /	DBL species x		
50% of total cover:	20% of	total cover: 1X	1) 1	ACW species x		
Sapling/Shrub Stratum (Plot size: 30)		1 FA	<b>177</b> 1	AC species x		
1. Nyes been sylvatica	5		B F	ACU species x	4 =	
2. Are rubrum	3	T		JPL species x		
3			c	Column Totals: (A	۸)	(B)
4				Descelar as Index - D/A -		
5				Prevalence Index = B/A =		
6				lydrophytic Vegetation Indica		
7				↓ 1 - Rapid Test for Hydrophy ↓ 2 - Dominance Test is >50%	-	
8						
	10	= Total Cover		3 - Prevalence Index is ≤3.0		
50% of total cover:	20% of	total cover:	21	Problematic Hydrophytic Ve	getation (Explain)	
Herb Stratum (Plot size: 30)			1,	la dia dana ari kao dai amin'ny soratra amin'ny soratra amin'ny soratra amin'ny soratra amin'ny soratra amin'ny	4	
1. Arundingrig gigginteq	70	FA		Indicators of hydric soil and we be present, unless disturbed or		st
2		······································		Definitions of Four Vegetation	-	*******
3				-		
4				ree – Woody plants, excluding nore in diameter at breast height		
5				eight.	it (DBH), regardless	5 01
6					and alter stars to	
7				Sapling/Shrub – Woody plants, han 3 in. DBH and greater than		ss
8				_	. ,	
9				<b>lerb</b> – All herbaceous (non-woo If size, and woody plants less th		ess
10						
11				<b>Voody vine –</b> All woody vines <u>(</u> leight.	greater than 3.28 ft	in
12.			''	eight.		
	70	= Total Cover				
50% of total cover: 35		total cover:	4			
Woody Vine Stratum (Plot size: 30)	20%0					
1 Stanlan art a shale of	5	I F	FAC			
2 W. to a vote a fall a	$\prec$	F	TA			
3.						
		<u> </u>				
5.						
J	10	= Total Cover		lydrophytic	A	
50% of total cover:				Present? Yes	No	
		total cover:		·····		
Remarks: (If observed, list morphological adaptations belo	vv).					

SO	I	L
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	cription: (Describe (	to the depth	needed to docu	ment the i	ndicator	or confirm	the absence of ir	ndicators.)	· · · · · · · · · · · · · · · · · · ·
Depth (inches)	<u>Matrix</u> Color (moist)		Redo Color (moist)	<u>x Features</u> %		Loc <sup>2</sup>	Texture	Remark	c
10-6	10 YR 3/2						<u> </u>	I Celliark	3
6-12	10 11 4/2	· ·····					<u></u>		
174	1975 Y 51	5	······			<u> </u>			
( <u> </u>	-12-27-1	7							***************************************
						<u></u>			
							·		
	concentration, D=Depl Indicators: (Application)					ains.		Pore Lining, M=M Problematic Hydr	
Histoso			Polyvalue Be		-	RR S, T, U		(A9) (LRR O)	
	pipedon (A2)		🔲 Thin Dark Su	urface (S9)	(LRR S,	T, U)		(A10) (LRR S)	
	listic (A3) en Sulfide (A4)		Loamy Muck			0)		ertic (F18) (outsid	
	d Layers (A5)		Loamy Gleye	,	F2)			loodplain Soils (F Bright Loamy Soil	
	Bodies (A6) (LRR P,	T, U)	Redox Dark		6)		(MLRA 1		
	ucky Mineral (A7) (LR		Depleted Da		. ,			t Material (TF2)	
	resence (A8) <b>(LRR U</b> ) uck (A9) <b>(LRR P, T)</b>	)	Redox Depre		8)			ow Dark Surface (T lain in Remarks)	F12)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	•	(MLRA 1	51)		an in Kennarks)	
	ark Surface (A12)		Iron-Mangan					s of hydrophytic ve	-
the second	Prairie Redox (A16) ( <b>N</b> Mucky Mineral (S1) (L		Umbric Surfa			, U)		hydrology must be listurbed or proble	•
	Gleyed Matrix (S4)		Reduced Ve			0A, 150B)	uness u	isturbed of problem	mauc.
	Redox (S5)		Piedmont Flo	•	. ,	•	•		
	d Matrix (S6) urface (S7) (LRR P, S	тты	Anomaious I	Bright Loar	ny Soils (I	=20) (MLRA	A 149A, 153C, 153	3D)	
	Layer (if observed):						[		
Туре:									λ.
Depth (ir	iches):						Hydric Soil Pres	sent? Yes	_ No <u>X</u>
Remarks:		\$					<b>.</b>	- Marine - Marine - Marine - Angeland	and the last of the second
1/	10	° / 1	a l.a.			4	L		
I HY	dric sol	1 in	Sicater	4	e n	of Pr	reson/		
						v			
L							······································		

Wnah017\_u



Upland data point wnah017\_u facing east



Upland data point wnah017\_u facing north

### Wnah017 soils



Wetland/upland soils

Hydric Soil Present? Yes   Wetland Hydrology Present? Yes   Yes Xo     Imary Break     Depressional     forested     Wetland Hydrology Indicators:     Pomary Indicators (minimum of one is required check all that apply)     Surface Water (A1)     High Water Table (A2)     Hydrogen Sulface Rest     Secondary Indicators (B1)     Surface Water (A1)     Aquatic Fauna (B13)     High Water Table (A2)     Secondary Indicators (B1)     Statistic Rest     Secondary Indicators (minimum of two required)     Surface Water (A1)     Aquatic Fauna (B13)     Wetland Hydrology Indicators:     Secondary Indicators (minimum of two required)     Surface Soil Cracks (B6)     Depresence of Reduced Iron (C1)     Water Marks (B1)   Diff Deposits (B2)   Presence of Reduced Iron (C4)   Diff Deposits (B5)   Conf Deposits (B5)   Diff Deposits (B5)	WETLAND DETERM	IINATION DATA FORM – Atlantic a	nd Gulf Coastal Plain Region	
vestgator(s)       DD, Wesh       Section, Township, Range         indumin inflistope terrace etc./       Depression       Locar lefel (concave convex, none)       Cats 2 497       Stope (%)       Depression         amegion if BR or M, RA)       I all 2007 1/284/8       Long 7/7 487/50-328       Datum W45.84         Map Link Name       Coll Stop Co. Frince Stop (%)       Or Min W45.84       Datum W45.84         Map Link Name       Coll Stop Co. Frince Stop (%)       Or Min W45.84       No       If 100 (110 caspian in Remarks.)         re Vegetation       Soil       of Hydrology       isignificantly disturbed?       Are Morral Circumstances present? Yes No       No       If needed explain any answers in Remarks.)         UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrology Present?       Yes       No       If the sampled Area within a Wettand?       Yes       No       If the sampled Area within a Wettand?       No       If the sampled Area within a Wettand?       No       If the area water (A)       If the area wate	Project/Site SERP	City/County, UCs-L	Sampling Date 17/30	>/29
vestgator(s)       DD, Wesh       Section, Township, Range         indumin inflistope terrace etc./       Depression       Locar lefel (concave convex, none)       Cats 2 497       Stope (%)       Depression         amegion if BR or M, RA)       I all 2007 1/284/8       Long 7/7 487/50-328       Datum W45.84         Map Link Name       Coll Stop Co. Frince Stop (%)       Or Min W45.84       Datum W45.84         Map Link Name       Coll Stop Co. Frince Stop (%)       Or Min W45.84       No       If 100 (110 caspian in Remarks.)         re Vegetation       Soil       of Hydrology       isignificantly disturbed?       Are Morral Circumstances present? Yes No       No       If needed explain any answers in Remarks.)         UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrology Present?       Yes       No       If the sampled Area within a Wettand?       Yes       No       If the sampled Area within a Wettand?       No       If the sampled Area within a Wettand?       No       If the area water (A)       If the area wate	Applicant/Owner DOMINION		State: NC Sampling Point NNAL	1011
Indition indistope tenade etc.       Yestession       Local relief concave: convex noney       Less 6-1-1-1       Slope (%)       Q         aningoor (LRP or MLRA)       Lat SLOT / L2.848       Long 77.445/32-328       Datum public 84         aningoor (LRP or MLRA)       Lat SLOT / L2.848       Long 77.445/32-328       Datum public 84         aningoor (LRP or MLRA)       Control (LRP or MLRA)       No       (If no, explain Remarks.)         re Vegetation       Soil       or Hydrology       significantly disturbed?       Are Normal Circumstances' present? Yes       No         use demark / Mortology       or Hydrology       naturally problematic?       (If no, explain Remarks.)         UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes       No         Wetland Hydrology Present?       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       Surface Soil Cracks (Bo)       Surface Soil Cracks (Bo)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (Bo)       Dataces Soil Cracks (Bo)       Dataces Soil Cracks (Bo)         Surface Water (A1)       Aquatic Fauna (B13)       Dressec of Reduced iron (C4)       Surface Soil Cracks (Bo)       Dataces Soil Crac	overstigator(s) DD West	Section Township Bar		
and Map Durn Name       COLORS DOTS       COLORS       Model Status       Model Color       Model Color <td>andform (hillslope terrace etc.) Reparks</td> <td>io in tocal relief (concave o</td> <td>onvex none) Cabland Slope (%) (</td> <td>5</td>	andform (hillslope terrace etc.) Reparks	io in tocal relief (concave o	onvex none) Cabland Slope (%) (	5
and Map Durn Name       COLORS DOTS       COLORS       Model Status       Model Color       Model Color <td>Schlegion (LRR or MLRA)</td> <td>121 2107 10.848</td> <td>000 77 48152.328" Datum 146</td> <td>584</td>	Schlegion (LRR or MLRA)	121 2107 10.848	000 77 48152.328" Datum 146	584
e dimatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)  te Vegetation Soil or Hydrology naturally problematic?  Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.)  UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Samplied Area within a Wetland? Yes No within a Wetland? Yes No (Modeling present? Yes (Model	Soil Man Lint Name	Ling Standy Loran	NIM dessification with the P	
evegetation       Soil       or Hydrology       significantly disturbed?       Are "Normal Circumstances' present? Yes No         ue vegetation       Soil       or Hydrology       naturally problematic?       (If needed, explain any answers in Remarks.)         UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Hydrophytic Vegetation Present?       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Remarks       Depressional       forested       wetland Hydrology Indicators:       No				Low
e VegetationSollor Hydrologynaturally problematic?       (If needed. explain any answers in Remarks.)         UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes XNo				
UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophylic Vegelation Present?       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Hydro Soil Present?       Yes       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       within a Wetland?       Yes       No         Wetland Hydrology Indicators:       Depressional forested wetHvtnd       Surface Soil Cracks (86)       Sprasely Vegetated Concave Surface (88)         High Water Table (A2)       Man Deposits (B15) (LRR U)       Surface Soil Cracks (86)       Sprasely Vegetated Concave Surface (88)         Hydrophylic Recent Charles (B1)       Oxidized Rhizospheres along Living Roots (C1)       Mos Stirration (A3)       Mos Surface (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Both Deposits (B3)       Recent Iron Reduction in Tilled Solis (C6)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (C9)         Hydraer Staure Leaves (B9)       Other (Explain in Remarks)       Shallow Aquitard (D3)       Shallow Aquitard (D3)         Hundation Visible on Aerial Imagery Yes       No       Depth (inches):       Shallow Aquitard (D3)         Water				
Hydrophylic Vegetation Present? Yes No   Hydric Soll Present? Yes No     Wetland Hydrology Present? Yes No     Wetland Hydrology Indicators:     Pomary Indicators:     Surface Water (A1)   Hydrogen Sufface Vater (A1)   Saturation Vasible on Aerial Imagery (C2)   Indicators (B2)   Into Induc Vasible on Aerial Imagery (B2)   Vater Stained Leaves (B3)   Incode Caser (Bacer (Inches))	Are Vegetation Soil or Hydrolog	y naturally problematic? (If ne	eded, explain any answers in Remarks.)	
Hydro. Soil Present?       Yes       No       within a Wetland?       Yes       No         Remarks       Depressional forested wetlwind       Secondary Indicators (minimum of two required)         WBROLOGY       Secondary Indicators (minimum of one is required check all that apply)       Surface Soil Cracks (B6)         Primary Indicators (minimum of one is required check all that apply)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Primary Indicators (Mart Deposits (B1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Mart Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Saturation (A3)       Hydrogen Sufface Odor (C1)       Moss Trim Lines (B16)         Orditace Water (A1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Saturation (A3)       Hydrogen Sufface Odor (C1)       Moss Trim Lines (B16)         Orditace Water (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Geometric Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Dry-Season Water Table (C2)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Saturation (A3)       Shallow Aquitard (D3)         Invindation Visible on Aerial Imagery (B7)       Yes       No       Sphallow Aquitard (D3)         Wat	SUMMARY OF FINDINGS – Attach s	ite map showing sampling point lo	ocations, transects, important features,	etc.
Hydro. Soil Present?       Yes       No       within a Wetland?       Yes       No         Remarks       Depressional forested wetlwind       Secondary Indicators (minimum of two required)         WBROLOGY       Secondary Indicators (minimum of one is required check all that apply)       Surface Soil Cracks (B6)         Primary Indicators (minimum of one is required check all that apply)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Primary Indicators (Mart Deposits (B1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Mart Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Saturation (A3)       Hydrogen Sufface Odor (C1)       Moss Trim Lines (B16)         Orditace Water (A1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Saturation (A3)       Hydrogen Sufface Odor (C1)       Moss Trim Lines (B16)         Orditace Water (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Geometric Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Dry-Season Water Table (C2)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Saturation (A3)       Shallow Aquitard (D3)         Invindation Visible on Aerial Imagery (B7)       Yes       No       Sphallow Aquitard (D3)         Wat	Hydrophytic Vegetation Present? Yes	No Is the Sampled	Δτεα	
Wetland Hydrology Present?       Yes       No         Remarks       Depressional forested wetlivend         Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Pimary Indicators (minimum of one is required check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       Sprasely Vegetated Concave Surface (B8)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfde Odor (C1)       Moss Trim Lines (B16)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Sediment 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)         I fund Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         I fundation Visible on Aerial Imagery (B7)       Vestard Methodogy Present? Yes       No         Water Table Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):       No         Water Table Present?       Yes       No       Depth (inches):       No       No         Surfac	Hydric Soil Present? Yes	X No listing to the second		
Depressional forested wethend         With the state of the state				
IVDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required check all that apply)         Surface Water (A1)         High Water Table (A2)         Mart Deposits (B15) (LRR U)         Saturation (A3)         Hydrogen Sulfide Odor (C1)         Water Marks (B1)         Oxidized Rhizospheres along Living Roots (C3)         Drif Deposits (B2)         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Solits (C6)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Other (Explain in Remarks)         Inudation Visible on Aerial Imagery (B7)         Water Table Present?         Yes         Notare Water Present?         Yes         Notare (B9)         Field Observations:         Surface Water Present?         Yes       No         Depth (inches):         uncludes capillary Image)         Depth Resent?         Yes       No         Depth Resent?       Yes         No       Depth (inches):         Water Stand Leaves (B9)       Depth (inches):         Saturation Present?       Yes       No         Depth Recorded Data	Remarks			
IVDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required check all that apply)         Surface Water (A1)         High Water Table (A2)         Mart Deposits (B15) (LRR U)         Saturation (A3)         Hydrogen Sulfide Odor (C1)         Water Marks (B1)         Oxidized Rhizospheres along Living Roots (C3)         Drif Deposits (B2)         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Solits (C6)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Other (Explain in Remarks)         Inudation Visible on Aerial Imagery (B7)         Water Table Present?         Yes         Notare Water Present?         Yes         Notare (B9)         Field Observations:         Surface Water Present?         Yes       No         Depth (inches):         uncludes capillary Image)         Depth Resent?         Yes       No         Depth Resent?       Yes         No       Depth (inches):         Water Stand Leaves (B9)       Depth (inches):         Saturation Present?       Yes       No         Depth Recorded Data	Derressimal	forested wetland		
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)         Sedment Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Schauration (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks       Surface Soil Cracks (B8)	pep. c=rer. c	<b>4</b> —		
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)         Sedment Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Schauration (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks       Surface Soil Cracks (B8)				
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)         Sedment 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)       Yes       No         Water Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       <	HYDROLOGY			J
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)         Sedment 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)       Yes       No         Water Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       <	Wetland Hydrology Indicators:	· · · · · · · · · · · · · · · · · · ·	Secondary Indicators (minimum of two requi	red)
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)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present?       Yes         Surface Water Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       No         Uncludes capillary fringe)       Depth (inches):       Wetland Hydrology Present?       Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.		check all that apply)		
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 Table Present?       Yes       No         Yes       No       Depth (inches):         uncludes capillary fringe)       Depth (inches):       Wetland Hydrology Present?         Ves       No       Depth (inches):       No         Includes capillary fringe)       Depth (inches):       No         Saturation Present?       Yes       No       No         Bernarks       Depth (inches):       Motos, previous inspections), if available.	Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (E	38)
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)         Dnft 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)       Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present?       Yes       No       Model Inches):         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes       No         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes       No         Cocket Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks       Opention (inches); if available.	High Water Table (A2)	Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)	
Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Dnft 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)       Depth (inches):       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present?       Yes       No         Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       No         Concludes capillary fringe)       Depth (inches):       Wetland Hydrology Present?       Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks       Other (stream gauge, monitoring well, aerial photos, previous inspections), if available.	Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)	
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:       Depth (inches):         Surface Water Present?       Yes         No       Depth (inches):         uncludes capillary fringe)       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.				
Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Image: Construction (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         Surface Water Present?       Yes       No         Yes       No       Depth (inches):         Uncludes capillary fringe)       Wetland Hydrology Present?       Yes         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks				
Iron Deposits (B5) Other (Explain in Remarks)   Inundation Visible on Aerial Imagery (B7)   Water-Stained Leaves (B9)   Field Observations:   Surface Water Present?   Yes   No   Z   Depth (inches):   Includes capillary fringe)   Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.				1)
Inundation Visible on Aerial Imagery (B7)   Water-Stained Leaves (B9)   Field Observations:   Surface Water Present?   Yes   No   X   Depth (inches):   Water Table Present?   Yes   No   X   Depth (inches):   Uncludes capillary fringe)   Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.   Remarks				
Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present?       Yes No X Depth (inches):         Water Table Present?       Yes No X Depth (inches):       Wetland Hydrology Present? Yes X No         Saturation Present?       Yes No X Depth (inches):       Wetland Hydrology Present? Yes X No         Concludes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.         Remarks       O			<b>T</b>	
Field Observations:         Surface Water Present?       Yes No X Depth (inches):         Water Table Present?       Yes No X Depth (inches):         Saturation Present?       Yes No X Depth (inches):         Uncludes capillary fringe)       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.         Remarks	V-71			
Water Table Present?       Yes No X Depth (inches):         Saturation Present?       Yes No X Depth (inches):         Uncludes capillary fringe)       Wetland Hydrology Present? Yes X No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.         Remarks				
Saturation Present?       Yes No X Depth (inches):       Wetland Hydrology Present? Yes X No         Uncludes capillary fringe)       Depth (inches):       Wetland Hydrology Present? Yes X No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks	Surface Water Present? Yes No	<u>X</u> Depth (inches):		
Saturation Present?       Yes No X Depth (inches):       Wetland Hydrology Present? Yes X No         Uncludes capillary fringe)       Depth (inches):       Wetland Hydrology Present? Yes X No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.       Remarks		Depth (inches):		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.	Saturation Present? Yes No	<u></u> Depth (inches): ₩ε	etland Hydrology Present? Yes 📈 No 🔄	
Remarks	(includes capillary fringe)		) if available	
	Describe Recorded Data (stream gauge, mont	oning weat, aerial protos, previous inspections		
Obvious depressional area.	Remarks			
Obvious depressioner orla.	A company of C	1		
	Uburburs a	representation of the	L.	
				1

WNAHOIG-W

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

Sampling Point

		Sampling Form
Tree Stratum (Plot size 30)	Absolute Dominant Indicator	Dominance Test worksheet:
(intersize )	<u>% Cover Species?</u> Status	Number of Dominant Species
1 Querene legeri Colica	30 V, FACW	That Are OBL, FACW, or FAC (A)
2 Nyssa biflera	10 V OBL	
	(	Total Number of Dominant
3. After rubrym	10 FAC	Species Across All Strata (B)
4. Quereus nigra		· · · · · · · · · · · · · · · · · · ·
		Percent of Dominant Species
5		That Are OBL, FACW, or FAC (A/B)
6		
		Prevalence Index worksheet:
		Total % Course f
		Total % Cover of Multiply by
	$L_0O = Total Cover$	OBL species x 1 =
		FACW species x 2 =
	20% of total cover. 12	1 1
Sapling/Shrub Stratum (Plot size)		FAC species x 3 =
1 Liquidanse Styrae, Flue,	5 JEnc	FACU species x 4 =
Cugulidgunser Stylse, Flue	> / FAC	
2. Myssa bitlorg	$\rightarrow$ $\vee$ $\vee$ $\vee$ $\vee$ $\vee$	UPL species x 5 =
3 The page 1	3 VI FAC	Column Totals: (A) (B)
3. Flex offace conymboseem		
4 Vaccinian appropriation	5 V FAQU	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
	25 = Total Cover $r$	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 17.	520% of total cover:	
		Indicators of hydric soil and wetland hydrology must
1. NONE		be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
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
		height.
5		incigitt.
6		Sapling/Shrub – Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
· · · · · · · · · · · · · · · · · · ·		and one borrand greater and reader that size of (1) my take
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.
		Ŭ
12		
	= Total Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size 50)	7 Far	
1. Smilax rotunditaling	<u> </u>	
2		
3.		ļ
4		
5.		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover: e	Present? Yes <u> </u>
		/
Remarks: (If observed, list morphological adaptations belo	9W).	

WNAHOIGF-w

SOIL		Sampling Point:
Profile Description: (Describe to the depth	needed to document the indicator or confirm t	the absence of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Redox Features Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Tautura
$\bigcirc 11 10 \times 12 \times 12$	<u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> <u>Loc<sup>2</sup></u>	Texture Remarks
11-18+ 104R 3/7		
11-10- 10/10-172		······
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=R	Reduced Matrix MS=Masked Sand Grains	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LI		Indicators for Problematic Hydric Solls <sup>3</sup> :
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,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	L Anomalous Bright Loamy Soils (F20)
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)	Uther (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T	) <sup>3</sup> 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)	
Sandy Redox (S5) Stripped Matrix (S6)	<ul> <li>Piedmont Floodplain Soils (F19) (MLRA 149, Anomalous Bright Loamy Soils (F20) (MLRA</li> </ul>	•
Dark Surface (S7) (LRR P, S, T, U)		149A, 199C, 199D)
Restrictive Layer (if observed):		
Туре:	num 1	Ĭ. (
Depth (inches):	[	Hydric Soil Present? Yes No
Remarks:	·······	<u> </u>
	0	
4.0	nic soil present	
	in so 4 preserv	

# Wnah016f\_w



Wetland data point wnah016f\_w facing east



Wetland data point wnah16f\_w facing south

WETLAND DETERMINATION DATA FOR	RM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/	County: Nash Sampling Date:
Applicant/Owner:	State: Sampling Point:
Investigator(s):Sect	ion, Township, Range:
Landform (hillslope, terrace, etc.):Hillslope Loca	al relief (concave, convex, none): Slope (%): $\mathcal{O}$ [
Subregion (LRR or MLRA): Lat: 36° 07'	18.801" Long: 77° 48' 52. 112" Datum:
Soil Map Unit Name:	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 distu	irbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks       Yes       No	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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LF	
Saturation (A3)     Hydrogen Sulfide Odor       Vater Marks (B1)     Oxidized Rhizospheres	
Sediment Deposits (B2)	
Drift Deposits (B3)	n Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
L Iron Deposits (B5) L Other (Explain in Remain Induction Visible on Aerial Imagery (B7)	rks) Shallow Aquitard (D3) 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?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks: NO hydrology r	present

WAHOLG - U Sampling Point:

VEGETATION (Four Strata) - Use scientific na	mes of pl	lants.		Sampling Point:
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size)	% Cover	Species?	Status	Number of Dominant Species
1 Pinus taela	29	$-\varphi$	TAK	That Are OBL, FACW, or FAC: (A)
2 Quereus rigra	42	-V_	FAC	Total Number of Dominant
3. Oxyopperon actionag	15	$ \longrightarrow $	FACU	Species Across All Strata: (B)
4 Liquidanbar styraci Phica	20		FAC	Percent of Dominant Species
				That Are OBL, FACW, or FAC: 66 (A/B)
6				Prevalence Index worksheet:
7			•	
8	22			Total % Cover of:Multiply by: OBL species x 1 =
1	, EO	= ⊤otal Cov	ver 17	1
50% of total cover: 240	20% of	f total cover	: Le_	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	12	. 1	<b>— 1</b>	FAC species         x 3 =           FACU species         x 4 =
1 Vaccinium stranger	20	4	FACU	UPL species x 4 =
2 Liput Amiran StyrAcituca	<u></u>	-4-	FAC	Column Totals (A) (B)
3. Obysentron arborea	20	$\underline{\checkmark}$	FACU	
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 ≤3.0'
55	50	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover. $25$	20% of	total cover	10	
Herb Stratum (Plot size)	10	ſ	CACI	Indicators of hydric soil and wetland hydrology must
Voeenplim Staminium			FACI	
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 height.
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7 2				than 5 m. Don and greater than 5.26 it (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
				height.
12	TO		·	
50% of total cover: 5		= Total Cov f total cover	0	
Woody Vine Stratum, (Plot size)	20%0	l total cover		
1 Using Statum (Horsize)	10		FAI	
2 Smilter Other Collins	-ia		FAI	
3.			-40	
4				
5				
	570	= Total Cov	ver í	Hydrophytic Vegetation
50% of total cover / C		total cover	61	Present? Yes No
Remarks (If observed, list morphological adaptations belo				1
	,			

SOIL

Sampling Point: \_\_\_\_\_\_U

Profile Description: (Describe to the dept	h needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-4 104R4/2		
4-9 IMPEIS		······································
d litimolo Fli		
9-16-107R 5/4		
Type C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR 0)
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, 1	a <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Praine 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 149	·
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре		$\Sigma$
Depth (inches)		Hydric Soil Present? Yes No
Remarks		
		$\sim$
	No hydric soil	
	No hydric sod	Dreser
	1	
	· · · · · · · · · · · · · · · · · · ·	

Wnah016\_u



Upland data point wnah016\_u facing east



Upland data point wnah016\_u facing north

### Wnah016 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM	– Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/Cou	nty:
Applicant/Owner: Dominian	State: NC Sampling Point: WNAH015-4
Investigator(s): DHUSS Section,	Township, Range:
	ief (concave, convex, none): CONCHAINQ Slope (%):
	2.451" Long: 77°49'11.269" Datum:
Soil Map Unit Name: RAINS	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	
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Hydric Soil Present? Ves X No	y between activity
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) Mad Departure (B45) (1 DP 1	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Saturation (A3) High Water Table (A2) Hydrogen Sulfide Odor (C1)	
Water Marks (B1) Qxidized Rhizospheres alor	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Image: Iron Deposits (B5)       Other (Explain in Remarks)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:     Yes     No     Depth (inches):       Surface Water Present?     Yes     No     Depth (inches):	2 84
Surface Water Present?     Yes     No     Depth (inches):       Water Table Present?     Yes     No     Depth (inches):	Page 1
Saturation Present? Yes $X$ No Depth (incles): $\leq \zeta \downarrow \downarrow$	X I
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	
Remarks:	
Obvibres swamp of abrieft boundary	forest with to adjacent upland
Langer,	

WNAHOIST-

'EGETATION (Four Strata) – Use scientific names of plants.			Sampling Point:		
		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status.	Number of Dominant Species	
1. Ny SEA DIFLORA	12	$-\mathcal{A}$	DD	That Are OBL, FACW, or FAC: (A)	
2. Der rubrum 3. Liguideensber Stipperblue	25 70	$\underline{\mathcal{Y}}$	FAC FAC	Total Number of Dominant Species Across All Strata: (B)	
4	·			Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: (A/B)	
6				Prevalence Index worksheet:	
7	·	<u> </u>		Total % Cover of: Multiply by:	
8	50	= Total Cov		OBL species x 1 =	
50% of total cover:				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size:)	20% of	total cover	10	FAC species x 3 =	
1. Accr nerum	15	. /	CAV.	FACU species x 4 =	
			5Ri	UPL species x 5 =	
2. Nyssn biflora 3. Duerris laurifolia	-10-	_V	ENCUL	Column Totals: (A) (B)	
			TFCI		
4				Prevalence Index = B/A =	
5	-			Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7	· ·····			2 - Dominance Test is >50%	
8	-20			3 - Prevalence Index is ≤3.0 <sup>1</sup>	
		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
50% of total cover: _/ 5	20% of	total cover	:_Q_		
1. Mur DANIa Keisak 50			<u>BBL</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. Dochmana cy lundriga	20	$\underline{\checkmark}$	FACK	Definitions of Four Vegetation Strata:	
3. Enonthes orconkas	10		FACW		
4. SANTUES Cornua	iΔ		OBL	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of	
5. Sarpus apennus	10		DBL	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 borbasseus (non weady) plants, recordings	
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			<u> </u>	height.	
12					
	100	= Total Cov			
50% of total cover: <u>52</u>	20% of	f total cover	: 20		
Woody Vine Stratum (Plot size:)					
1					
2	-				
3					
4					
5				Hydrophytic	
		= Total Cov	ver	Vegetation X	
50% of total cover:				Present? Yes No	
Remarks: (If observed, list morphological adaptations belo				1	
	<b>,</b> .				

SO	IL
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SUIL							Sampling Point:	· · · · · · · · · · · · · · · · · · ·
Profile Desc	ription: (Describe to	the depth needed to d	ocument the	indicator	or confirm	the absence of in	dicators.)	
Depth (inches)	Matrix Color (moist)	% Color (mois	Redox Featur t)            %	es Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0- 6	INVRZII		<u></u>			loram	T Cinarka	
6-10	2 M 5/2	104R 41	1. 528	$\overline{}$	m	1		
in Irt	7VE10	OUR 4/6	6 12 77	$\frac{3}{5}$	m	10AM		
10 10	21212-		210 12		<u>Irc</u>			
			a dal dalaria dall'al con con successione anna con conservatione anna con conservatione anna con conservatione a					
177 0 0			·····					
		ion. RM=Reduced Matr le to all LRRs, unless			ains.		<sup>⊃</sup> ore Lining, M=Matrix. Problematic Hydric So	ile <sup>).</sup>
Histosol		_	le Below Sur			<b>L1</b>	(A9) (LRR O)	
	upedon (A2)		rk Surface (S				(A10) (LRR S)	
Black His			Mucky Minera		R O)		ertic (F18) (outside ML	
	n Sulfide (A4) I Layers (A5)		Gleyed Matrix d Matrix (F3)	: (F2)		· · · · ·	loodplain Soils (F19) (L Bright Loamy Soils (F2	
	Bodies (A6) (LRR P, T		Dark Surface	(F6)		(MLRA 15		•)
	cky Mineral (A7) (LRR		d Dark Surfac	•			Material (TF2)	
	esence (A8) (LRR U) ck (A9) (LRR P, T)		Depressions ( 10) <b>(LRR U)</b>	F8)			w Dark Surface (TF12) ain in Remarks)	
	Below Dark Surface (		d Ochric (F11	) (MLRA 1	51)		antin (Centarks)	
	irk Surface (A12)		nganese Mas	. ,	•	•	of hydrophytic vegetat	
<u>אמרהל</u>	airie Redox (A16) <b>(ML</b> lucky Mineral (S1) <b>(LR</b>	· •	Surface (F13 chric (F17) (N	, ,			hydrology must be pres isturbed or problematic	
	leyed Matrix (S4)	· · —	d Vertic (F18	-		uniess u	isturbed of problematic	•
	edox (S5)		nt Floodplain			-		
	-Matrix (S6) fface (S7) <b>(LRR P, S, 1</b>		ous Bright Lo	amy Soils	(F20) <b>(MLRA</b>	A 149A, 153C, 153	D)	
	_ayer (if observed):	, 07	·····			· · · · · · · · · · · · · · · · · · ·		
Туре	-						$\sim$	
Depth (inc	ches)					Hydric Soil Pres	ent? Yes	No
Remarks			/. <b>1</b> . W					
		11 0		$\langle \cap \rangle$		$\cap$		
		Hydri	_ SO	n.V	() NO	the		
		$\mathcal{S}$	- 20	1	ple	Sit		
		->	11	1	~	1	$\cap$ $D$	
		>20%	mott	les	In u	ther so	J Surt	see
		1200				y i	,	

Wnah015f\_w



Wetland data point wnah015f\_w facing east



Wetland data point wnah15f\_w facing south

WETLAND DETERMINATION DATA	FORM – Atlantic an	d Gulf Coastal Pl	ain Region
Project/Site:	City/County:	5件	7-30-14 Sampling Date:
Applicant/Owner: Dominion	· · ·	State: NC	Sampling Point WNH4015
NO ALVIST	Section, Township, Range		
			,
Subregion (LRR or MLRA): Lat: 36	26 42.019 10	7704911	Slope (%): <u>⊘ ~ €</u> . <u>657</u> ″_ Datum:
Soil Map Unit Name: RAINS		NWI classific	
Are climatic / hydrologic conditions on the site typical for this time of ye			
			present? Yes <u>No</u> No
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pro		ed, explain any answe	·
SUMMARY OF FINDINGS – Attach site map showing	sampling point loc	ations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No		? Yes	
Remarks: Not all three poe	rumeters	present	-
HYDROLOGY			
Wetland Hydrology Indicators:	···	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	
Surface Water (A1)	3)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Drainage Pa	tterns (B10)
Saturation (A3)		Moss Trim L	
	eres along Living Roots (0	· • • • • • • • • • • • • • • • • • • •	Water Table (C2)
Sediment Deposits (B2)     Presence of Reduction       Drift Deposits (B3)     Recent Iron Reduction	tion in Tilled Soils (C6)	Crayfish Bur	Tows (C8) isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	, ,		Position (D2)
Iron Deposits (B5)		Shallow Aqu	• • •
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra	I Test (D5)
Water-Stained Leaves (B9)		Sphagrium r	noss (D8) <b>(LRR T, U)</b>
Field Observations:			
Surface Water Present? Yes No Depth (inches			
	):	and Hydrology Prese	
Saturation Present? Yes No Depth (inches (includes capillary fringe)	): Vvetia	and Hydrology Prese	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections),	if available:	
Remarks: No hydrole	egy pro	sert	

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VEGETATION (Four Strata) – Use scientific names of plants	VEGETATION	(Four Strata)	- Use scientific	names of plants.
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Sampling Point:

	Absoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
	20	/	FIA A	Number of Dominant Species
	20	$\rightarrow 4$	<u>fite</u>	That Are OBL, FACW, or FAC: (A)
2. Chiefens nicirca	<u></u>		FAX	Total Number of Dominant
3. Acor rubrum	20	× /	FA	Species Across All Strata: (B)
4. Pinus taga	773	$\overline{\overline{}}$	FIL	
		<u> </u>	THE	Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8.				
		= Total Cov		OBL species x 1 =
50% of total cover:	20% of	total cover	16	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		7		FAC species x 3 =
	15		EN	_FACU species x 4 =
1. Hor rubrum	12		1-AC	F
2. Ulmus akita ai	10		TAU	UPL species x 5 =
3. Liquic Amber 5 ty rac it luce	M	$\overline{v}$	FAC	Column Totals: (A) (B)
				Prevalence Index = B/A =
5	·			Hydrophytic Vegetation Indicators:
6				J - Rapid Test for Hydrophytic Vegetation
7				
		<u></u>		2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	35	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <u>17</u> .	5 20% of	total cover	: /	
Herb Stratum (Plot size:,)				1
	2		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Asstenijen potimour	NOS	/	THEC	be present, unless disturbed or problematic.
2. Vitis rotundifolia	<u> </u>	$\checkmark \neq$	FAC	Definitions of Four Vegetation Strata:
3. Rubus argutus	$\overline{D}$	-i/	FAU	_
· <u> </u>			4 AL	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.				
(1)		= Total Co	/er	
50% of total cover: 💋 🦉	20% of	total cover	: 3.4	
Woody Vine Stratum (Plot size:			4 -	
1 Sun Por particulation	20		IFTA/	
	- al	$- \vec{-} +$	FAR	
2. Urtis rohundikolla	10	$\underline{}$	INC	
3				
4.				
E		<u></u>	<u></u>	
σ.	*787	<u></u>		Hydrophytic /
	20	= Total Co	ver /	Vegetation
50% of total cover:	20% of	total cover	:_Q	Present? Yes / No
				1
Remarks: (If observed, list morphological adaptations being				
Remarks: (If observed, list morphological adaptations below	ow).			
Remarks: (If observed, list morphological adaptations belo	ow).			
Remarks: (If observed, list morphological adaptations belo	ow).			
Remarks: (If observed, list morphological adaptations belo	ow).			
Remarks: (If observed, list morphological adaptations belo	ow).			
Remarks: (If observed, list morphological adaptations belo	ow).			
Remarks: (If observed, list morphological adaptations belo	ow).			

SOIL			いいしょう Sampling Point:	015
Profile Description: (Describe to the	lepth needed to docum	ent the indicator or co		
Depth <u>Matrix</u>	Redox	Features		
(inches) Color (moist) %	Color (moist)	<u>% Type<sup>1</sup> Loc</u>	2 Texture Remarks	
U-4 10412/12_			Butnany lown	
HELE FROM				
1-9 2.5Y K/K/			SAN QUIDNO	-
9-11+ INUP Ele		<u></u>		-
1 16 1011 78				
<sup>1</sup> Type: C=Concentration, D=Depletion, I			<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherv	vise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol (A1)		ow Surface (S8) (LRR S		
Histic Epipedon (A2)		face (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)	
Black Histic (A3)		Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A	
Stratified Layers (A5)	Loamy Gleyed		Piedmont Floodplain Soils (F19) (LRR P, S, Anomalous Bright Loamy Soils (F20)	. 1)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S		(MLRA 153B)	
5 cm Mucky Mineral (A7) (LRR P, T		· /	Red Parent Material (TF2)	
Muck Presence (A8) (LRR U)	Redox Depres	sions (F8)	Very Shallow Dark Surface (TF12)	
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LF		Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)		ric (F11) (MLRA 151)	3	
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 1		se Masses (F12) (LRR (		
Sandy Mucky Mineral (S1) (LRR O,		e (F13) <b>(LRR P, T, U)</b> F17) <b>(MLRA 151)</b>	wetland hydrology must be present. unless disturbed or problematic.	
Sandy Gleyed Matrix (S4)		c (F18) (MLRA 150A, 1	•	
Sandy Redox (S5)		dplain Soils (F19) (MLR		
Stripped Matrix (S6)			MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)				
Restrictive Layer (if observed):				
Туре:				
Depth (inches):			Hydric Soll Present? Yes No _/	<u> </u>
Remarks:				
N	o hys	Arc Se	sils present	
			*	
				1

Wnah015\_u



Upland data point wnah015\_u facing east



Upland data point wnah015\_u facing north

### Wnah015 soils



Wetland/upland soils

WETLAND DETERMINATION DATA F	ORM – Atlantic and Gulf Coastal Plain Regi	on
5/0120/		•
Applicant/Owner: Dimminution	City/County: <u>Nash</u> Sampling State: <u>NC</u> Sampling	Point:
Investigator(s): DDLDEST	Section, Township, Range:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Landform (hillslope, terrace, etc.): Dopression		Slope (%)· Ô
	6' 38,037" Long: 77°49'14.320"	
Soil Map Unit Name: RiAn_5	NWI classification:	DEA
		<u>r10</u>
Are climatic / hydrologic conditions on the site typical for this time of year		$\mathcal{A}$
Are Vegetation, Soil, or Hydrology significantly of	-	
Are Vegetation, Soil, or Hydrology naturally pro	olematic? (If needed, explain any answers in Rema	rks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, import	ant features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No	Is the Sampled Area within a Wetland? Yes No _	
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:	Cocondany Indicators (minin	um of two required)
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minin	
Surface Water (A1)		
High Water Table (A2)		
□		, 
Water Marks (B1) Oxidized Rhizosphe	res along Living Roots (C3) 🛛 🔲 Dry-Season Water Tabl	le (C2)
Sediment Deposits (B2)	ed Iron (C4) Crayfish Burrows (C8)	
	on in Tilled Soils (C6)	
Algal Mat or Crust (B4)		)2)
Iron Deposits (B5) Deposits (B5) Cher (Explain in Re	· · · · · · · · · · · · · · · · · · ·	
Inundation Visible on Aerial Imagery (B7)           Water-Stained Leaves (B9)	∬ FAC-Neutral Test (D5) ☐ Sphagnum moss (D8) (	
Field Observations:		
Surface Water Present? Yes No X Depth (inches)		
Water Table Present? Yes No C Depth (inches)	i i i i i i i i i i i i i i i i i i i	
Saturation Present? Yes No X Depth (inches)		<u> </u>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo		
Remarks:		
$\left( \left  \cdot \right\rangle \right)$	A	
Hydrology prese		
,		

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

sampling Point: \_\_\_\_\_

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?		Number of Dominant Species
1. Acer rubinen	40	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. figuidanbar styraciflua	15_	$\rightarrow$	FAC	Total Number of Dominant
3. Liridenation hilpifer	15_	$\rightarrow$	FACU	Species Across All Strata: (B)
4. Vinis Lacda	15	<u> </u>	FAC	Percent of Deminent Species
5. 1 April Grand Grand	15_		FALW	Percent of Dominant Species (A/B)
6. Querone lourifelia	15		FACW	· · · · · · · · · · · · · · · · · · ·
7				Pre∨alence Index worksheet:
8	_			Total % Cover of: Multiply by:
	95	= Total Cov	/er. a	OBL species x 1 =
50% of total cover:	5 20% of	total cover	19	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)			· — — — — — — — — — — — — — — — — — — —	FAC species x 3 =
1. Liquidomber styracitha	10	$\sim$	FAC	FACU species x 4 =
2. Carpines carelinique	17	$\overline{\nabla}$	FAC	UPL species x 5 =
2. 19 pinge carolinging			FACW	Column Totals: (A) (B)
3. Magnetia Virginiana	~	<u></u>		
4. Acer nobrum			FAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.		······	<u></u>	3 - Prevalence Index is ≤3.0 <sup>1</sup>
1.	30	= Total Cov	1.	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:( 5	20% of	total cover	:	
Herb Stratum (Plot size: 30)		1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Afrindingria grigantia	10	$\underline{\checkmark}$	FACW	be present, unless disturbed or problematic.
2. Chasmanthian Jaxam	2		FACW	Definitions of Four Vegetation Strata:
3. Microstogium Vindenia	2		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				Santing/Shrub Moody plants evoluting vines loss
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	111			
-		= Total Cov	7.57	
50% of total cover:	20% of	f total cover	: <u>~~</u> 6	
<u>Woody Vine Stratum</u> (Plot size: $\leq 6$ )	6	/	<i>C</i> • 0	
1. Viting rotundito ha		$\rightarrow$	FAC	
2. Smilax rotunditolia			FAC	
3. Campsis radicans	~		FAC	
4				
5				Hydrophytic
	12	= Total Co	/eri	Vegetation
50% of total cover:	20% o	f total cover	:2.4	Present? Yes No
Remarks: (If observed, list morphological adaptations belo				I
· · · · · · · · · · · · · · · · · · ·	¢			

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SOIL			Sampling Point:
Profile Desc	ription: (Describe to the depth	needed to document the indicator or confirm	the absence of indicators.)
Depth	Matrix	Redox Features	
(inches)	<u>Color (moist)</u> %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-8	10VR34		Lorm
8.14	10YR3/1		snulyloam
14-18	10YR5/2	(DYR4/6 72	SCL'
			-
			·····
		Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	indicators: (Applicable to all L		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		Polyvalue Below Surface (S8) (LRR S, T, U)	
Histic Ep	pipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Hi		Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4) I Layers (A5)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Bodies (A6) (LRR P, T, U)	Depleted Matrix (F3) Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	icky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
	esence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Uther (Explain in Remarks)
	d Below Dark Surface (A11) ark Surface (A12)	Depleted Ochric (F11) (MLRA 151) iron-Manganese Masses (F12) (LRR O, P, T	F) <sup>3</sup> Indicators of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150A)		wetland hydrology must be present,
	lucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
	Bleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
	Redox (S5)   Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 149 Anomalous Bright Loamy Soils (F20) (MLRA	
	rface (S7) (LRR P, S, T, U)		(149A, 155C, 155D)
	Layer (if observed):		
Туре:	······································		
Depth (in	ches):		Hydric Soil Present? Yes No
Remarks:			1
	, 1		
	Sr. Or	ic soils present	м
	vigos.	is points preservy	
	<u> </u>		
L		İ	San and

Wnah014f\_w



Wetland data point wnah014f\_w facing east



Wetland data point wnah14f\_w facing south

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region $7-30-14$
Project/Site:	City/County: NIA66+ Sampling Data:
Applicant/Owner: Dominican	City/County:
	Section, Township, Range:
Landform (hillslope, terrace, etc.):Hillsloppe	
Subragion (I BB or MI BA):	6538.686 Long: 77 49113.800 Datum:
Soil Map Unit Name: Raims	-
	NWI classification:
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	
SUMMARY OF FINDINGS – Attach site map showin	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       Image: Control of the second sec	Is the Sampled Area within a Wetland? Yes No X
Mot all three prove HYDROLOGY	zometer's present
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply	Secondary Indicators (minimum of two required)
Surface Water (A1)	
High Water Table (A2)	
Saturation (A3)	
	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)     Presence of Redu       Drift Deposits (B3)     Recent Iron Redu	ced Iron (C4)     Crayfish Burrows (C8)       tion in Tilled Soils (C6)     Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Other (Explain in	
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 2 Depth (inche	
Surface Water Present?     Yes No Depth (inche Water Table Present?       Water Table Present?     Yes No Depth (inche Compare No D	
	): Wetland Hydrology Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	
Remarks: No hydrology	present

いいんせのにし Sampling Point:

VEGETATION (Four Strata) - Use scientific nar	mes of pl	ants.		Sampling Point:
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taela	50		FAL	That Are OBL, FACW, or FAC: (A)
	10		FAL	Total Number of Dominant
3. Live alon fullpitera	10	<u> </u>	FAU	Species Across All Strata: (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	:70	= Total Cov	/er , i	OBL species x 1 =
50% of total cover: 3.5				FACW species x 2 =
Sapling/Shrub Stratum (Plot size:			<u> </u>	FAC species x 3 =
1. Limic Orabor Styracitluc	15	$-\mathcal{V}_{\ell}$	FAC	FACU species x 4 =
2. Aby rubrum	15	- V	TAC	UPL species x 5 =
3. Lindon Oven tulepilera	15		FAIN	Column Totals: (A) (B)
4	······		17755	
5	,		*****	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	115			3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:	5 20% 01	= Total Cov total cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)	~		•	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Arynclinaria gromea			_FACy	be present, unless disturbed or problematic.
2. RUSULS Arguturs	20		FACU	Definitions of Four Vegetation Strata:
				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		<u></u>	<u> </u>	Woody vine – All woody vines greater than 3.28 ft in
	<u> </u>			height.
12	72		<u></u>	
		= Total Cov	<b>II</b> /	
50% of total cover	20% of	f total cover	100	
Woody Vine Stratum (Plot size:)	30		GAL	
1 Juittx Joran alballa	<u>- 1</u>	$\rightarrow$	FAC	
2. Uits rotuncifolla	$\underline{10}$	<u> </u>	FAC	
3		<u></u>	<u></u>	
4			••••••	
5				Hydrophytic
	40	= Total Cov	/er 🛷	Vegetation
50% of total cover: 📈	20% of	f total cover	:_ <u>_</u>	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			L

SOIL

Profile Description: (Describe to the depth needed to document the indicator or cont	firm the absence of indicators.)
Depth <u>Matrix</u> <u>Redox Features</u>	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	
H- 7 INVO 11/2	Shandy loram
$\frac{T}{2} \frac{1}{\sqrt{k}} \frac{10 \sqrt{k}}{\sqrt{2}} \frac{7}{\sqrt{2}} \frac{1}{\sqrt{k}} \frac{10 \sqrt{k}}{\sqrt{2}} \frac{1}{\sqrt{2}} $	_ sondy loom
<u>2-16+104R5/4</u>	5(1-
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
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)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,B)     Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Image: Constraint of the second se	Uther (Explain in Remarks)
Thick Dark Surface (A12)	, P, T) <sup>3</sup> 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)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA	
Stripped Matrix (S6)	
Dark Surface (S7) (LRR P, S, T, U)	- , , ,
Restrictive Layer (if observed):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	$\frown$
No Lydric soils 7	
100 Regaric seris 1.	reserv

Wnah014\_u



Upland data point wnah014\_u facing east



Upland data point wnah014\_u facing north

## Wnah014 soils



Wetland/upland soils

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

Project/Site ACP	_ City/County: Nash Sampling Date 8/24/16
Applicant/Owner: Dominion	State: NL Sampling Point: Whap015f_w
Investigator(s) ESI-L. Loper	
Landform (billstone terrace etc) drain A o P	Local relief (concave, convex, none): LONLAVE Slope (%) 0-37
Subragion (LRB or MIRA) LERP U Lat 36	10951 Long -77.81859 Datum: WI-SBY
Sublegion (ERR of MERA)	m, D-21, Slopes NWI classification: PFD
Soil Map Unit Name ECTINS TITLE Series 100	
Are climatic / hydrologic conditions on the site typical for this time of	/ear/ Yes No (If to, explain in Kemains)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS - Attach site map showin	ig sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled Area
Hydric Soil Present? YesNo	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	-
Remarks	
NCWAM; Bottomland Hard	and Encert
	DOOD FOILST
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apoly	
L Surface Water (A1) Aquatic Fauna (B) High Water Table (A2) Marl Deposits (B)	
High Water Table (A2) Marl Deposits (B Saturation (A3) Hydrogen Sulfide	
	oheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (DB) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inche	
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes No Depth (inche	es): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks: Could not auger past 12 inches	due to gravel layer.
Could not auger past 12 menes	chuc is J
and the second design of	
abnormally dry conditions	
·	

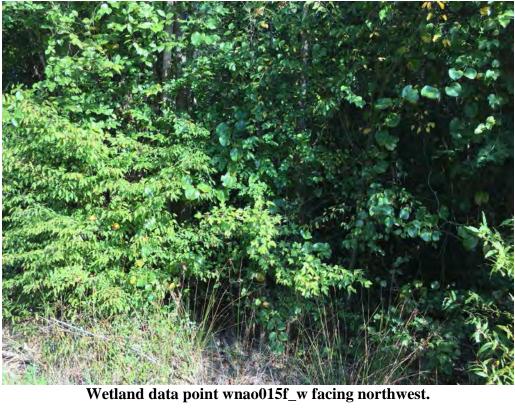
whao DISF.w

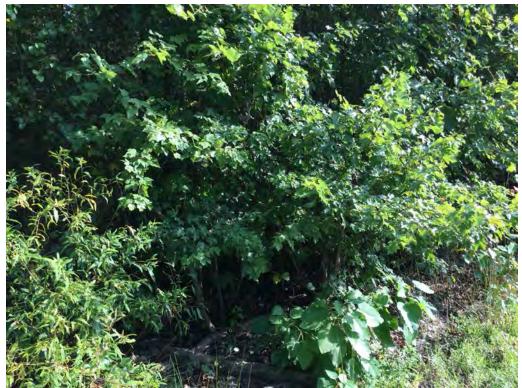
VEGETATION	(Four Strata) -	Use scientific	names of plants.
------------	-----------------	----------------	------------------

EGETATION (Four Strata) – Use scientific ha					ang Pont.	
2-11-12-11			t Indicator	Dominance Test worksheet:		
		Species	Status	Number of Dominant Species	- E-	
1. Aur rubrum	15	Y	FAL	That Are OBL, FACW, or FAC:	6	_ (A)
2 Betula nigra	10	Y	FALL	Total Number of Dominant		
3 Liquidambar styraciflua	10	Y	FAL	Species Across All Strata	6	(B)
3 LIQUICUM DON STUTALITIUM	E	N	FAL	Species Across Air Strata		_ (=)
4 Pinus tacda	2	IN	EHL.	Percent of Dominant Species	100%	
5				That Are OBL, FACW, or FAC		_ (A/B)
6						
				Prevalence Index worksheet:		
7				Total % Cover of:	Multiply by:	
B	-			OBL species x	1 =	
	40	= Total Co	ver			
50% of total cover: 2D	20% of	f total cove	r. 8	FACW species X		
Sapling/Shrub Stratum (Plot size: 30 F+ x 10 FF)			-	FAC species x		
Sapindishitub Shatum (Fiot size)				FACU species x	4 =	_
1. hone				UPL species x		
2				Column Totals: (A		
3				Column Totais: (P	·	(0)
				Prevalence Index = B/A =		
4						
5				Hydrophytic Vegetation Indica		
6				1 -Rapid Test for Hydrophy		
7				2 - Dominance Test is >50%	6	
8				3 - Prevalence Index is ≤3.0		
	0	- Total Co	Var			(aia)
	-			Problematic Hydrophytic Ve	igeration (Exp	any
50% of total cover:	_ 20% of	total cove				
Herb Stratum (Plot size; 30F+ x 10F+)				<sup>1</sup> Indicators of hydric soil and we	tland hydrolog	/ must
1. Junus effusus	10	Y	DBL	be present, unless disturbed or	problematic.	
				Definitions of Four Vegetation	1 Strata:	
2						
3		-		Tree - Woody plants, excluding	vines, 3 in. (7.	6 cm) of
4		-		more in diameter at breast heigh	nt (DBH), regain	dless of
5				height.		
				Sapling/Shrub - Woody plants	excluding vin	as lass
6				than 3 in. DBH and greater than	3.28 ft (1 m) t	all.
7				and a strategy strategy state. The		
B				Herb - All herbaceous (non-woo	ody) plants, re	gardless
9				of size, and woody plants less the	han 3.28 ft tall.	
						00 # in
10				Woody vine - All woody vines	greater than 3.	20 11 11
11		-		height.		
12						
	10	= Total Co	ver			
50% of total cover: 5	20% of	total cove	r 2			
		10101 0010				
Woody Vine Stratum (Plot size: 30Ff x 10Ff)	10	N	COL			
1. Smilax rotundifolia	15		FAL			
2. Vitis rotundifolia	10	Y	FAL	1		
3. Campsis radilans	5	N	FAL	1		
I Maillia						
4				10		
5				Hydrophytic	è	
	30	= Total Co	ver	Vegetation		
FOX - 1444 15		f total cove	1	Present? Yes	_ No	-
50% of total cover: 15	and the set of the latest	total cove	·			
Remarks: (If observed, list morphological adaptations belo	W).					
	201					

Depth	cription: (Describe Matrix	to the depth	Redo	x Features	5			
nches)	Color (moist)		Color (moist)	%	Type'	Loc	Texture	Remarks
) - [2	1076-5/2	95	10 V.C. 414	_ڭ. 		<u></u>		
ydric Soil Histoso Histic E Black H Hydroge Stratifie Organic 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy I Sandy I Strippe Dark Si estrictive Type: Depth (in	oncentration, D=Dep Indicators: (Applic I (A1) pipedon (A2) istic (A3) en Suffide (A4) d Layers (A5) e Bodies (A6) (LRR P ucky Mineral (A7) (LF resence (A8) (LRR U uck (A9) (LRR P, T) d Below Dark Surfac ark Surface (A12) Prairie Redox (A16) (f Mucky Mineral (S1) (f Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S Layer (if observed) nches):	able to all Ll (R P, T, U) (AR P, T, U) (All RA 150A) (RR O, S) (S, T, U)	RRs, unless othe Polyvalue B Thin Dark S Loamy Much Loatny Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) ( Depleted Oc Iron-Mangar Umbric Sunf Delta Ochic Reduced Ve Piedmont F Anomalous	erwise note elow Surfa urface (S9) ky Mineral ed Matrix (F3) Surface (F3) Surface (F3) Chric (F11) nese Mass face (F13) ( Chric (F13) ( Christian ( Ch	ed.) ce (S8) (I (LRR S, (F1) (LRF F2) 6) (F7) 8) (MLRA 1 es (F12) (LRR P, T .RA 151) (MLRA 1: oils (F19) my Soils	LRR S, T, U T, U) 2 O) 1 (LRR O, P, (LRR O, P, (LRR O, P, (LRR O, P, (LRR O, P, (LRR 0, P, (LRR 0, P, (LRR 0, P, (MLR 14 (F20) (MLR	Indicators f 1 cm M 2 cm M Piedmo Anomal (MLR Red Pa Very St Other ( T) <sup>3</sup> Indic: wett unle (9A) A 149A, 153C, Hydric Soil	Present? Yes <u>No</u>

Environmental Field Surveys Wetland Photo Page





Wetland data point wnao015f\_w facing northeast.

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

	_ City/County _ NASH Sampling Date: _ <u>B/24/16</u> State: _ <u>NC</u> Sampling Point: <u>WnacD15-4</u>
Applicant/Owner: Dominion	
Investigator(s): EST-L. Roper	_ Section, Township, Range. YOY1C
Landform (hillslope, terrace, etc.)	Local relief (concave, convex, none): <u>Loncave</u> Slope (%) <u>U-31</u> 10948 Long <u>-77-81857</u> Datum: <u>W1584</u>
Subregion (LRR or MLRA): LAP P Lat 36	Long -11-81827 Datum: W6207
Soil Map Unit Name Pains fine sandy 10	am, 0-2%. SlopeNWI classification: NA
Are climatic / bydrologic conditions on the site typical for this time of t	vear? Yes No (If no, explain in Remarks)
Are Vegetation Soil or Hydrology significant	ly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answers in Remarks.)
	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soll Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       No	Is the Sampled Area within a Wetland? Yes No
Roadside	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
U Surface Water (A1) Aquatic Fauna (B High Water Table (A2) Marl Deposits (B	
High Water Table (A2) Marl Deposits (B) Saturation (A3) Hydrogen Sulfide	
	oheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Red	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Uther (Explain In 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 (inche	es): <u>V H</u>
Water Table Present? Yes No Depth (inche	es): <u>210</u>
Saturation Present? Yes No Depth (inche	es): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks	
Abnormally dry randitions	Les (sealbad fill)
Could not auger past 10 inc	ues (locabes alla

Sampling Point:

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

Tree Stratum (Plot size: 30ft x 10ft) 1. Nove	Absolute	Dominan	Indicator	Dominance Test worksheet:
1.1.0.1.0	% Cover	Species	Status	Number of Dominant Species \ (A)
2				Total Number of Dominant 2 (B)
4				
5				Percent of Dominant Species <u>50</u> (A/B) That Are OBL, FACW, or FAC
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
B	- 2			OBL species x 1 =
Start Mathematica		= Total Co		
50% of total cover:	20% of	total cove	r:	FACW species $x^2 = $ FAC species $10$ $x^3 = 30$
Sapling/Shrub Stratum (Plot size: 30ft × 10ft)				FACU species 100 x4= 400
none				UPL species x 5 =
3				Column Totals: 110 (A) 430 (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
3				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cove	r	the second second second second second
terb Stratum (Plot size: 30ft x 10 ft )	nn	M	can	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Paspalum notatum	10		FACU	Definitions of Four Vegetation Strata:
Lespedeza coneata	10			
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
I				more in diameter at breast height (DBH), regardless of height.
5				
3				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				a service a constraint of the service of the service of the
3				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				the second state and the secon
0				Woody vine - All woody vines greater than 3.28 ft in height.
1				neight.
2	1120	= Total Co		
50% of total cover:		total cove		
Noody Vine Stratum (Plot size: 30 Ft x 10 Ft )	2070 01	total cove		
. Campsis radicans	10	Y	FAL	
- campais rabicaris				
			-	
		-		
	110	= Total Co		Hydrophytic Vegetation
i			AGI	
5550% of total cover:5				Present? Yes No

SOIL

Depth	Matrix			Features			the absence of in	
nches)	Color (moist)	100	Color (moist)	%	Type	Loc	Texture	Remarks
-10	1078-43					_		
dric Soi Histosc Histic E Black H Hydrog Stratifie Organi 5 cm M Muck F 1 cm M Deplet Thick E Coast I Sandy Sandy Sandy Strippe Dark S	Epipedon (A2) distic (A3) een Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR F lucky Mineral (A7) (L Presence (A8) (LRR R Luck (A9) (LRR P, T) ed Below Dark Surface Oark Surface (A12) Prairie Redox (A16) ( Mucky Mineral (S1) ( Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) urface (S7) (LRR P,	cable to all LR , T, U) RR P, T, U) J) ce (A11) MLRA 150A) LRR O, S) S, T, U)	Rs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Mucky Depleted Mail Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Umbric Surfa Delta Ochric Reduced Ver Piedmont Fic	wise noted low Surface (S9) ( y Mineral (F d Matrix (F trix (F3) Surface (F6 k Surface (F6 k Surface ( k Surface ( F8) RR U) nric (F11) (I ese Masse ce (F13) (L (F17) (MLF tic (F18) (N podplain So	d.) e (S8) (L (LRR S, <sup>-</sup> 1) (LRR 5, <sup>-</sup> 1) (LRR 2) ) F7) ) MLRA 15 (RR P, T (RR P, T (RA 151) MLRA 15 ils (F19)	RR S, T, U) T, U) O) LRR O, P, T , U) 0A, 150B) (MLRA 14)	Indicators for I 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Paren Very Shalk Other (Exp 1) <sup>3</sup> Indicator wetland unless	t Material (TF2) bw Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic.
Type:		):	-					No.
Depth (i marks:	nches):		-				Hydric Soll Pre	sent? Yes No
CN	R past	10"	due t	10 (1	om	pac	hon or	roadside.

Environmental Field Surveys Wetland Photo Page



Upland data point wnao015\_u facing south.



Upland data point wnao015\_u facing west.

WETLAND DETERMINATION DATA FO	ORM – Atlantic and Gulf Coastal Plain Region
	ity/County:State: Sampling Date:State:Sampling Point:State:Sampling Point:Sampling POINT:SAMPLI
Applicant/Owner: DOMINION	State: Alc Sampling Date: MA140198-W
Investigator(s): DDWEST S	ection, Township, Range:
Landform (hillslope, terrace, etc.): Botter	concave convex none): Pat Stone (%):
Subregion (LRR or MLRA):	ocal relief (concave, convex, none): <u>Flat</u> Slope (%): <u>O</u> 5 26,59 Long: <u>77949172.865</u> Datum: <u>1465 84</u>
Soil Map Unit Name:	NWI classification: <u>PEM</u>
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology _X significantly di	·
Are Vegetation, Soil, or Hydrology naturally probl	
Attach site hap showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       No	Is the Sampled Area within a Wetland? Yes <u>X</u> No
Beauce swamp Id as Black swamp on US	
Id as Black swamp on US	16S
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 (B13)         High Water Table (A2)       Marl Deposits (B15) (I         Saturation (A3)       Hydrogen Sulfide Odd	or (C1)       Moss Trim Lines (B16)         ps along Living Roots (C3)       Dry-Season Water Table (C2)         Iron (C4)       Crayfish Burrows (C8)         n in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         77       Geomorphic Position (D2)         harks)       Shallow Aquitard (D3)         FAC-Neutral Test (D5)       Sphagnum moss (D8) (LRR T, U)
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Surfair Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
Emergent between strengent between strengent between strengent trengent strengent strengent stre	from centerline.

WNAHOME\_~~

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

Trop Stratum (Blot size)			t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species	<u>Status</u>	Number of Dominant Species
1		•••••		That Are OBL, FACW, or FAC:(A)
2		<u></u>		Total Number of Dominant
3				Species Across All Strata: (B)
4				
5			-	Percent of Dominant Species
6	· ·····			That Are OBL, FACW, or FAC: (A/B)
7			•	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8				1
		= Total Co	ver	OBL species x 1 =
50% of total cover:	20% of	total cove	r:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		ſ		FAC species x 3 =
1. Acor pibrum	10	J.	FAR	FACU species x 4 =
2. Diveripos urginiana	22		FIAC	UPL species x 5 =
3. Hypericum h. Spericorles	5			Column Totals: (A) (B)
		<u> </u>		
				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 $\leq 3.0^1$
	25	= Total Co	ver	
50% of total cover: 12,				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)	2078 01		•	
	20	$\sim$	man i	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Scitpus cyperings	<u></u>		<u>DBL</u>	be present, unless disturbed or problematic.
2. Eriantico gignanteus	10		FACIN	Definitions of Four Vegetation Strata:
3. Services Cenuca	20	·~/	<u>OBL</u>	
4. Arundinana grownten	20	$\sim$	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Bookmenn extenderca	5		FACW	height.
6. Murdania Keisak	in		OBL	
	μ <u></u>		FACT	Sapling/Shrub – Woody plants, excluding vines, less
7. Importions supersis	<u> </u>			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8. Juncus efficiency	2		FACK	Herb – All herbaceous (non-woody) plants, regardless
9. Hydrocotop munulubides	5		OBL	of size, and woody plants less than 3.28 ft tall.
				Mandara All wards since production 0.00 ft is
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
	TAT	= Total Co		
5	100		ver	
50% of total cover:	20% of	total cover		
Woody Vine Stratum (Plot size:)	~	/		
1. Smilax potunditatia	<u> </u>	$\underline{\checkmark}$	FAC	
2				
3				
4				
т				
5				Hydrophytic
~		= Total Co		Vegetation Present? Yes No
50% of total cover: <u>2.5</u>	20% of	total cover	:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).		······································	······································
Emergent bonver	Suit	Jann G	<	
Crimergert isnoeld	SU	Nind	し	
~		,		

SOI	L

-3

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the	indicator (	or confirm	the absence of inc	licators.)	
Depth	Matrix		Redo	ox Feature	es			<i>,</i>	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10482/1						42		-
5-177	INVR SIM		OYR 5/6		•		<u> </u>		
2-10	10/11/12	<u> </u>	2/110	- Z/_		u	<u>_&gt;L_</u>		
								······································	
		······	<u></u>						
		·····					<i>i</i>		
				-	· •				
					· ·				
Hydric Soil L	ncentration, D=Depl ndicators: (Applica		educed Matrix, IVI	S=Masker	Sand Gra	ins.	Location: PL=P	ore Lining, M=Matrix.	
_		able to all Lr			•			roblematic Hydric Soils <sup>3</sup> :	
Histosol	. ,		Polyvalue Be	elow Surfa	ice (S8) <b>(LF</b>	RR S, T, U)			
	ipedon (A2)		Thin Dark St					A10) (LRR S)	
Black His						O)		rtic (F18) <b>(outside MLRA 150A,B)</b>	
	n Sulfide (A4)		Loamy Gley		(F2)			oodplain Soils (F19) (LRR P, S, T)	
	Layers (A5)		Depleted Ma					Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P,	T, U)			•		(MLRA 15:	•	
	cky Mineral (A7) (LR	R P, T, U)	Depleted Da				[ ]	Material (TF2)	
	esence (A8) (LRR U)				8)			/ Dark Surface (TF12)	
	ck (A9) (LRR P, T)		Marl (F10) (I				U Other (Explai	in in Remarks)	
	Below Dark Surface rk Surface (A12)	e (A11)					<b>`</b>		
	rk Surface (A12) airie Redox (A16) <b>(M</b>		Iron-Mangan	lese Mass	es (F12) (L	.RR 0, P, T		of hydrophytic vegetation and	
	ucky Mineral (S1) (M		Umbric Surfa			U)		ydrology must be present,	
	leyed Matrix (S4)	RR 0, 5)		·(F17) (ML	-RA 151)		unless dis	sturbed or problematic.	
	edox (S5)		Reduced Ve						
	Matrix (S6)		Piedmont Flo						
	face (S7) <b>(LRR P, S</b> ,	T 11)		Sright Loar	my Solls (F	20) (MLKA	149A, 153C, 153D	))	
Restrictive L	ayer (if observed):	, 1, 0)				T			
Type:	ayor (n obserrou).								
	• _ x								
Depth (inc	hes):						Hydric Soil Prese	ent? Yes <u>X</u> No	
Remarks:					A				
									l
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									ļ
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									1
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Wnah019e\_w



Wetland data point wnah019e\_w facing east



Wetland data point wnah19e\_w facing south

# Wnah019e\_w soils



Wetland soils

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/C	county:State:Sampling Date: 7-30-14 State:NCSampling Point: V_N/AHO19.f
Applicant/Owner: 15000101000	State: NC Sampling Point: VNAH019.
	on, Township, Range: '~ W
Landform (hillslope, terrace, etc.): Balton land Local	relief (concave, convex, none): Slope (%):
	28.535" Long: 77" 49'23.053" Datum: -
Soil Map Unit Name:	NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of year? Y	'esX No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	poling point locations, transects, important features, etc.
$\checkmark$	······································
Hydrophytic Vegetation Present?     Yes     No       Hydric Soil Present?     Yes     No	Is the Sampled Area
Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	
Saturation (A3)	
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)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	(s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	EAC-Neutral Test (D5)
Vater-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
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, pre	
· · · · · · · · · · · · · · · · · · ·	
Remarks:	$\frown$
Hydrology	Dag coult
1790000Ca	preserve
0 - 0	

WNAHO19f\_1, Sampling Point:

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

1

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Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species ALINEA 20FALL That Are OBL, FACW, or FAC; (A)Total Number of Dominant Species Across All Strata: (B)17 Percent of Dominant Species That Are OBL, FACW, or FAC; (A/B)Prevalence Index worksheet: Total % Cover of: Multiply by: **OBL** species \_\_\_\_\_x1=\_ = Total Cover FACW species \_\_\_\_\_ x 2 = 50% of total cover: 20% of total cover FAC species \_ x 3 = Sapling/Shrub atum (Plot size FACU species x 4 = UPL species x 5 = axinus Column Totals: \_ (A) \_\_\_\_\_(B) ac 3 trun 2 Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation Z 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover 20% of total cover Herb S tratum (Plot size <sup>1</sup>Indicators of hydric soil and wetland hydrology must FACI CYN7 ZI be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** FAI LIMIN PO Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 201 more in diameter at breast height (DBH), regardless of height. omiera Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall, Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in 11. height. 12. = Total Cover 50% of total cover: 3 20% of total cover: Woody Vine Stratum (Plot size: BNICHA FD Hydrophytic Vegetation = Total Cover No \_\_\_\_\_ Present? 50% of total cover: 20 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Absolute Dominant Indicator

Dominance Test worksheet:

WNAHO19F-W

SOIL						Sampling Point:	-
Profile Desc	ription: (Describe to the dep	oth needed to docur	nent the in	dicator	or confirm	n the absence of indicators.)	
Depth	Matrix		x Features				
(inches)	<u>Color (moist)</u> %	Color (moist)		Type <sup>1</sup>	<u>Loc<sup>2</sup></u>	Texture Remarks	-
Q-1_	184R4/2		-			Stouly loam	
7-10	10VR 5/2	104R416	75	Ć	ĺМ	<mail from<="" td=""><td></td></mail>	
10-16+	16YR 5/1	IMUR 5/8	~~~~		11.1	5(1)-	
K- IL	<u></u>	myn 2 D			M	-)	
<sup>1</sup> Type: C=Co	oncentration, D=Depletion, RM	=Reduced Matrix M	 S=Macked 9	Sand Gra		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators: (Applicable to all	LRRs, unless othe	wise noted	3.)	ams.	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol		Polyvalue Be			RRSTU		
	pipedon (A2)	Thin Dark Su				2 cm Muck (A10) (LRR S)	
📙 🔲 Black His	stic (A3)	Loamy Muck				Reduced Vertic (F18) (outside MLRA 150A,B)	)
	n Sulfide (A4)	Loamy Gleye	ed Matrix (F	2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	Layers (A5)	Depleted Ma	• •			L Anomalous Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P, T, U)	Redox Dark	•	<i>,</i>		(MLRA 153B)	
	cky Mineral (A7) <b>(LRR P, T, U</b> esence (A8) <b>(LRR U)</b>	) Depleted Date Redox Depre		,		Red Parent Material (TF2)	
	ck (A9) (LRR P, T)	Marl (F10) (L	• •			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	
	Below Dark Surface (A11)	Depleted Oc		MLRA 15	i1)		
Thick Da	irk Surface (A12)	🔲 Iron-Mangan				T) <sup>3</sup> Indicators of hydrophytic vegetation and	
	airie Redox (A16) <b>(MLRA 150</b>	A) 🔲 Umbric Surfa	ice (F13) (L	<b>RR</b> P, T,		wetland hydrology must be present.	
	lucky Mineral (S1) (LRR O, S)	Delta Ochric				unless disturbed or problematic.	
	leyed Matrix (S4)	Reduced Ver					
	edox (S5) Matrix (S6)	Piedmont Flo			•	•	
	face (S7) (LRR P, S, T, U)		sright Loam	y Soils (F	·20) (MLRA	A 149A, 153C, 153D)	
	ayer (if observed):					T	
Туре	· · · · · · · · · · · · · · · · · · ·						
	ches):	,				Hydric Soil Present? Yes 📈 No	
Remarks		······································					
(cinanto)							
		• 1					
			~		$\cdot \cap$	$\cap$	
		Ayor	22-	Ser	$ \cup 1$	Dreegat	
		$\sim S$				brand	

Wnah019f\_w



Wetland data point wnah019f\_w facing east



Wetland data point wnah019f\_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/County: NASA Sampling Date:
Applicant/Owner:
Investigator(s):
Landform (hillslope, terrace, etc.):LLocal relief (concave, convex, none):Slope (%): @2 L
Subregion (LRR or MLRA): Lat: 36° 06' 29,138' Long: 77° 49' 22,961 "Datum:
Soil Map Unit Name: Nortolk time Srandy Lorom 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 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       Ves       No       Ves       No         Remarks       No       Ves       No       Ves       No       Ves       No
Remarks Not all three 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)
Image: Drift Deposits (B3)       Image: Recent Iron Reduction in Tilled Soils (C6)       Image: Status Soils (C6)         Image: Algal Mat or Crust (B4)       Image: Thin Muck Surface (C7)       Image: Geomorphic Position (D2)
Iron Deposits (B5)
L Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Image: Comparison of the second se
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
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 highology present
Service of the servic

WNAHO19 -U

VEGETATION (Four Strata) – Use scientific nar	nes of plants.	Sampling Point:
	Absolute Dominant Indicato	
<u>Tree Stratum</u> (Plot size ) 1. <u>Provus Lae de</u>	% Cover Species? Status	$\sim$ Number of Dominant Species $\sim$
		That Are OBL, FACW, or FAC:
2 Betwie nigra 3 Liquiden Stynschule 4 Linden Dom tulik terr	An tra	⊼ Total Number of Dominant
3 Liquid contern Startacethic	TO U PAG	Species Across All Strata. (B)
4 Lintodenbron tuli pitera	LOV FAL	Percent of Dominant Species
5		- That Are OBL, FACW, or FAC (A/B)
6		Desuglarias Index warksheet
7		Prevalence Index worksheet:
8.	<u> </u>	Total % Cover of: Multiply by:
20	-70 = Total Cover	OBL species x 1 =
50% of total cover. $35$	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size)	IS I FAN	FAC species x 3 =
1. Olmusalata	15 U FACI	FACU species x 4 =
2 Carping caroliniana	15 1/ FAC	UPL species x 5 =
3 Acor rubrin A	15 V FAC	Column Totals: (A) (B)
4. Liquite centres styniciture.	15 V FAC	Prevalence Index = B/A =
5		- Hydrophytic Vegetation Indicators:
6		<ul> <li>1 - Rapid Test for Hydrophytic Vegetation</li> </ul>
7		- 2 - Dominance Test is >50%
8		$- \boxed{3} - \text{Prevalence Index is } \le 3.0^{\circ}$
•	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 🔬	20% of total cover: 12	
Herb Stratum (Plot size	<b>`</b>	Indicators of hydric soil and wetland hydrology must
1 Arisciema Friphy//un	2EHACI	be present, unless disturbed or problematic.
2 Microstegiun Viminco	10 V FA	Definitions of Four Vegetation Strata:
		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		<ul> <li>Herb – All herbaceous (non-woody) plants, regardless</li> </ul>
9		of size, and woody plants less than 3.28 ft tall.
10		
11		<ul> <li>Woody vine – All woody vines greater than 3.28 ft in height.</li> </ul>
12		
_	2 = Total Cover	
50% of total cover: 6	20% of total cover: 2.	
Woody Vine Stratum (Plot size:		
1. Smilax cotunditilic	30 - / FA	C
2 Vitis optimalitalia	$10 \vee FA$	Ć,
3	· · · · · · · · · · · · · · · · · · ·	
4		
5.		- Hydrophytic
	HD = Total Cover	Vegetation
50% of total cover ZD	20% of total cover:	Present? Yes No
Remarks. (If observed, list morphological adaptations below	N).	

SOIL

WNAHD19 -U

		Sampling Point:
Profile Description: (Describe to the	depth needed to document the indicator or confirm	m the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-4 LOYR312		
H-G LOUID UM		
-1-1 10412 71L		
9-16+104R513_		
		· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	o all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, I	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,B)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	
Stratified Layers (A5)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, 1		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Uery Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (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,	7, T) <sup>3</sup> 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		
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLF	RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре:		
		$\sim$
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
	1	
	Nohyonc	$\sim$ $\sim$ $\sim$
	NORendric	Sallas ett
	Aprice	50 apresent
	0	
	•	

Wnah019\_u



Upland data point wnah019\_u facing east



Upland data point wnah019\_u facing north

# Wnah019 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FO	ORM – Atlantic and Gulf Coastal Plain Region
	ity/County:State: Sampling Date:State:Sampling Point:State:Sampling Point:Sampling POINT:SAMPLI
Applicant/Owner: DOMINION	State: Alc Sampling Date: MA140198-W
Investigator(s): DDWEST S	ection, Township, Range:
Landform (hillslope, terrace, etc.): Botter	coal relief (concave, convex, none); Pat Stone (%); D
Subregion (LRR or MLRA):	ocal relief (concave, convex, none): <u>Flat</u> Slope (%): <u>O</u> 5 26,59 Long: <u>77949172.865</u> Datum: <u>1765 84</u>
Soil Map Unit Name:	NWI classification: <u>PEM</u>
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology _X significantly di	·
Are Vegetation, Soil, or Hydrology naturally probl	
Attach site hap showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       No	Is the Sampled Area within a Wetland? Yes <u>X</u> No
Beauce swamp Id as Black swamp on US	
Id as Black swamp on US	16S
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 (B13)         High Water Table (A2)       Marl Deposits (B15) (I         Saturation (A3)       Hydrogen Sulfide Odd	or (C1)       Moss Trim Lines (B16)         ps along Living Roots (C3)       Dry-Season Water Table (C2)         Iron (C4)       Crayfish Burrows (C8)         n in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         77       Geomorphic Position (D2)         harks)       Shallow Aquitard (D3)         FAC-Neutral Test (D5)       Sphagnum moss (D8) (LRR T, U)
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Surfair Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
Emergent between strengent between strengent between strengent trengent strengent strengent stre	from centerline.

WNAHOME\_~~

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

Trop Stratum (Blot size)			t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species	<u>Status</u>	Number of Dominant Species
1		•••••		That Are OBL, FACW, or FAC:(A)
2		<u></u>		Total Number of Dominant
3				Species Across All Strata: (B)
4				
5			-	Percent of Dominant Species
6	· ·····			That Are OBL, FACW, or FAC: (A/B)
7			•	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8				1
		= Total Co	ver	OBL species x 1 =
50% of total cover:	20% of	total cove	r:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		ſ		FAC species x 3 =
1. Acor pibrum	10	J.	FAR	FACU species x 4 =
2. Diveripos urginiana	22		FIAC	UPL species x 5 =
3. Hypericum h. Spericorles	5			Column Totals: (A) (B)
		<u> </u>		
				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 $\leq 3.0^1$
	25	= Total Co	ver	
50% of total cover: 12,				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)	2078 01		•	
	20	$\sim$	man i	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Scitpus cyperings	<u></u>		<u>DBL</u>	be present, unless disturbed or problematic.
2. Eriantico gignanteus	10		FACIN	Definitions of Four Vegetation Strata:
3. Services Cenuca	20	·~/	<u>OBL</u>	
4. Arundinana grownten	20	$\sim$	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Bookmenn extenderca	5		FACW	height.
6. Murdania Keisak	in		OBL	
	μ		FACT	Sapling/Shrub – Woody plants, excluding vines, less
7. Importions supersis	<u> </u>			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8. Juncus efficiency	2		FACK	Herb – All herbaceous (non-woody) plants, regardless
9. Hydrocotop munulubides	5		OBL	of size, and woody plants less than 3.28 ft tall.
				Mandara All wards since production 0.00 ft is
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
	TAT	= Total Co		
5	100		ver	
50% of total cover:	20% of	total cover		
Woody Vine Stratum (Plot size:)	~	/		
1. Smilax potunditatia	<u> </u>	$\underline{\checkmark}$	FAC	
2				
3				
4				
т				
5				Hydrophytic
~		= Total Co		Vegetation Present? Yes No
50% of total cover: <u>2.5</u>	20% of	total cover	:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).		······································	······································
Emergent bonver	Suit	Jann G	<	
Crimergert isnoeld	SU	Nind	し	
~		,		

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Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	ox Feature	S		,	
(inches)	Color (moist)	%C(	olor (moist)	%	Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks	
0-5	10482/1					62		
6-17+	INVR SIN		YR 5/6			<u> </u>		
2-10	10/10/12		/10-10	- ZZ	······	<u></u>		
·····		·····				/		
1								
Type: C=Cc	oncentration, D=Depl	etion, RM=Redu	uced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.	
	ndicators: (Applica	uble to all LRRs	i, unless othe	rwise not	ed.)	Indicators for Probl	ematic Hydric Soils <sup>3</sup> :	
🔲 Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) <b>(LRR S, T, U</b>	) 🛄 1 cm Muck (A9)	(LRR O)	
	oipedon (A2)	Ē	Thin Dark Sι	urface (S9)	(LRR S, T, U)	2 cm Muck (A10)		
Black His	stic (A3)	Ľ			(F1) (LRR O)		F18) (outside MLRA 150A,B)	
Hydroge	n Sulfide (A4)	Ē	Loamy Gleye				lain Soils (F19) (LRR P, S, T)	
	Layers (A5)	R	Depleted Ma	•			t Loamy Soils (F20)	
	Bodies (A6) (LRR P,	т, U) 🏾 🗍	Redox Dark		6)	(MLRA 153B)		
5 cm Mu	cky Mineral (A7) (LR	R P. T. U)	Depleted Da		•	Red Parent Mate	rial (TE2)	
Muck Pre	esence (A8) (LRR U)		Redox Depre			F 1	rk Surface (TF12)	
	ck (A9) (LRR P, T)		Marl (F10) (L		5)	Other (Explain in		
	Below Dark Surface	(A11)	Depleted Oc		(MI RA 151)		Remarks	
	rk Surface (A12)	(····) T			es (F12) (LRR O, P, 1	T) <sup>3</sup> Indicators of by	drophytic vegetation and	
	airie Redox (A16) (M	LRA 150A)	Umbric Surfa	are (F13) (	LRR P, T, U)		logy must be present,	
	ucky Mineral (S1) (L		Delta Ochric				ed or problematic.	
	leyed Matrix (S4)		Reduced Ver	() // () ()	MLRA 150A, 150B)	uniess uisturu	ed or problematic.	
	edox (S5)	i i i i i i i i i i i i i i i i i i i			oils (F19) <b>(MLRA 14</b> 9			
	Matrix (S6)	T T				A 149A, 153C, 153D)		
	face (S7) <b>(LRR P, S,</b>	т II)	Anomaious L	Jugni Loai	ny sons (rzu) (meite	A 149A, 153C, 153D)		
Restrictive L	aver (if observed):					I		
Restrictive L	ayer (if observed):							
Restrictive L	ayer (if observed):							
Restrictive L	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes <u> </u>	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soil Present?	Yes No	
Restrictive L Type: Depth (inc	ayer (if observed):					Hydric Soll Present?	Yes No	

Wnah019e\_w



Wetland data point wnah019e\_w facing east



Wetland data point wnah19e\_w facing south

# Wnah019e\_w soils



Wetland soils

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SERA City/C	county:State:Sampling Date: 7-30-14 State:NCSampling Point: V_N/AHO19.f
Applicant/Owner: 15000101000	State: NC Sampling Point: VNAH019.
	on, Township, Range: '~ W
Landform (hillslope, terrace, etc.): Balton land Local	relief (concave, convex, none): Slope (%):
	28.535" Long: 77" 49'23.053" Datum: -
Soil Map Unit Name:	NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of year? Y	'esX No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	poling point locations, transects, important features, etc.
$\checkmark$	······································
Hydrophytic Vegetation Present?     Yes     No       Hydric Soil Present?     Yes     No	Is the Sampled Area
Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	
Saturation (A3)	
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)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	(s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	EAC-Neutral Test (D5)
Vater-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
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, pre	
· · · · · · · · · · · · · · · · · · ·	
Remarks:	$\frown$
Hydrology	Dag coult
1790000Ca	preserve
0 - 0	

WNAHO19f\_1, Sampling Point:

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3 4. 5.

Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species ALINEA 20FALL That Are OBL, FACW, or FAC; (A)Total Number of Dominant Species Across All Strata: (B)17 Percent of Dominant Species That Are OBL, FACW, or FAC; (A/B)Prevalence Index worksheet: Total % Cover of: Multiply by: **OBL** species \_\_\_\_\_x1=\_ = Total Cover FACW species \_\_\_\_\_ x 2 = 50% of total cover: 20% of total cover FAC species \_ x 3 = Sapling/Shrub atum (Plot size FACU species x 4 = UPL species x 5 = axinus Column Totals: \_ (A) \_\_\_\_\_(B) ac 3 trun 2 Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation Z 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover 20% of total cover Herb S tratum (Plot size <sup>1</sup>Indicators of hydric soil and wetland hydrology must FACI CYN7 ZI be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** FAI LIMIN PO Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 201 more in diameter at breast height (DBH), regardless of height. omiera Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall, Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in 11. height. 12. = Total Cover 50% of total cover: 3 20% of total cover: Woody Vine Stratum (Plot size: BNICHA FD Hydrophytic Vegetation = Total Cover No \_\_\_\_\_ Present? 50% of total cover: 20 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Absolute Dominant Indicator

Dominance Test worksheet:

WNAHO19F-W

SOIL						Sampling Point:	-
Profile Desc	ription: (Describe to the dep	oth needed to docur	nent the in	dicator	or confirm	n the absence of indicators.)	
Depth	Matrix		x Features				
(inches)	<u>Color (moist)</u> %	Color (moist)		Type <sup>1</sup>	<u>Loc<sup>2</sup></u>	Texture Remarks	-
Q-1_	184R4/2		-			Stouly loam	
7-10	10VR 5/2	104R416	75	Ć	ĺМ	<mail from<="" td=""><td></td></mail>	
10-16+	16YR 5/1	IMUR 5/8	~~~~		11.1	5(1)-	
K- IL	<u></u>	myn 2 D			M	-)	
<sup>1</sup> Type: C=Co	oncentration, D=Depletion, RM	=Reduced Matrix M	 S=Macked 9	Sand Gra		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators: (Applicable to all	LRRs, unless othe	wise noted	3.)	ams.	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol		Polyvalue Be			RRSTU		
	pipedon (A2)	Thin Dark Su				2 cm Muck (A10) (LRR S)	
📙 🔲 Black His	stic (A3)	Loamy Muck				Reduced Vertic (F18) (outside MLRA 150A,B)	)
	n Sulfide (A4)	Loamy Gleye	ed Matrix (F	2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	Layers (A5)	Depleted Ma	• •			L Anomalous Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P, T, U)	Redox Dark	•	<i>,</i>		(MLRA 153B)	
	cky Mineral (A7) <b>(LRR P, T, U</b> esence (A8) <b>(LRR U)</b>	) Depleted Date Redox Depre		,		Red Parent Material (TF2)	
	ck (A9) (LRR P, T)	Marl (F10) (L	• •			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	
	Below Dark Surface (A11)	Depleted Oc		MLRA 15	i1)		
Thick Da	irk Surface (A12)	🔲 Iron-Mangan				T) <sup>3</sup> Indicators of hydrophytic vegetation and	
	airie Redox (A16) <b>(MLRA 150</b>	A) 🔲 Umbric Surfa	ice (F13) (L	<b>RR</b> P, T,		wetland hydrology must be present.	
	lucky Mineral (S1) (LRR O, S)	Delta Ochric				unless disturbed or problematic.	
	leyed Matrix (S4)	Reduced Ver					
	edox (S5) Matrix (S6)	Piedmont Flo			•	•	
	face (S7) (LRR P, S, T, U)		sright Loam	y Soils (F	·20) (MLRA	A 149A, 153C, 153D)	
	ayer (if observed):					T	
Туре	· · · · · · · · · · · · · · · · · · ·						
	ches):	,				Hydric Soil Present? Yes 📈 No	
Remarks		······································					
(cinanto)							
		• 1					
			~		$\cdot \cap$	$\cap$	
		Ayor	22-	Ser	$ \cup 1$	Dreegat	
		$\sim S$				brand	

Wnah019f\_w



Wetland data point wnah019f\_w facing east



Wetland data point wnah019f\_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/County: NASA Sampling Date:
Applicant/Owner:
Investigator(s):
Landform (hillslope, terrace, etc.):LLocal relief (concave, convex, none):Slope (%): @2 L
Subregion (LRR or MLRA): Lat: 36° 06' 29,138' Long: 77° 49' 22,961 "Datum:
Soil Map Unit Name: Nortolk time Srandy Lorom 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 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       Ves       No       Ves       No         Remarks       No       Ves       No       Ves       No       Ves       No
Remarks Not all three 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)
Image: Drift Deposits (B3)       Image: Recent Iron Reduction in Tilled Soils (C6)       Image: Status Soils (C6)         Image: Algal Mat or Crust (B4)       Image: Thin Muck Surface (C7)       Image: Geomorphic Position (D2)
Iron Deposits (B5)
L Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Image: Comparison of the second se
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
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 highology present
Service of the servic

WNAHO19 -U

VEGETATION (Four Strata) – Use scientific nar	nes of plants.	Sampling Point:
	Absolute Dominant Indicato	
<u>Tree Stratum</u> (Plot size ) 1. <u>Provus Lae de</u>	% Cover Species? Status	$\sim$ Number of Dominant Species $\sim$
		That Are OBL, FACW, or FAC:
2 Betwie nigra 3 Liquiden Stynschule 4 Linden Dom tulik terr	An It m	⊼ Total Number of Dominant
3 Liquid contern Startacethic	TO U PAG	Species Across All Strata. (B)
4 Lintodenbron tuli pitera	LOV FAL	Percent of Dominant Species
5		- That Are OBL, FACW, or FAC (A/B)
6		Desuglarias Index warksheet
7		Prevalence Index worksheet:
8.	<u> </u>	Total % Cover of: Multiply by:
20	-70 = Total Cover	OBL species x 1 =
50% of total cover. $35$	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size)	IS I have	FAC species x 3 =
1. Olmusalata	15 U FACI	FACU species x 4 =
2 Carping caroliniana	15 1/ FAC	UPL species x 5 =
3 Acor rubrin A	15 V FAC	Column Totals: (A) (B)
4. Liquite centres styniciture.	15 V FAC	Prevalence Index = B/A =
5		- Hydrophytic Vegetation Indicators:
6		<ul> <li>1 - Rapid Test for Hydrophytic Vegetation</li> </ul>
7		- 2 - Dominance Test is >50%
8		$- \boxed{3} - \text{Prevalence Index is } \le 3.0^{\circ}$
•	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 🔬	20% of total cover: 12	
Herb Stratum (Plot size	<b>`</b>	Indicators of hydric soil and wetland hydrology must
1 Ariscience Friphy//un	2EHACI	be present, unless disturbed or problematic.
2 Microstegiun Viminco	10 V FA	Definitions of Four Vegetation Strata:
		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		<ul> <li>Herb – All herbaceous (non-woody) plants, regardless</li> </ul>
9		of size, and woody plants less than 3.28 ft tall.
10		
11		<ul> <li>Woody vine – All woody vines greater than 3.28 ft in height.</li> </ul>
12		
_	2 = Total Cover	
50% of total cover: 6	20% of total cover: 2.	
Woody Vine Stratum (Plot size:		
1. Smilax cotunditilic	30 - / FA	C
2 Vitis optimalitalia	$10 \vee FA$	Ć,
3	· · · · · · · · · · · · · · · · · · ·	
4		
5.		- Hydrophytic
	HD = Total Cover	Vegetation
50% of total cover ZD	20% of total cover:	Present? Yes No
Remarks. (If observed, list morphological adaptations below	N).	

SOIL

WNAHD19 -U

		Sampling Point:
Profile Description: (Describe to the	depth needed to document the indicator or confirm	m the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-4 LOYR312		
H-G LOUID UM		
-1-1 10412 71L		
9-16+104R513_		
		· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	o all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, I	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,B)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	
Stratified Layers (A5)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, 1		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Uery Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	∐ Marl (F10) <b>(LRR U)</b>	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,	7, T) <sup>3</sup> 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		
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLF	RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре:		
		$\sim$
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
	1	
	Nohyonc	$\sim$ $\sim$ $\sim$
	NORendric	Sallas ett
	Aprice	50 apresent
	0	
	•	

Wnah019\_u



Upland data point wnah019\_u facing east



Upland data point wnah019\_u facing north

## Wnah019 soils



Wetland/upland soils

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region $7 - 30 - 14$
Project/Site:	City/County: NASA Sampling Date:
Applicant/Owner: Dominion	State: NCSampling Point: wnah036f_w
Investigator(s):	Section, Township, Range:
	Local relief (concave, convex, none): <u>Concluding</u> Slope (%). <u>°OC OI · 856</u> Long: <u>777 49 ' 58, 735</u> Datum. NWI classification <u>PFO</u> rear? Yes No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology significant	
Are Vegetation Soil or Hydrology naturally p	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       No	g Sampling point locations, transects, important features, etc. - Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Sediment Deposits (B2)	13)       Sparsely Vegetated Concave Surface (B8)         15) (LRR U)       Drainage Patterns (B10)         Odor (C1)       Moss Trim Lines (B16)         heres along Living Roots (C3)       Dry-Season Water Table (C2)         iced Iron (C4)       Crayfish Burrows (C8)         iction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         e (C7)       Geomorphic Position (D2)
Surface Water Present?       Yes No X       Depth (inche:         Water Table Present?       Yes No X       Depth (inche:         Saturation Present?       Yes No X       Depth (inche:         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial phote	s): Wetland Hydrology Present? Yes No
Remarks: Hydridocge	J present

# Sampling Point: \_\_\_\_\_wnah036f\_w

Trans Charlense (PL )		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Acer rubryn	<u>40</u>	4	FAC	That Are OBL, FACW, or FAC: (A)
2. Dyssa Dy florit	40	$\rightarrow \not \downarrow$	OBL	Total Number of Dominant
3. Ligicichambor styrace Flara	20	$\underline{\vee}$	FAC	Species Across All Strata:(B)
4	·····			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	80	= Total Cov	er	OBL species x 1 =
50% of total cover: <u>4</u> 1				FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1. Decimium corymbosam	15		FACU	/ FACU species x 4 =
2. Maynolia Virgeniana	10	-4-	FAV	UPL species x 5 =
•		_ <b>/</b>	THE	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5	*******	····		Hydrophytic Vegetation Indicators:
6				, 1 - Rapid Test for Hydrophytic Vegetation
7				A - Dominance Test is >50%
8		<u> </u>		3 - Prevalence Index is ≤3.0
		= ⊺otal Cov		Problematic Hydrophytic Vegetation <sup>3</sup> (Explain)
50% of total cover	c <u>5</u> 20% of	total cover	5	
Herb Stratum (Plot size:)	7	. /		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Hunder and size:)	50	-V	FAQU	be present, unless disturbed or problematic.
2. Sarwir Leriwa	20		DBL	Definitions of Four Vegetation Strata:
3		<u> </u>		
4		·····		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
5				long ht.
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				°
	50	= Total Cov	er	
50% of total cover		total cover:		
Woody Vine Stratum (Plot size)				
1				
3				
4				4
5				Hydrophytic
		= ⊺otal Cov		Vegetation Present? Yes No
50% of total cover:	20% of	total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

Profile Des	cription: (Describe t	o the depth	needed to docur	nent the	indicator	or confirm	the absence of	findicators.)	
Depth	Matrix	•		x Feature					
(inches)	Color (moist)		Color (moist)	%	Type1	_Loc <sup>2</sup>		Remarks	
0-9	10YF 3/1								
9-16#	1044 41								
11-20t	DYRYL		1042314	2					
10	The to it		10/1-14	<u> </u>					-
				. <u></u>			<u> </u>		
	,					······			-
1Tupo: 0mC							2		-
Hydric Soil	oncentration, D=Deple Indicators: (Applica	ble to all L	Re unless other	S=Masked	d Sand Gr	ains.		L=Pore Lining, M=Matrix.	
Histosol						<b>DD 0 T 1</b>		or Problematic Hydric Soils <sup>3</sup> :	
	oipedon (A2)		Polyvalue Be					ck (A9) (LRR O)	
	istic (A3)		Loamy Muck					ck (A10) <b>(LRR S)</b>   Vertic (F18) <b>(outside MLRA 150A</b> ,	3)
	en Sulfide (A4)		Loamy Gleye			. 0,		t Floodplain Soils (F19) (LRR P, S, 1	
	d Layers (A5)		Depleted Mar					us Bright Loamy Soils (F20)	·
	Bodies (A6) (LRR P,		Redox Dark	Surface (F	6)		(MLRA	(153B)	
	ucky Mineral (A7) (LR		Depleted Dar		• •			ent Material (TF2)	
	esence (A8) (LRR U)		Redox Depre		8)			Illow Dark Surface (TF12)	-
	uck (A9) <b>(LRR P, T)</b> d Below Dark Surface	(644)	Marl (F10) (L				Uther (E:	xplain in Remarks)	
	ark Surface (A12)	(ATT)	Depleted Oct				T) <sup>3</sup> ladiaat		
	rairie Redox (A16) (M	RA 150A)	Umbric Surfa					ors of hydrophytic vegetation and nd hydrology must be present,	
	lucky Mineral (S1) (L		Delta Ochric			, 0,		s disturbed or problematic.	
	Bleyed Matrix (S4)	-, -,	Reduced Ver			0A, 150B)	unico	s distance of problemate.	
	Redox (S5)		Piedmont Flo				9A)		
Stripped	Matrix (S6)		Anomalous B	right Loar	ny Soile /I	E20) /ML R	A 149A, 153C, 1	53D)	
				ingin Loui	ity oons (i	20) (111210		330)	
🔲 Dark Su	rface (S7) (LRR P, S,	T, U)					,		
Dark Su Restrictive		T, U)							
Dark Su Restrictive	rface (S7) (LRR P, S, Layer (if observed):	T, U)						1-	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S,	T, U)					Hydric Soil Pi	1-	-
Dark Su Restrictive	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)						1-	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)	_ Hydr				Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	T, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	Τ, U)					Hydric Soil Pi	resent? Yes X No	-
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	<u>Τ, U)</u>					Hydric Soil Pi	resent? Yes X No	_
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	<u>Τ, U)</u>					Hydric Soil Pi	resent? Yes X No	
Dark Su Restrictive Type: Depth (in	rface (S7) (LRR P, S, Layer (if observed):	<u>Τ, U)</u>					Hydric Soil Pi	resent? Yes X No	-

Wnah036f\_w



Wetland data point wnah036f\_w facing east



Wetland data point wnah36f\_w facing south

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region $7-30 - 14$
Project/Site: SERP City/	County: NASH Sampling Date: State: Sampling Point Wnah036_u
Applicant/Owner: Dominion	State: NC Sampling Point Whah036_u
	ion, Township, Range:
	I relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA):	22. 311" Long: 177° 491 58, 245" Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation, Soil, or Hydrology naturally problem	
	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       Yes	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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Saturation (A3) Hydrogen Sulfide Odor (	
Saturation (A3)       Hydrogen Sulfide Odor (         Water Marks (B1)       Oxidized Rhizospheres	
Sediment Deposits (B2)	
Drift Deposits (B3)	n Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
L Iron Deposits (B5) L Other (Explain in Remar Inundation Visible on Aerial Imagery (B7)	
Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) <b>(LRR T, U)</b>
Field Observations:	
Surface Water Present? Yes No 🔀 Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks: No hydrolt	gy present

### Sampling Point: wnah036\_u

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1. Pineestagla	45 J FAC	That Are OBL, FACW, or FAC:
2. LIAURATMEDAR STUPACIOTUG	<u>15 V FAC</u>	Tatal Number of Deminerat
3. Chryden Cron Eerboren	IDEACU	Total Number of Dominant Species Across All Strata: (B)
4. Hist numerum	10FAC	
5	•	Percent of Dominant Species That Are OBL, FACW, or FAC:
6		
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	90 = Total Cover	OBL species x 1 =
50% of total cover:		FACW species x 2 =
		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: ) 1. Lestrelie and mr Stynacistuce	20 J. Enc	FACU species x 4 =
2. NUKSA SU VATICA	The Fitte	UPL species x 5 =
	A CHIL	Column Totals:         (A)         (B)
3. Acorrubrum	TO FIL	
4. Væcemen Staminum	•	Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8	- <u>/</u>	$3$ - Prevalence Index is $\leq 3.0^{1}$
2.	<u>60</u> = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	2 20% of total cover:	
Herb Stratum (Plot size:)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Vaecinium stanini-	10 V FACU	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		Senling/Shrub Woodu plante evoluding visco loss
7		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		
		Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		or 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		
4	$\underline{\mathcal{D}}$ = Total Cover 7	
50% of total cover: 🥑	20% of total cover:	
Woody Vine Stratum (Plot size:	10 11 11	~
1. Uptis rotunger sollien	TO U POR	~
2. mary rotanditolia	J FAC	-
3		
4		
5		Hydrophytic A
	= Total Cover 🥱	Vegetation
50% of total cover: 7-5	20% of total cover: 5	Present? Yes V No
Remarks: (If observed, list morphological adaptations belo		1

	cription: (Describe t	o the depth	needed to docum	nent the i	ndicator	or confirm	the absence of i	ndicators.)
Depth	Matrix		Redox	Features	;			
(inches)	<u>Color (moist)</u>	%	Color (moist)	%	<u>Type</u> <sup>1</sup>	<u>Loc<sup>2</sup></u>	<u> </u>	Remarks
22	<u>IOTA T</u>						<u>&gt;L</u>	-
5-9	10 71-5/3				<u></u>		<u></u>	
9-14+	2.575/3		2.54 514	くえ			52	
	-							
							***************************************	
							••••••••••••••••••••••••••••••••••••••	
17 0.0								
Hydric Soil	oncentration, D=Deple Indicators: (Applica	etion, RM=R	educed Matrix, MS	=Masked	Sand Gra	uins.		Pore Lining, M=Matrix.
Histoso		Die to all LP	_					Problematic Hydric Soils <sup>3</sup> :
	pipedon (A2)		Polyvalue Bel					: (A9) ( <b>LRR O)</b> : (A10) <b>(LRR S)</b>
	istic (A3)		Loamy Mucky					/ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleyed	d Matrix (F	-2)			Floodplain Soils (F19) (LRR P, S, T)
a constant of the second se	d Layers (A5) Bodies (A6) ( <b>LRR P</b> ,	<b>T</b> 115	Depleted Mati	· ·	•			Bright Loamy Soils (F20)
1 THE T	ucky Mineral (A7) (LRR P,		Redox Dark S	•				53B) t Material (TF2)
	resence (A8) (LRR U)		Redox Depres		• •			ow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10) (LI	-	,			lain in Remarks)
	d Below Dark Surface	(A11)	Depleted Och				_	
	ark Surface (A12) rairie Redox (A16) <b>(M</b>		Iron-Mangane					s of hydrophytic vegetation and
	Aucky Mineral (S1) (LI		Umbric Surfac			0)		hydrology must be present, disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Vert			)A. 150B)	011635 (	isturbed of problematic.
	Redox (S5)		Piedmont Floo				9A)	
	Matrix (S6)		Anomalous Bi	right Loan	ny Soils (F	20) (MLRA	A 149A, 153C, 153	3D)
	rface (S7) (LRR P, S, Layer (if observed):	1, 0)						
Type:								
Depth (in	ches):						Hydric Soil Pre	sent? Yes No
Remarks:							,	
	A 1-	. 1	0	~ (	7		0	
	NC	) hy	drics	in		nes	ont	
		(	) ~~ <			. ~ ~ ~ ~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
1								

Wnah036\_u



Upland data point wnah036\_u facing east



Upland data point wnah036\_u facing north

## Wnah036 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FO	DRM – Atlantic and Gulf Coastal Plain Region $7 - 30 \cdot 14$
Project/Site: <u>SERP</u> C	NATOR I
Applicant/Owner: Dominion	try/County:State:Sampling Date:Sampling Point: W/U/AEHO 18 F
Investigator(s): DDWEST s	ection, Township, Range:
Landform (hillslope, terrace, etc.) Billion Vand	ocal relief (concave, convex, none): Concorrective Slope (%):
	6'01.856" Long 177* 49' 58,735' Datum
Soil Map Unit Name RMINS	NWI classification PFO
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation Soil or Hydrology significantly di	
Are Vegetation Soil or Hydrology naturally problem	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       No	Is the Sampled Area within a Wetland? Yes <u>No</u>
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) Marl Deposits (B15) ( Saturation (A3) Hydrogen Sulfide Od	
	or (C1) Moss Trim Lines (B16) es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	N
Crift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C	
L Iron Deposits (B5) D Other (Explain in Rer Inundation Visible on Aerial Imagery (B7)	narks)Shallow Aquitard (D3) X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X	
Water Table Present? Yes No X Depth (inches):	V
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes 🔨 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks	
	$\cap$
Hydrologie	DA0301. H
	Passa

WNAHO18F-W Sampling Point:

Tree Stratum (Plot size:) 1. <u>ACP</u> -TUBRAM 2. <u>Nyssa</u> Di Horra 3. <u>Lugeus Ambor Styraci Husa</u> 4 5 6		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:         LDZ         (A/B)
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	$\underline{\mathcal{SD}}$ = Total Cover	OBL species x 1 =
50% of total cover: <u>4</u> 2	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
1. Jaccinium corymposium	15 V FACK	/ FACU species x 4 =
2. Maynolia Virgeniana	10 V FACH	UPL species x 5 =
3		Column Totals: (A) (B)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		, 1 - Rapid Test for Hydrophytic Vegetation
7	A	Provide the state of the sta
8		3 - Prevalence Index is ≤3.0
r y	$\underline{25}$ = Total Cover	Problematic Hydrophytic Vegetation (Explain)
50% of total cover /Z	$\underline{C}$ 20% of total cover $\underline{2}$	
Herb Stratum (Plot size:) 1. Houndercorico - seguriteus	30 V FAGA	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Samuer Leriwal	20 , / OBL	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
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		Mondy vine All woody vines greater than 2.39 ft in
11		Woody vine – All woody vines greater than 3.28 ft in height.
12		-
	50 = Total Cover	
50% of total cover	20% of total cover: _/O	
Woody Vine Stratum (Plot size)		
1.		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation Present? Yes No
50% of total cover:		
Remarks: (If observed, list morphological adaptations below	w).	

WNAHOISF\_W

Sampling Point:

	i needed to document the indicator or col	nfirm the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	·
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loo	c <sup>2</sup> TextureRemarks
0-9 104F 3/1		
9-16# 104× 4/		
11-201 DYRYL	104R3A 2	
10		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F Hydric Soil Indicators: (Applicable to all L	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
I	· · · · ·	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S	
Black Histic (A3)	Thin Dark Surface (S9) (LRR S, T, U) Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	L Reduced Vertic (F18) (outside MLRA 150A,B)
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 (	
Coast Prairie Redox (A16) (MLRA 150A)		wetland hydrology must be present,
Sandy Mucky Milleral (ST) (LRK U, S)	Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 15	unless disturbed or problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (	
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Restrictive Layer (if observed):		Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type:		Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):		
Restrictive Layer (if observed): Type: Depth (inches):	- Hudre soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric soil	

Wnah018f\_w



Wetland data point wnah018f\_w facing east



Wetland data point wnah18f\_w facing south

	FORM – Atlantic and Gulf Coastal Plain Region $31-14$
	$\sqrt{NAH} = \sqrt{N}$
	City/County: AASA Sampling Date:
	State: NC Sampling Point:
	Section, Township, Range:
	Local relief (concave, convex, none): <u>Lonchule</u> Slope (%): 05 ' <u>58, 236''</u> Long: <u>77 50 ' 05, 961''</u> Datum:
Soil Map Unit Name: RAMS	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? 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	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydroc Soil Present? Wetland Hydrology Present? Remarks: Bedded planfed pt	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)	Secondary moleculors (minimum of two required)
Surface Water (A1)	
High Water Table (A2)	
Saturation (A3)	
↓       Water Marks (B1)       ↓       Oxidized Rhizosph         ↓       Sediment Deposits (B2)       ↓       Presence of Reduct	eres along Living Roots (C3) Dry-Season Water Table (C2)
	tion in Tilled Soils (C6) $\Box$ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
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)	N.
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:	J present
- Strengt	
L	

WNMHO185-W

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

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
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:
				OBL species x 1 =
		= Total Cov		
50% of total cover:	20% of	ftotal cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		1		FAC species x 3 =
	60		Enc	FACU species x 4 =
1. Pinuz tareda	$\underline{\omega}\underline{\mathcal{O}}$		FAC	
2. L'ipine ambrar Styme Flue	10			UPL species x 5 =
3. Clethon alnifolia	10		*****	Column Totals: (A) (B)
" Lie w Manni Folla	10		<u> </u>	
4. Magnolia Virgenxana			<u> </u>	Prevalence Index = B/A =
5. The opaca				
a Dia - Files	·		·	Hydrophytic Vegetation Indicators:
6. Acor hubrin	- <u></u>		·	1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
,	IDD	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 50	20% of	total cover	20	
	207001	total cover		
Herb Stratum (Plot size:)	2.	, /		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Chasman Them oxum	20	$\sim$	FACIL	be present, unless disturbed or problematic.
	10	·····	FAC	
2. Andriperon Unreplaces	10_			Definitions of Four Vegetation Strata:
3. Rynchospora ceptan flues	20	V	FAQ.)	
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
5				height.
6				Senting (Charles ) Manda alasta a studio a dana lara
				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				
				l boight
12.	· ······			height.
				height.
				height.
	60	– Total Cov	17	height.
50% of total cover: 3C	60		17	height.
50% of total cover: <u>3</u> <u>Woody Vine Stratum</u> (Plot size: <u>Λ</u> , )	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	
	20% of 20%	= Total Cov total cover	 	Hydrophytic
Woody Vine Stratum (Plot size:) 1	20% of 20% of 5 25	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
	20% of 20% of 5 25	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:) 1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation

SUIL				Sampling Point:
Profile Description: (Describe to the de	pth needed to document the indic	ator or confirm	the absence of inc	licators.)
Depth Matrix	Redox Features			
(inches) Color (moist) %	Color (moist) % Ty	pel_Loc <sup>2</sup>	Texture	Remarks
0.6 18/R3/1		<u> 200</u>	9	i cinarka
			loom_	
6-15 104R 5/2	101R 4/6 75 C	-m	SCL	
				· · · · · · · · · · · · · · · · · · ·
<sup>1</sup> Type: C=Concentration, D=Depletion, RM		d Craina	21	
Hydric Soil Indicators: (Applicable to al		iu Grains.		Pore Lining, M=Matrix.
	· · ·			roblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S		' <b>'''''</b> '' '	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LR		2 cm Muck (/	A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1)	(LRR O)	Reduced Ver	rtic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Flo	oodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous E	Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 15	
📔 5 cm Mucky Mineral (A7) (LRR P, T, U	) 🔲 Depleted Dark Surface (F7)		Red Parent I	Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)		1 1	Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)			in in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (ML	RA 151)		······································
Thick Dark Surface (A12)	Iron-Mangariese Masses (F		T) <sup>3</sup> Indicators	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150	A) Umbric Surface (E13) / BR	PT 11)	•	ydrology must be present.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA			sturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLR	•	uniess uis	storbed of problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (			
Stripped Matrix (S6)			•	
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loamy S		A 149A, 153C, 153L	))
Restrictive Layer (if observed):				
Туре				$\mathbf{V}$
Depth (inches):			Hydric Soil Prese	ent? Yes No
Remarks				
	2	$\cap$	(	<b>`</b>
d	1.0.00			
V V	yone Soil		esers	
	0 300	$ \sqrt{1}$		
		V		

Wnah018s\_w



Wetland data point wnah018s\_w facing east



Wetland data point wnah18s\_w facing south

Upland point for both wnah018f\_w and wnah018f\_w

WETLAND DETERMINATION	DATA FORM – Atlantic an	nd Gulf Coastal Plain Region
Project/Site: <u>SERP</u>	City/County: 1945	L Sampling Date: 7/31/14
Applicant/Owner: <u>POMINION</u>	===============================	State: Sampling Point: <u>WNAH018</u>
	Section, Township, Rang	
	Local relief (concave, co	nuer nano): (ONUF) Stone (8/): 7
Landform (hillslope, terrace, etc.): <u>Hillslop</u> Lat: Subregion (LRR or MLRA): <u> </u>	$\frac{2}{2} \frac{1}{2} \frac{1}$	$\nabla e_{x}$ , $\nabla h = \frac{1}{2} \sqrt{\frac{1}{2}} \sqrt{\frac{1}$
Soil Map Unit Name: RAINS	<u>26 07 9 00 0</u> L0	
		NWI classification:
Are climatic / hydrologic conditions on the site typical for this til		
Are Vegetation, Soil, or Hydrology sign		
Are Vegetation, Soil, or Hydrology nate		ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point loo	cations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No _         Hydric Soil Present?       Yes No _         Wetland Hydrology Present?       Yes No _         Remarks       Mod Call Homee F	$\frac{\lambda}{\Sigma}$ within a Wetland	1? Yes <u>No X</u>
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	t apply)	Surface Soil Cracks (B6)
Surface Water (A1)	una (B13)	Sparsely Vegetated Concave Surface (B8)
	sits (B15) <b>(LRR U)</b>	Drainage Patterns (B10)
	Sulfide Odor (C1)	Moss Trim Lines (B16)
	hizospheres along Living Roots (	
	of Reduced Iron (C4) n Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Surface (C7)	Geomorphic Position (D2)
	lain 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		
Water Table Present? Yes No X Depth		
Saturation Present? Yes No X Depth (includes capillary fringe)	(inches): Wetla	and Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections),	if available:
Remarks:		
No hydrolo	zy present	~

WNIAHO18 - U

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

Sampling Point:

	Abcoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
				Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
3				Total Number of Dominant (B)
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $100$ (A/B)
6				
				Prevalence Index worksheet:
7		•••••••••••••••••••••••••••••••••••••••		Total % Cover of: Multiply by:
8				
		= Total Cove	er	OBL species x 1 =
50% of total cover:	20% of	total anuary		FACW species x 2 =
	20 /0 01	IUTAI COVER		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	$( \circ$	. /	~	
1. Fines torda	60		FAC	FACU species x 4 =
2. Drudoudion arboria	10		FALL	UPL species x 5 =
			FALL	Column Totals: (A) (B)
	$-\frac{10}{10}$		Π	
4. Actor metrun	$\underline{u}$		FIAL	Prevalence Index = B/A =
5. Vaccinium staminium	10		FALL	
6			1 - 11-10	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	<u>-</u>			∠2 - Dominance Test is >50%
8				
	152	= Total Cove		☐ 3 - Prevalence Index is ≤3.01
	100		- 1 A V	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <u>SO</u>	20% of	total cover:	<u></u>	
Herb Stratum (Plot size:)	<b>~</b> ~		,	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Charsmanthen SCHITCOTUS	- 20	· / /	FIA/	be present, unless disturbed or problematic.
Plus men pure sessince.	717	<u> </u>	EAC	
2. Klus molerans	<u> </u>	<u> </u>	FAR	Definitions of Four Vegetation Strata:
3				Tree Mondy plants evaluating vision 2 in (7.6 cm) or
4				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				i o gin.
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				
11				Woody vine – All woody vines greater than 3.28 ft in height.
				noight.
12	00			
1.	50	= Total Cove	er,	
50% of total cover:	> 20% of	total cover:	6	
Woody Vine Stratum <sub>t</sub> (Plot size:)				
	LIM		FAC	
1 _ SIMULAX POTULACI KOLLA	$\underline{\mathcal{D}}$	<u> </u>	FAC	
2.				
3				
	******			
4.				
5				Hydrophytic
	40	= Total Cove	er ~/	Vegetation
50% of total cover: ZE	1	total cover:	8	Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations below	w).			

Profile Description: (Describe to the depth needed to docume	ent the indicator	or confirm	the absence of	indicators.)
Depth         Matrix         Redox           (inches)         Color (moist)         %         Color (moist)	Features % Type	Loc <sup>2</sup>	Texture	Remarks
<u>D-9 104R4/2</u>			75 7	
$(\mathcal{G}_{\mathcal{G}})$ $(\mathcal{G})$			Sanly	
			- Show	HORM
		·		
		<u> </u>		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=	=Masked Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherw Histosol (A1)			<u> </u>	r Problematic Hydric Soils <sup>3</sup> :
	ow Surface (S8) <mark>(L</mark> face (S9) <b>(LRR S</b> ,			ck (A9) <b>(LRR O)</b> ck (A10) <b>(LRR S)</b>
	Mineral (F1) (LRF			Vertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)	Matrix (F2)			t Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matri Organic Bodies (A6) (LRR P, T, U) Redox Dark St				us Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)     Redox Dark St     5 cm Mucky Mineral (A7) (LRR P, T, U)     Depleted Dark			(MLRA	nt Material (TF2)
Muck Presence (A8) (LRR U)	· · ·			llow Dark Surface (TF12)
L 1 cm Muck (A9) (LRR P, T)				plain in Remarks)
	ric (F11) (MLRA 1		3	<i>.</i>
	se Masses (F12) <b>(</b> e (F13) <b>(LRR P,</b> T	, ,	,	ors of hydrophytic vegetation and nd hydrology must be present,
📔 🛄 Sandy Mucky Mineral (S1) (LRR O, S) 🛛 🔲 Delta Ochric (F	F17) (MLRA 151)	, 0,		disturbed or problematic.
	c (F18) (MLRA 15	0A, 150B)		
	dplain Soils (F19)	•	· ·	
Dark Surface (S7) (LRR P, S, T, U)	ight Loamy Soils (	-20) (MLRA	149A, 153C, 1	53D)
Restrictive Layer (if observed):				
Туре:				
Depth (inches):			Hydric Soil Pr	esent? Yes No
Remarks:				Hunnand (
í n		~	$\cap$	$\land$
No Ly	Darz	Som	U1 MA	0 ront
· · · · · · · · · · · · · · · · · · ·	CALC	80 0	es pri	enter of

Wnah018\_u



Upland data point wnah018\_u facing east



Upland data point wnah018\_u facing north

## Wnah018 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FO	DRM – Atlantic and Gulf Coastal Plain Region $7 - 30 \cdot 14$
Project/Site: <u>SERP</u> C	NATOR I
Applicant/Owner: Dominion	try/County:State:Sampling Date:Sampling Point: W/U/AHO 18 F
Investigator(s): DDWEST s	ection, Township, Range:
Landform (hillslope, terrace, etc.) Billion Vand	ocal relief (concave, convex, none): Concorrective Slope (%):
	6'01.856" Long 177* 49' 58,735' Datum
Soil Map Unit Name RMINS	NWI classification PFO
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation Soil or Hydrology significantly di	
Are Vegetation Soil or Hydrology naturally problem	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       No	Is the Sampled Area within a Wetland? Yes <u>No</u>
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) Marl Deposits (B15) ( Saturation (A3) Hydrogen Sulfide Od	
	or (C1) Moss Trim Lines (B16) es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	N
Crift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C	
L Iron Deposits (B5) D Other (Explain in Rer Inundation Visible on Aerial Imagery (B7)	narks)Shallow Aquitard (D3) X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X	
Water Table Present? Yes No X Depth (inches):	V
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes 🔨 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks	
	$\cap$
Hydrologie	DA0301. H
	Passa

WNAHO18F-W Sampling Point:

Tree Stratum (Plot size:) 1. <u>Acer rubran</u> 2. <u>Nyssa bi Harra</u> 3. <u>Ligeuchmbor styraci Haa</u> 4 5 6		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:         LDDD         (A/B)
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	$\underline{\mathcal{SD}}$ = 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. Goecinium corymbersum	15 V FACU	/ FACU species x 4 =
2. Maynolia Virgeniana	10 V FACH	UPL species x 5 =
3		Column Totals: (A) (B)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		, 1 - Rapid Test for Hydrophytic Vegetation
7		Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0
A ca	= Total Cover	Problematic Hydrophytic Vegetation` (Explain)
50% of total cover	15 20% of total cover	
Herb Stratum (Plot size:) 1. Hrundencerice -significus	30 V FAGN	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Sarwir Leriwal	20 7 OBL	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
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		
11		Woody vine – All woody vines greater than 3.28 ft in height.
12		
	50 = Total Cover	
50% of total cover 25	20% of total cover: 10	
Woody Vine Stratum (Plot size)		
1.		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation X
50% of total cover:	20% of total cover:	Present? Yes A No
Remarks: (If observed, list morphological adaptations belo	w).	

WNAHOISF\_W

Sampling Point:

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	the absence of	of indicate	ors.)	
Depth	Matrix		Redox	Feature		-				
(inches)	<u>Color (moist)</u>	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-9	104F 3/1									
9-16#	1044 4/1									
16-201	DYRYL		10YR SM	2	······		<u> </u>			
ļ <i>to</i>	10 10 11	<u> </u>	10/11/			<u></u>	<u> </u>			
		<u> </u>					······································			
	oncentration, D=Depl	ation BM-D	aduced Metrix MC				2,			
Hydric Soil	indicators: (Applica	able to all I R	Rs unless other	=Masked	Sand Gra	ains.			ining, M=Matri	
Histosol					•				matic Hydric	Solis :
	pipedon (A2)		Polyvalue Bel				·	uck (A9) <b>(L</b>		
Black Hi			Loamy Mucky					uck (A10) ( d Vertic /E	• •	ILRA 150A,B)
	n Sulfide (A4)		Loamy Gleye			. 0,		•	ain Soils (F19)	
	Layers (A5)		Depleted Mat	•	-,			•	Loamy Soils (	
	Bodies (A6) (LRR P,		Redox Dark S	Surface (F	6)			A 153B)		,
	icky Mineral (A7) <b>(LR</b>		Depleted Dari	< Surface	(F7)			rent Materi	ial (TF2)	
	esence (A8) (LRR U)	)	Redox Depres		8)		L Very Sh	allow Dark	Surface (TF1	2)
	ck (A9) (LRR P, T)		Marl (F10) (LI				Dther (E	Explain in f	Remarks)	
	l Below Dark Surface Irk Surface (A12)	e (A11)	Depleted Och							
	airie Redox (A16) (N	U DA 150A)	Iron-Mangane					•	frophytic veget	
	lucky Mineral (S1) (L		Umbric Surfac			, 0)		-	ogy must be pr	
	ileyed Matrix (S4)		Reduced Vert			0A 150B)		ss disturbe	d or problema	liC.
	edox (S5)		Piedmont Flor							
	Matrix (S6)		Anomalous Bi					153D)		
	face (S7) (LRR P, S	, T, U)		•			, ,			
Restrictive L	face (S7) (LRR P, S _ayer (if observed):	, T, U)								
Restrictive L Type:	.ayer (if observed):	, T, U)								
Restrictive L Type: Depth (inc		, T, U)		-			Hydric Soil F		Yes_X_	No
Restrictive L Type:	.ayer (if observed):	, T, U)	_						Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, <b>T</b> , U)					Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hudr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes_X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes_X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes_X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes <u>X</u>	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes_X	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No
Restrictive L Type: Depth (inc	.ayer (if observed):	, T, U)	Hydr				Hydric Soil F	Present?	Yes	No

Wnah018f\_w



Wetland data point wnah018f\_w facing east



Wetland data point wnah18f\_w facing south

	FORM – Atlantic and Gulf Coastal Plain Region $34-14$
	$\sqrt{NAH} = \sqrt{N}$
* · · ·	City/County: Sampling Date:
	State: NC Sampling Point:
and a	Section, Township, Range:
	Local relief (concave, convex, none): <u>LONCIANE</u> Slope (%): DS '58.2.36'' Long: <u>77<sup>2</sup>50'05.961"</u> Datum:
Soil Map Unit Name: RAMS	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? 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	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydroc Soil Present? Wetland Hydrology Present? Remarks: Bedded planfed pt	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 Water (A1)	renning to the second
High Water Table (A2)	
Saturation (A3)	
↓       Water Marks (B1)       ↓       Oxidized Rhizosph         ↓       Sediment Deposits (B2)       ↓       Presence of Reduction	eres along Living Roots (C3) Dry-Season Water Table (C2)
	tion in Tilled Soils (C6) $\Box$ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5)	
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)	A.
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:	2 present
george .	
L	

WNMHO185-W

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

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
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:
				OBL species x 1 =
		= Total Cov		
50% of total cover:	20% of	ftotal cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		1		FAC species x 3 =
	60		Enc	FACU species x 4 =
1. Pinuz tareda	$\underline{\omega}\underline{\mathcal{O}}$		FAC	
2. L'ipine ambrar Styme Flue	10			UPL species x 5 =
3. Clethon alnifolia	10		*****	Column Totals: (A) (B)
" Lie w Manni Folla	10			
4. Magnolia Virgenxana			<u> </u>	Prevalence Index = B/A =
5. The opaca				
a Dia - Files	·		·	Hydrophytic Vegetation Indicators:
6. Acor hubrin	- <u></u>		·	1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
,	IDD	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 50	20% of	total cover	20	
	207001	total cover		
Herb Stratum (Plot size:)	2.	, /		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Chasman Them oxum	20	$\sim$	FACIL	be present, unless disturbed or problematic.
	10	·····	FAC	
2. Andriperon Unreplaces	10_			Definitions of Four Vegetation Strata:
3. Rynchospora ceptan flues	20	V	FAQ.)	
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
5				height.
6				Continue (Charles 10/2 and 1 and 2 and 2 and 1 and 1 and 1
				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				
				l boight
12.	· ······			height.
				height.
				height.
	60	– Total Cov	17	height.
50% of total cover: 3C	60		17	height.
50% of total cover: <u>3</u> <u>Woody Vine Stratum</u> (Plot size: <u>Λ</u> , )	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	height.
	60	– Total Cov	17	
	20% of 20%	= Total Cov total cover	 	Hydrophytic
Woody Vine Stratum (Plot size:) 1	20% of 20% of 5 25	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
	20% of 20% of 5 25	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:) 1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation
Woody Vine Stratum (Plot size:)         1	20% of 20% of 5 25 20% of	= Total Cov total cover	<u><u></u><u></u><u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	Hydrophytic Vegetation

#### SOIL

SUIL				Sampling Point:
Profile Description: (Describe to the de	pth needed to document the indic	ator or confirm	the absence of inc	licators.)
Depth Matrix	Redox Features			
(inches) Color (moist) %	Color (moist) % Ty	pel_Loc <sup>2</sup>	Texture	Remarks
0.6 18/R3/1		<u> 200</u>	9	i cinarka
			loom_	
6-15 104R 5/2	101R 4/6 75 C	-m	SCL	
				· · · · · · · · · · · · · · · · · · ·
<sup>1</sup> Type: C=Concentration, D=Depletion, RM		d Craina	21	
Hydric Soil Indicators: (Applicable to al		iu Grains.		Pore Lining, M=Matrix.
	· · ·			roblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S		' <b>'''''</b> '' '	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LR		2 cm Muck (/	A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1)	(LRR O)	Reduced Ver	rtic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Flo	oodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous E	Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 15	
📔 5 cm Mucky Mineral (A7) (LRR P, T, U	) 🔲 Depleted Dark Surface (F7)		Red Parent I	Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)		1 1	Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)			in in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (ML	RA 151)		······································
Thick Dark Surface (A12)	Iron-Mangariese Masses (F		T) <sup>3</sup> Indicators	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150	A) Umbric Surface (E13) / BR	PT 11)	•	ydrology must be present.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA			sturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLR	•	uniess uis	storbed of problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (			
Stripped Matrix (S6)			•	
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loamy S		A 149A, 153C, 153L	))
Restrictive Layer (if observed):				
Туре				$\mathbf{V}$
Depth (inches):			Hydric Soil Prese	ent? Yes No
Remarks				
	2	$\cap$	(	<b>`</b>
d	1.0.00	1		
V V	yone Soil		esers	
	0 300	$ \sqrt{1}$		
		V		

Wnah018s\_w



Wetland data point wnah018s\_w facing east



Wetland data point wnah18s\_w facing south

Upland point for both wnah018f\_w and wnah018f\_w

WETLAND DETERMINATION	DATA FORM – Atlantic an	nd Gulf Coastal Plain Region
Project/Site: <u>SERP</u>	City/County: 1945	L Sampling Date: 7/31/14
Applicant/Owner: <u>POMINION</u>	===============================	State: Sampling Point: <u>WNAH018</u>
	Section, Township, Rang	
	Local relief (concave, co	nuer nano): (ONUF) Stone (8/): 7
Landform (hillslope, terrace, etc.): <u>Hillslop</u> Lat: Subregion (LRR or MLRA): <u> </u>	$\frac{2}{2} \frac{1}{2} \frac{1}$	$\nabla e_{x}$ , $\nabla h = \frac{1}{2} \sqrt{\frac{1}{2}} \sqrt{\frac{1}$
Soil Map Unit Name: RAINS	<u>26 07 9 00 0</u> L0	
		NWI classification:
Are climatic / hydrologic conditions on the site typical for this til		
Are Vegetation, Soil, or Hydrology sign		
Are Vegetation, Soil, or Hydrology nate		ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point loo	cations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No _         Hydric Soil Present?       Yes No _         Wetland Hydrology Present?       Yes No _         Remarks       Mod Call Homee F	$\frac{\lambda}{\Sigma}$ within a Wetland	1? Yes <u>No X</u>
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	t apply)	Surface Soil Cracks (B6)
Surface Water (A1)	una (B13)	Sparsely Vegetated Concave Surface (B8)
	sits (B15) <b>(LRR U)</b>	Drainage Patterns (B10)
	Sulfide Odor (C1)	Moss Trim Lines (B16)
	hizospheres along Living Roots (	
	of Reduced Iron (C4) n Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Surface (C7)	Geomorphic Position (D2)
	lain 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		
Water Table Present? Yes No X Depth		
Saturation Present? Yes No X Depth (includes capillary fringe)	(inches): Wetla	and Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections),	if available:
Remarks:		
No hydrolo	zy present	~

WNIAHO18 - U

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

Sampling Point:

	Abcoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
				Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
3				Total Number of Dominant Species Across All Strata: (B)
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $100$ (A/B)
6				
				Prevalence Index worksheet:
7		•••••••••••••••••••••••••••••••••••••••		Total % Cover of: Multiply by:
8				
		= Total Cove	er	OBL species x 1 =
50% of total cover:	20% of	total anuary		FACW species x 2 =
	20 /0 01	IUTAI COVER		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	$( \circ$	. /	~	
1. Fines torda	60		FAC	FACU species x 4 =
2. Drudoudion arboria	10		FALL	UPL species x 5 =
			FALL	Column Totals: (A) (B)
	$-\frac{10}{10}$		Π	
4. Actor metrun	$\underline{u}$		FIAL	Prevalence Index = B/A =
5. Vaccinium staminium	10		FALL	
6			1 - 11-10	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	<u>-</u>			∠2 - Dominance Test is >50%
8				
	152	= Total Cove		☐ 3 - Prevalence Index is ≤3.01
	100		- 1 A V	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <u>SO</u>	20% of	total cover:	<u></u>	
Herb Stratum (Plot size:)	<b>~</b> ~		,	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Charsmanthen SCHITCOTUR	- 20	· / /	FIA/	be present, unless disturbed or problematic.
Plus men pure sessince.	717	<u> </u>	EAC	
2. Klus molerans	<u> </u>		FM	Definitions of Four Vegetation Strata:
3				Tree Mondy plants evaluating vision 2 in (7.6 cm) or
4				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				in organic
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				
11				Woody vine – All woody vines greater than 3.28 ft in height.
				noight.
12	00			
1.	50	= Total Cove	er,	
50% of total cover:	> 20% of	total cover:	6	
Woody Vine Stratum <sub>t</sub> (Plot size:)				
	LIM		FAC	
1 _ SIMULAX POTULACI KOLLA	$\underline{\mathcal{D}}$	<u> </u>	FAC	
2.				
3				
	******			
4.				
5				Hydrophytic
	40	= Total Cove	er ~/	Vegetation
50% of total cover: ZE	1	total cover:	8	Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations below	w).			

SOIL

Profile Description: (Describe to the depth needed to docume	ent the indicator	or confirm	the absence of	indicators.)
Depth         Matrix         Redox           (inches)         Color (moist)         %         Color (moist)	Features % Type	Loc <sup>2</sup>	Texture	Remarks
<u>D-9 104R4/2</u>			75 7	
$(\mathcal{G}_{\mathcal{G}})$ $(\mathcal{G})$			Sanly	
			- Show	HORM
		·		
		<u> </u>		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=	=Masked Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherw Histosol (A1)			<u> </u>	r Problematic Hydric Soils <sup>3</sup> :
	ow Surface (S8) <mark>(L</mark> face (S9) <b>(LRR S</b> ,			ck (A9) <b>(LRR O)</b> ck (A10) <b>(LRR S)</b>
	Mineral (F1) (LRF			Vertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)	Matrix (F2)			t Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matri Organic Bodies (A6) (LRR P, T, U) Redox Dark St				us Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)     Redox Dark St     5 cm Mucky Mineral (A7) (LRR P, T, U)     Depleted Dark			(MLRA	nt Material (TF2)
Muck Presence (A8) (LRR U)	· · ·			llow Dark Surface (TF12)
L 1 cm Muck (A9) (LRR P, T)				plain in Remarks)
	ric (F11) (MLRA 1		3	<i>.</i>
	se Masses (F12) <b>(</b> e (F13) <b>(LRR P,</b> T	, ,	,	ors of hydrophytic vegetation and nd hydrology must be present,
📔 🛄 Sandy Mucky Mineral (S1) (LRR O, S) 🛛 🔲 Delta Ochric (F	F17) (MLRA 151)	, 0,		disturbed or problematic.
	c (F18) (MLRA 15	0A, 150B)		
	dplain Soils (F19)	•	· ·	
Dark Surface (S7) (LRR P, S, T, U)	ight Loamy Soils (	-20) (MLRA	149A, 153C, 1	53D)
Restrictive Layer (if observed):				
Туре:				
Depth (inches):			Hydric Soil Pr	esent? Yes No
Remarks:				Hunnand III,/ ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,
í n		~	$\cap$	$\land$
No Ly	Darz	Som	U1 MA	0 ront
· · · · · · · · · · · · · · · · · · ·	CALC	80 0	es pri	enter of

Wnah018\_u



Upland data point wnah018\_u facing east



Upland data point wnah018\_u facing north

# Wnah018 soils



Wetland/upland soils

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

Project/Site: <u>SCRP</u> City/County: <u>NASA</u> Sampling Date: <u>7</u> - Applicant/Owner: <u>Doministra</u> State: <u>NC</u> Sampling Point/ <u>V</u>	23-14
Applicant/Owner:	NAHOOG
Investigator(s):Section, Township, Range:	
Landform (hillslope, terrace, etc.):Local relief (concave, convex, none):Slope (%	
Subregion (LRR or MLRA): Lat: 32-05'57.906" Long: 77'50'18,162" Datum:	·/·
Soil Map Unit Name:B	••••••••••••••••••••••••••••••••••••••
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 featu	ires, etc.
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area         Hydric Soil Present?       Yes       No       No       within a Wetland?         Wetland Hydrology Present?       Yes       No       No       No       No         Remarks:       No       No       No       No       No       No       No	
HYDROLOGY	
Wetland Hydrology Indicators:         Secondary Indicators (minimum of two r	required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surfa         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)	ice (B8)
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)	
Drift Deposits (B3)	v (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)	
Iron Deposits (B5) U Other (Explain in Remarks) Shallow Aquitard (D3)	
L Inundation Visible on Aerial Imagery (B7)	
Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Image: Comparison of the second se	
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) Departmentory for the first state of the	
Remarks:	
Hydrology present	

WNAHOOGF-W

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

Trop Stratum (Distaine)	Absolute Dominant Indicator	Dominance Test worksheet:
1. NUSSA (States)	<u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species
	$-32 - \sqrt{-0}$	That Are OBL, FACW, or FAC: (A)
	LO V FACH	Total Number of Dominant
		Species Across All Strata:(B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	55 = Total Cover	OBL species x 1 =
50% of total cover: 27.		FACW species x 2 =
Sapling/Shrub Stratum (Plpt size:)		FAC species x 3 =
1. Number Ditoka	25 . (	FACU species x 4 =
	$22$ $\sqrt{-00}$	VUPL species         x 5 =
2 Chetans lauritalia	25 V FACIL	Column Totals:         (A)         (B)
3		(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		$\square$ 3 - Prevalence Index is <3.0 <sup>1</sup>
	50 = Total Cover	
50% of total cover: $25$	20% of total cover: 1D	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)		
1. Ericenthes aizmniec	20 V FAON	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2 Caron infumbscen s	5 FACK	
		Definitions of Four Vegetation Strata:
3. Knynchospera cephalantha		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
	10 V PACI	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		
11		Woody vine – All woody vines greater than 3.28 ft in height.
12		neight.
	HO = Total Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size:) (	20% of total cover:	
1. Smiller motion de bits	ID I Enc	
· struct vorunderolk	<u> </u>	-
2.		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover: _5	_ 20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations below	/).	Lunnet

SOIL

WNAHOOGF

Sampling Point: \_\_\_\_

Profile Desc	ription: (Describe to	o the depth r	needed to docur	nent the i	ndicator	or confirm	n the absence of ind	icators.)	
Depth	Matrix			x Features			<b>-</b> .	~ .	
$\frac{(inches)}{\Delta}$	<u>Color (moist)</u>	%	Color (moist)		_Type'	Loc <sup>2</sup>	<u>Texture</u>	Remarks	
$\frac{D}{O}$	104R311						Lotm		
<u> 7. 16</u>	<u>104R4[]</u>	10	YR416	75	_ <u>C</u> _	<u>in</u>	SCL_		
							-		
				•	<u></u>				
				<u> </u>			<u> </u>		
						<u> </u>			
	oncentration, D=Deple					ains.		ore Lining, M=Matrix.	
	ndicators: (Applica	ble to all LR	_				<b></b>	oblematic Hydric So	bils':
Histosol	(A1) ipedon (A2)		Polyvalue Be				· • • • •		
Black Hi		1	Thin Dark Su Loamy Muck				2 cm Muck (A	tic (F18) <b>(outside ML</b>	RA 150A B)
	n Sulfide (A4)		Loamy Gleye	-		,		odplain Soils (F19) (L	
	Layers (A5)	Ž	Depleted Ma		,			right Loamy Soils (F2	
	Bodies (A6) (LRR P,		Redox Dark				(MLRA 153		
	cky Mineral (A7) <b>(LRI</b> esence (A8) <b>(LRR U)</b>		Depleted Da				Red Parent N	• •	
	ck (A9) (LRR P, T)	-	Redox Depre		5)			Dark Surface (TF12) n in Remarks)	
	Below Dark Surface	(A11)	Depleted Oc		(MLRA 1	51)		n in itematics)	
Thick Da	irk Surface (A12)	Ì	,Iron-Mangan	ese Masse	es (F12) (	LRR O, P,	T) <sup>3</sup> Indicators of	of hydrophytic vegetat	tion and
	airie Redox (A16) <b>(M</b>					, U)		drology must be pres	
	lucky Mineral (S1) (LI	RRO,S)	Delta Ochric					turbed or problematic	<b>.</b> .
	leyed Matrix (S4) edox (S5)	J	Reduced Ver						
	Matrix (S6)	-	Piedmont Flo	•	• •	•	A 149A, 153C, 153D	<b>`</b>	
	face (S7) (LRR P, S,	T, U)		ingin Loui	ny 0013 (	20) (	, 1407, 1000, 1000	)	
	ayer (if observed):						T		
Туре:			_					× /	
Depth (ind	ches):		-				Hydric Soil Prese	nt? Yes	No
Remarks:							.1		

wnah006f\_w



Wetland data point wnah006f\_w facing east



Wetland data point wnah006f\_w facing south

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/C	County: Dash Sampling Date: 7/23/19
Applicant/Owner: <u>DDM IN 1019</u>	State: Sampling Point:
Investigator(s): DDWEST Section	
Landform (hillslope, terrace, etc.): <u>Hill Slope</u> Local	relief (concave, convex, none): <u>Convex</u> Slope (%): <u>7-3</u>
Subregion (LRR or MLRA):	51,533 Long: 177 501 18.359 Datum:
Soil Map Unit Name:	NWI classification; NONE
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       O       O	Is the Sampled Area within a Wetland? Yes No
Wot all the	porrameters present
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of hus an united)
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	t U) Drainage Patterns (B10)
Saturation (A3)     Hydrogen Sulfide Odor (C       Water Marks (B1)     Oxidized Rhizospheres all	
Water Marks (B1)       Oxidized Rhizospheres al         Sediment Deposits (B2)       Presence of Reduced Iror	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks	s) 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): Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	
(includes capillary inlige)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	ious inspections), if available:
Remarks:	
Wotland hydroslogy ind	icaters are not present

WMA1+ 006 \_\_ U Sampling Point: \_\_\_\_\_ Sampling Point: \_

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50 )		Species?		Number of Dominant Species
1. Rugrune nigors	175		FAC	That Are OBL, FACW, or FAC:
2. Pinuc teeds	10		FAL	
3. Crawdumbar Styley Aug	<u> </u>		FAC	Total Number of Dominant
	<u> </u>	<u> </u>	FAC	Species Across All Strata: (B)
4. Ace rubrum	$\geq$		PAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6				
7				Prevalence index worksheet:
8	<u></u>			Total % Cover of: Multiply by:
	TOD			OBL species x 1 =
50		= Total Cov		FACW species x 2 =
50% of total cover: <u>50</u>	20% of	total cover	$-\frac{10}{10}$	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)		/		
1. Oxydendyrun arbureum			FACU	FACU species x 4 =
2. Querans pignes	10	$\checkmark$	FAC	UPL species x 5 =
3				Column Totals: (A) (B)
			<u> </u>	
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8		<u></u>		☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	15	= Total Cov	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:				
an in	20/001			
Herb Stratum (Plot size:)	20		FALU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	30_	~		be present, unless disturbed or problematic.
2. Cleatherer alnitelia			FACW	Definitions of Four Vegetation Strata:
3				Tree Mondy plants evaluating vince 2 in (7.6 cm) or
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
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				Manducting Alburghusing another than 2.00.4 in
11				Woody vine – All woody vines greater than 3.28 ft in height.
				noight.
12	25			
		= Total Cov	~	
50% of total cover:	⊇ 20% of	total cover:	·	
Woody Vine Stratum (Plot size:)	1			
1. Smilax potenditolia	$-\nu$	$\sim$	FAC	
2				
3.				
A		<del>-</del>	·	
0	1-		<u> </u>	Hydrophytic
,	0	= Total Cov	er	Vegetation Van
50% of total cover:	20% of	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below	N).			
	•			

001	S	0	I	L
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WNAHOO \_\_\_\_

	ent the indic	ator or confirr		findicators)
			n the absence o	n maicators.)
(incheo) $(classical)$ $(classical)$	Features	1 2		<b>_</b>
(inches) Color (moist) % Color (moist)	Тү	pe <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
<u>D-2 104R 9/2</u>			56	
2-8 10412 3/3			56	
Q-16 IDYR %			SL.	
		······		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS		d Grains.		PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless other	•			or Problematic Hydric Soils <sup>3</sup> :
		8) (LRR S, T, I	J) <u> </u>	uck (A9) <b>(LRR O)</b>
Histic Epipedon (A2)				uck (A10) <b>(LRR S)</b>
Black Histic (A3)		(LRR O)		d Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	• •			nt Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matr	. ,			ous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)     Redox Dark S     5 cm Mucky Mineral (A7) (LRR P, T, U)     Depleted Dark	• •			A 153B) ent Material (TF2)
Muck Presence (A8) (LRR U)				allow Dark Surface (TF12)
□ 1 cm Muck (A9) (LRR P, T) □ Marí (F10) (LR	• •			Explain in Remarks)
Depleted Below Dark Surface (A11)		RA 151)		
	• • •	12) (LRR O, P,	T) <sup>3</sup> Indica	tors of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	•			ind hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (	• • •			s disturbed or problematic.
		A 150A, 150B)		
Saridy Redox (S5)	dplain Soils (I	F19) (MLRA 14	49A)	
	ight Loamy So	oils (F20) <b>(MLF</b>	RA 149A, 153C,	153D)
Dark Surface (S7) (LRR P, S, T, U)				
Restrictive Layer (if observed):				
Туре:				
Depth (inches):			Hydric Soil F	resent? Yes No
Remarks:				
	1		1	,
In along to the Dia			1	
Hydric Soil indic	ators.	Che	not k	present
Hydric Soil indic.	a fors	Che	not p	aresent
Hydric Spil indic	afors	Che	not p	aresent
Hydric Soil indic	ators	G/L	not p	present
Hydric Soil indic.	ators	Ch'e	not p	present
Hydric Spil indic	a-fors	GE	not p	present
Hydric Spil indic	enfors	Ch l	not p	arcsent
Hydric Spil indic	enfors	Ch l	not p	arcsent
Hydric Spil indic.	enfors	Ch l	net p	aresent
Hydric Soil indic.	e-fors	Ch' t	net p	aresent
Hydric Soil indic.	e-fors	Ch' t	not p	aresent
Hydric Soil indic.	enfors	Ch' t	not p	aresent
Hydric Soil indic	enfors	G/L	net p	aresent
Hydric Soil indic	enfors	G/L	net p	mesent
Hydric Soil indic	en for s	G/L	not p	mesent
Hydric Soil indic	en for s	G/L	not p	mesent
Hydric Spil indic	enfors	G/L	not p	mesent
Hydric Spil indic	en for s	G/L	not p	mesent
Hydric Spil indic	en for s	G/L	not p	mesent
Hydric Spil indic	en for s	Gle	not p	mesent
Hydric Spil indic	en for s	Gle	not p	mesent
Hydric Spil indic	en for s	Gle	not p	mesent

wnah006\_u



Upland data point wnah006\_u facing east



Upland data point wnah006\_u facing north

## wnah006 soils



Wetland/upland soils

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

Project/Site:City/	County:
Applicant/Owner: Domnion	County: <u>NASA</u> Sampling Date: <u>7-23-14</u> State: <u>NZ</u> Sampling Point: <u>WNAH</u> WSF_W
Investigator(s): PD WEST Section	ion, Township, Range:
	I relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA):	'41.175" Long: 77°50'26.516 Datum:
Soil Map Unit Name: Right	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	
	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes 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)       High Water Table (A2)     Marl Deposits (B15) (LRE)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)       Marl Deposits (B15) (LRF         Saturation (A3)       Hydrogen Sulfide Odor (0	
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
│	
Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No 🔀 Depth (inches):	
Water Table Present?     Yes No Depth (inches):       Saturation Present?     Yes No Depth (inches):       (includes capillary fringe)     Yes No	Wetland Hydrology Present? Yes 🔨 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	
Remarks:	$\wedge$
Hydrolozy pre	524
	315-1 f

Sampling Point:

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

Tree Stratum (Plot size:)		Dominant		Dominance Test worksheet:
	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Quereus AigrA	10	/	FAC	
2. Hor rubriem	20	$\overline{}$	FAC	That Are OBL, FACW, or FAC: (A)
			- Til	Total Number of Dominant
3. Liven Combar Stymaitha	10		FAC	
4. TYox opreg	IN	/	FAC	Species Across All Strata: (B)
5. Linodenchon talipitera	-45-			Percent of Dominant Species
	<u> 20</u>	<u>_v</u>	HALL	
6			•	That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	915	- Total Oak		OBL species x 1 =
110		= Total Cov		
50% of total cover: $45$	20% of	total cover	:10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:		/	r	FAC species x 3 =
1. Liquidambor styracither	Un	. /	KAI	FACU species x 4 =
" Superior Stylitecture	10	- 4	THE	
2. Vaccinium cotymbosum	15		EACH	UPL species x 5 =
3		~	V	Column Totals: (A) (B)
				(0)
4				Prevalence Index - D/A -
5	_			Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X a b t a b
8			······	2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov	er	
50% of total cover: <u>27.5</u>	200/ 05	total any any	11	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Horb Stratum (Distained	20% 01	total cover:	4	
Herb Stratum (Plot size:)	1.34			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Carex intumescens	10	$\mathbf{v}_{\perp}$	FACIN	be present, unless disturbed or problematic.
	- <u>~</u>			
2. Magnotico VIrcumana	<u> </u>		FACW	Definitions of Four Vegetation Strata:
30				
4.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				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) tail.
8			1	
		-	[	Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11.				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	15 -	Total Cove		
7,	<b>M</b>		7	
50% of total cover: _/·5	20% of t	otal cover:		
Woody Vine Stratum (Plot size;)			FAC	
1. Smilar sotring 1. P. Tre.	10	1/		
1 the state -			8	
2. Unis rotanelitolia	$\overline{\mathcal{O}}$	$\checkmark$	FAC	
3			1	
A				
·				
5	_			
	20 -			Hydrophytic
()		Total Cove	r) /	Vegetation X
50% of total cover: $LO$	_ 20% of to	otal cover:	4	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations below				
(	<i>,</i> .			
				1

# WNAHOOSF-W

SOIL		Sampling Point:
Profile Description: (Describe to the dep	oth needed to document the indicator or confirm	the absence of indicators )
Deptn <u>Matrix</u>	Redox Features	
D-7 (DYR 3/1) %	<u>Color (moist) % Type<sup>1</sup> Loc<sup>2</sup></u>	Texture Remarks
		SARdy Stom
<u>1-11 104R5/2</u> 11-16+104R5/2		Skondytonm
<u>11-16+104K5/2</u>	LOYR4162CM	SCU
<sup>1</sup> Type: C=Concentration, D=Depletion, RM:	=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U	) 1 cm Muck (A9) (LRR O)
Black Histic (A3)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,B) 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) 5 cm Mucky Mineral (A7) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
Muck Presence (A8) (LRR U)	Depleted Dark Surface (F7) Redox Depressions (F8)	└── Red Parent Material (TF2) └── Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Ochric (F11) (MLRA 151)	
Coast Prairie Redox (A16) (MLRA 150A	Iron-Manganese Masses (F12) (LRR O, P,	, , , ,
Sandy Mucky Mineral (S1) (LRR O, S)	M Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	9A)
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
,		
$\int \int dx dx$	$\mathbf{N}$	
Acolor	2 Stall Dags	A
Gen	- and preser	
	(	

wnah005f\_w



Wetland data point wnah005f\_w facing east



Wetland data point wnah005f\_w facing south

WETLAND DETERMINATION DATA	FORM – Atlantic a	and Gulf Coastal P	lain Region
1000			_ Sampling Date:7-23-14
Applicant/Owner: DOMINION		State: 11C	_ Sampling Point: <u>wnah005</u> u
Investigator(s): DPWEST	Section, Township, Rar	nge:	
Landform (hillslope, terrace, etc.):	Local relief (concave o	00vex_none);	Slong (9/): 1
Subregion (LRR or MLRA):	5' 40,405" I	ong: 17/2° 50'27	Slope (%): /79''' Datum:
Soil Map Unit Name: Rains		NWI classifi	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔀 No	/If no, explain in l	
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pro-		eded, explain any answ	present? Yes <u>&gt;</u> No
	•		
SUMMARY OF FINDINGS – Attach site map showing	sampling point ic	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled	Area	
Hydric Soil Present?     Yes     No     X       Wetland Hydrology Present?     Yes     No     X	within a Wetlan		No
Remarks:	<u>_</u>		
12 l OR H		-A	A
Not all the	l porrame	uns pres	ent
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)     Aquatic Fauna (B13)       High Water Table (A2)     Marl Deposits (B15)			getated Concave Surface (B8)
		Drainage Pa	1
	aor (C1) eres along Living Roots (	Moss Trim L	
Sediment Deposits (B2)		Crayfish Bur	Water Table (C2)
Drift Deposits (B3)	ion in Tilled Soils (C6)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Re ☐ Inundation Visible on Aerial Imagery (B7)	emarks)	🔲 Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)		FAC-Neutral	
Field Observations:			noss (D8) <b>(LRR T, U)</b>
Surface Water Present? Yes No X Depth (inches):			
Water Table Present? Yes No X Depth (inches):			
Saturation Present? Yes No _X Depth (inches): (includes capillary fringe)	: Wetl	and Hydrology Presen	t? YesNo_X
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections),	if available:	······································
	,		
Remarks:		·····	
No verland hydrology	- i- Pic -	Lon cre	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1) narcsi		Fresen

WNAHOOSLU Sampling Point:

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

Tree Stratum (Plot size:)	Absolute	Dominant Indicate	Dominance Test worksheet:
		Species? Statu	S Number of Dominant Species
2. fines tanda	<u> </u>	<i>FA</i>	That Are OBL, FACW, or FAC:
3. Lopidendron Julip, forg			Total Number of Deminant
	12_	FAC	□ Species Across All Strata:(B)
	25	<u> </u>	
5			<ul> <li>Percent of Dominant Species</li> <li>That Are OBL, FACW, or FAC:</li> </ul>
6			
7			Prevalence Index worksheet:
8			Total % Cover of: Multiply by:
	<u>55</u> -	= Total Cover	OBL species x 1 =
50% of total cover: <u>27</u> ,	5 20% of	total cover: 1 (	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)			FAC species x 3 =
1. Ox dendrum abover	10	V FAC	
2. Ciquidenber styractura	3	FAC	
3. Quenes alsa	5	FACI	
4. Myma centera	1~	FAC	
			Prevalence Index = B/A =
6			<ul> <li>Hydrophytic Vegetation Indicators:</li> </ul>
7.			- 1 - Rapid Test for Hydrophytic Vegetation
7 8	<u> </u>		- 🔟 2 - Dominance Test is >50%
	76 -		- ☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
FOW attraction is in	==	Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <u>17.5</u> Herb Stratum (Plot size:)	20% of t	otal cover:	-
1. Haching Gtening	140	. Frace	, <sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Lecthera clouble	10	V FACL	be present, unless disturbed or problematic.
2 Clarthand Ginselia	<u> </u>	V FACH	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
1			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 height.
12			Ŭ
_	<u> </u>	Total Cover	
50% of total cover:S		tal cover: <u>3</u>	
Woody Vine Stratum (Plot size:)		,	
1. Smilax cotendifolia	10	V FAC	
2. Ditis rotind Solia	10	V FAC	
3			
4			
5			
	50=1	otal Cover	Hydrophytic Vegetation
50% of total cover: (/O	20% of to	, /	Present? Yes No
Remarks: (If observed, list morphological adaptations below)	_ 20 /0 01 101		
	•		

SOIL

WNAHOOS\$\_u

	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confirm	n the absence of indicators.)
Depth         Matrix         Redox Features           (inches)         Color (moist)         %         Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-15+ 104R4/2	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	J) 1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S)
Black Histic (A3)	Reduced Vertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)     Loamy Gleyed Matrix (F2)       Stratified Layers (A5)     Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)       Depleted Matrix (F3)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	(MLRA 153B) Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)       Image: Mari (F10) (LRR U)         Depleted Below Dark Surface (A11)       Image: Depleted Ochric (F11) (MLRA 151)	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, 1	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A 150B)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149)	
Stripped Matrix (S6)	9A) A 149A, 153C, 153D)
_ Dark Surface (S7) (LRR P, S, T, U)	
estrictive Layer (if observed): Type:	
Depth (inches):	$\checkmark$
Remarks:	Hydric Soil Present? Yes No
	,
Hydric soil indicators are ne	t present
	1 3 - 11

wnah005\_u



Upland data point wnah005\_u facing east



Upland data point wnah005\_u facing north

## wnah005 soils



Wetland/upland soils

#### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nash	Sampling Date: 3/7/2015
Applicant/Owner: Dominion	State: [	
Investigator(s): TP, CR	Section, Township, Range: No PLSS in	
Landform (hillslope, terrace, etc.): drainage way	Local relief (concave, convex, none):	-
Subregion (LRR or MLRA): P	Lat: <u>36.09400565</u> Long: <u>-77.84131436</u>	Datum: WGS 1984
Soil Map Unit Name: Rains fine sandy loam		classification: None
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Yes 🖌 No (If no, exp	lain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumst	ances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain an	y answers in Remarks.)
	a second a second second base of the second	ware to the set out for the set of a

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	レ レ レ	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks:						
PSS wetland in drainage way dominated	by red n	naple,	sweet-bay, and titi.			

Wetland Hydrology Indicate	ors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required;	check all that apply)	Surface Soil Cracks (B6)
<ul> <li>Surface Water (A1)</li> </ul>		True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
<ul> <li>High Water Table (A2)</li> </ul>		Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
<ul> <li>Saturation (A3)</li> </ul>		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 Se	oils (C6) Crayfish Burrows (C8)
<ul> <li>Drift Deposits (B3)</li> </ul>		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 Ae	rial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (E	39)		Microtopographic Relief (D4)
Aquatic Fauna (B13)			✓ FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes 🖌 No	Depth (inches):3	
Water Table Present?		Depth (inches):0	
	Yes 🖌 No _		Wetland Hydrology Present? Yes <u>✓</u> No
Water Table Present? Saturation Present? (includes capillary fringe)	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe)	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No _ Yes 🖌 No _	Depth (inches): 0 Depth (inches): 0	, , ,

HYDROLOGY

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

Sampling Point: wnab102s\_w

	Abso	olute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% (	Cover	Species?		Number of Dominant Species
1. Acer rubrum		5	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2. Quercus nigra		5	Yes	FAC	
					Total Number of Dominant
3					Species Across All Strata:4 (B)
4					
					Percent of Dominant Species
5					That Are OBL, FACW, or FAC: (A/B)
6			. <u> </u>		Prevalence Index worksheet:
7					
	1	10	= Total Cove	<u>e</u> r	Total % Cover of: Multiply by:
50% of total cover:	5 2		total cover:	2	OBL species 0 x 1 = 0
15	Z	0 /0 01	total cover.		FACW species $15$ x 2 = $30$
Sapling/Shrub Stratum (Plot size:	_)				
1. Liquidambar styraciflua	1	10	Yes	FAC	FAC species $\underline{\qquad}$ x 3 = $\underline{\qquad}$
<sub>2.</sub> Magnolia virginiana	1	10	Yes	FACW	FACU species x 4 =0
3. Acer rubrum		5	No	FAC	UPL species $0   x 5 = 0$
		5	No	FACW	40 105
4. Cyrilla racemiflora		5	INO	FACW	Column Totals: (A) (B)
5					Prevalence Index = $B/A = 2.62$
6					Hydrophytic Vegetation Indicators:
7					
8					1 - Rapid Test for Hydrophytic Vegetation
			·		✓ 2 - Dominance Test is >50%
9			<u> </u>		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		30 .	= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:	15 2	0% of	total cover:	6	
Herb Stratum (Plot size: 5 )					data in Remarks or on a separate sheet)
					Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1			. <u> </u>		
2					1
3					<sup>1</sup> Indicators of hydric soil and wetland hydrology must
					be present, unless disturbed or problematic.
4					Definitions of Four Vegetation Strata:
5					
6					<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
					more in diameter at breast height (DBH), regardless of
7					height.
8					Sapling/Shrub – Woody plants, excluding vines, less
9					than 3 in. DBH and greater than or equal to 3.28 ft (1
10.					m) tall.
					,
11			·		Herb – All herbaceous (non-woody) plants, regardless
			= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:	0 2	0% of	total cover:	0	
Woody Vine Stratum (Plot size: 30	)				Woody vine – All woody vines greater than 3.28 ft in
	/				height.
1					
2					
3					
4					
			·		Hydrophytic
5					Vegetation
		0	= Total Cove	er	Present? Yes 🖌 No
50% of total cover:	0 2	0% of	total cover:	0	
Remarks: (Include photo numbers here or on a sep	alate sheet.	)			

Profile Des	cription: (Describe te	o the de	pth needed to docur	nent the	indicator of	or confirm	n the absence	of indicators.)
Depth	Matrix Redox Features							
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 3/2	100					SL	
5-12	10YR 5/1	95	10YR 4/6	5	С	М	SCL	
	· · · · · · · · · · · · · · · · · · ·				. <u> </u>	. <u></u>		
	·				·	<u> </u>		
	·					·		
					·			
	· · · · · · · · · · · · · · · · · · ·					·		
	·					·		
					. <u> </u>			
<sup>1</sup> Type: C=C	Concentration, D=Deple	etion RM	1=Reduced Matrix MS	S=Maske	d Sand Gra	ains	<sup>2</sup> Location: PI	L=Pore Lining, M=Matrix.
	Indicators:							ators for Problematic Hydric Soils <sup>3</sup> :
Histoso	l (A1)		Dark Surface	(S7)			2	cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be	· · ·	ace (S8) <b>(M</b>	ILRA 147,		oast Prairie Redox (A16)
Black H	listic (A3)		Thin Dark Su	rface (S9	) (MLRA 1	47, 148)		(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Pi	iedmont Floodplain Soils (F19)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)				(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark	`	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar				0	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre		,			
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		ses (F12) <b>(I</b>	_RR N,		
	A 147, 148)		MLRA 13	•		6 400)	310 d	instana of hudronhutia vegetation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					icators of hydrophytic vegetation and tland hydrology must be present,
	d Matrix (S6)		Red Parent N					ess disturbed or problematic.
	Layer (if observed):			iatoriai (i		<b></b>		
Type:								
Depth (in	(choc):						Hydric Soil	Present? Yes 🖌 No
Remarks:								



Photo 1 Wetland data point wnab102s\_w facing east



Photo 2 Wetland data point wnab102s\_w facing south



Photo 3 Wetland data point wnab102s\_w facing southwest

#### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nash		Sampling Date: 3/7/2015		
Applicant/Owner: Dominion		State: NC	_ Sampling Point: wnab102_u		
Investigator(s): TP, CR	Section, Township,	Range: No PLSS in this area			
Landform (hillslope, terrace, etc.): hill slope		onvex, none): <u>none</u>	Slope (%): <u>2</u>		
Subregion (LRR or MLRA): P Lat: 3	6.09414665 L	ong: -77.84118348	Datum: WGS 1984		
Soil Map Unit Name: Rains fine sandy loam		NWI classifica	tion: None		
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes No	o (If no, explain in Re	marks.)		
Are Vegetation, Soil, or Hydrology	_significantly disturbed? A	re "Normal Circumstances" pro	esent? 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?	Yes Yes Yes _✔	No No No	Is the Sampled Area 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) 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 Sc	bils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No <u>r</u> Depth (inches):	
Water Table Present? Yes No <u>/</u> Depth (inches):	
Saturation Present? Yes <u>&lt;</u> No <u>Depth (inches)</u> : <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
Please note, saturation is present, but it is outside of the growing season. Rain in last 48	3 hours.

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

Sampling Point: wnab102\_u

	Absolute	• Dominant Ir	diaatar	Deminence Test werkehest:
Tree Stratum (Plot size: <u>30</u> )		Dominant Ir Species?		Dominance Test worksheet:
1 Pinus taeda	30	Yes	FAC	Number of Dominant Species
••	10			That Are OBL, FACW, or FAC:4 (A)
2. Quercus alba	10	Yes	FACU	Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6				
				Prevalence Index worksheet:
7	40			Total % Cover of: Multiply by:
		= Total Cover		
50% of total cover: 20	20% of	total cover:	8	
Sapling/Shrub Stratum (Plot size: 15 )				FACW species $0   x 2 = 0$
1 Vaccinium stamineum	10	Yes	FACU	FAC species $55$ x 3 = $165$
1				20 80
2. Liquidambar styraciflua	10	Yes	FAC	FACU species $x 4 = 0$
3. Acer rubrum	10	Yes	FAC	
				Column Totals: $75$ (A) $245$ (B)
4				
5				Prevalence Index = $B/A = 3.26$
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				
0	30			3 - Prevalence Index is $\leq 3.0^1$
15		= Total Cover	6	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:15	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 )				
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1				
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				<b>Tree</b> – 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		······		
11				Herb – All herbaceous (non-woody) plants, regardless
	0	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 2.5		total cover:	1	
20				Woody vine – All woody vines greater than 3.28 ft in
	_			height.
1. Vitis rotundifolia	5	Yes	FAC	
2.				
3				
4				Hydrophytic
5				Vegetation
	_			Present? Yes <u>V</u> No
0.5		= Total Cover	1	
50% of total cover: 2.5	20% of	total cover:	1	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	cription: (Describe to	the dep	th needed to docun	nent the i	ndicator	or confirm	the absence	of indicato	ors.)	
Depth	Matrix		Redo							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-6	10YR 3/2	100					SL			
6-12	10YR 4/3	85	10YR 5/6	15	С	М	SCL			
<sup>1</sup> Type: C=C	oncentration, D=Deple	tion, RM	=Reduced Matrix, MS	S=Masked	I Sand Gra	ains.	<sup>2</sup> Location: P	L=Pore Linii	ng, M=Matrix	
Hydric Soil		,	,							ydric Soils <sup>3</sup> :
Black H Hydroge Stratified 2 cm Mu Deplete Thick D	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) <b>(LRR N)</b> d Below Dark Surface ark Surface (A12)	. ,	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre	low Surfa rface (S9) d Matrix ( rrix (F3) Surface (F k Surface ssions (F8)	(MLRA 1 F2) (F7) 8)	47, 148)	148) C	Coast Prairie (MLRA 14 Piedmont Flo (MLRA 13 Very Shallow	odplain Soils	) s (F19) e (TF12)
	Aucky Mineral (S1) (LF	RR N,	Iron-Mangane		es (F12) <b>(I</b>	_RR N,				
	A 147, 148)		MLRA 130			C 400)	3	Kantona of hi	وروالي المراجع والمراجع	antation and
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122)							<ul> <li><sup>3</sup>Indicators of hydrophytic vegetation and</li> <li>wetland hydrology must be present,</li> </ul>			
	Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14 Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 14						, , , , , , , , , , , , , , , , , , , ,			
	Layer (if observed):			iateriai (F		<b>h</b> 127, 147	j un			
Type:										
Depth (in	ches):						Hydric Soil	Present?	Yes	No 🖌
Remarks:	/ -						.,			



**Photo 1** Upland data point wnab102\_u facing east



Photo 2 Upland data point wnab102\_u facing north



Photo 3 Upland data point wnab102\_u facing northeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site:
Investigator(s):DLDDESTSection Township Range:
Landform (hillslope, terrace, etc.): de pression Local relief (concave, convex, none): CATA CHANG Stone (4(1))
Soil Map Unit Name: RAMSNVI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>Yes</u> No <u>Is the Sampled Area</u> Hydric Soil Present? Yes <u>Yes</u> No <u>Wetland Hydrology Present?</u> Yes <u>Yes</u> <u>No No</u> Remarks: Oburbus depressioned ponded wetland/forested
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) Marl Deposits (B15) (LRR U) Sofuration (A2)
Water Marks (B1)
Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)
Drift Deposits (B3)
Alga Mat or Crust (B4) Thin Muck Surface (C7)
Water-Stained Leaves (B9)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
(includes capillary fringe) Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hydrohogy present
Je Justice

WNAHOO48-11 Sampling Point:

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

Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: <u>% Cover Species? Status</u> Number of Dominant Species F 1. Quercus Konstelves 50 EACIA That Are OBL, FACW, or FAC: (A) 2 NUSSA DIFLOTA NR Total Number of Dominant 3. Species Across All Strata: (B) 4 Percent of Dominant Species 5. That Are OBL, FACW, or FAC: 6. Prevalence Index worksheet: 7. Total % Cover of: Multiply by: 8 \_\_\_\_\_ x 1 = \_\_\_\_\_ OBL species = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_ 50% of total cover: 20% of total cover: FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_ Sapling/Shrub Stratum (Plot size: FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ 1 JUORIN UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ 2 Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) KR 3 ITYC I cer rubrun 4 Prevalence Index = B/A = 5. Hydrophytic Vegetation Indicators: 6. 1 - Rapid Test for Hydrophytic Vegetation 7.  $\square$ 2 - Dominance Test is >50% 8 3 - Prevalence Index is ≤3.0<sup>1</sup> H 🕼 = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: LD20% of total cover: Herb Stratum (Plot size: \_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1.\_ 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 height. 5. \_\_\_\_ 6. \_ Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 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. 12. = Total Cover 50% of total cover: 20% of total cover: Woody Vine, Stratum (Plot size 11+ 1 2 an З. 4. 5 Hydrophytic <u>
 CO</u> = Total Cover -Vegetation Present? 50% of total cover: 20% of total cover: Remarks: (If observed, list morphological adaptations below),

SOIL

WNAH004	, _	14	ņ
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SOIL					Sampling Point:				
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth <u>Matrix</u>		x Feature							
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Remarks				
$\frac{0-12}{10}$				·	lobm				
12-16 10 YR 3/1					Dam				
16-20 10YR 5/2	104R 4/6	2	<u> </u>	M	<u>SCL</u>				
				·					
					21				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all				rains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :				
Histosol (A1)	Polyvalue Be			RRSTI					
Histic Epipedon (A2)	Thin Dark Su				2 cm Muck (A10) (LRR S)				
Black Histic (A3)	Loamy Mucky	•			Reduced Vertic (F18) (outside MLRA 150A,B)				
Hydrogen Sulfide (A4)	Loamy Gleye		(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)				
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)	Depleted Mat	• •			L Anomalous Bright Loamy Soils (F20)				
5 cm Mucky Mineral (A7) (LRR P, T, U)	Redox Dark S     Depleted Dar				Red Parent Material (TF2)				
Muck Presence (A8) (LRR U)	Redox Depre		• •		Very Shallow Dark Surface (TF12)				
1 cm Muck (A9) (LRR P, T)	🔲 Marl (F10) (L	•	,		Other (Explain in Remarks)				
Depleted Below Dark Surface (A11)	Depleted Och								
Thick Dark Surface (A12)	Iron-Mangane								
Coast Prairie Redox (A16) (MLRA 150A Sandy Mucky Mineral (S1) (LRR O, S)	Umbric Surfa				wetland hydrology must be present, unless disturbed or problematic.				
Sandy Gleyed Matrix (S4)	Reduced Ver	. , .			•				
Sandy Redox (S5)	Piedmont Flo	• •	•		·				
Stripped Matrix (S6)	Anomalous B	right Loa	my Soils	(F20) <b>(MLR</b>	RA 149A, 153C, 153D)				
Dark Surface (S7) (LRR P, S, T, U)									
Restrictive Layer (if observed):									
Туре:									
Depth (inches):					Hydric Soil Present? Yes No				
Remarks:									
٨									
	0 > c	~	$\cap$		$\cap$ –				
1940	yours 5	jor	とう	res	ent				
			Ń						

wnah004f\_w



Wetland data point wnah004f\_w facing east



Wetland data point wnah004f\_w facing south

WETLAND DETERMINATION DATA	FORM – Atlan	tic and Gulf C	Coastal Plain	Region AHOOH-U
		<u> </u>		impling Date:
Applicant/Owner: <u>MOM MOM</u>		State	: NC sa	mpling Point: 7/23/U
Investigator(s):	Section, Townshi	p, Range:		р Х. А. А́
Landform (hillslope, terrace, etc.): <u>Slaper</u>	Local relief (conca	ave, convex, none	): Con	Slope (%): 🔨
Subregion (LRR or MLRA): Lat: 36	05 33,2	38 Long: 77"	50' 32.	Slope (%): <u>~</u> 2_ <u>55 <sup>(†)</sup></u> Datum:
Soil Map Unit Name:			NWI classificatio	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes			
Are Vegetation, Soil, or Hydrology significantly				ent? Yes <u></u> No
Are Vegetation, Soil, or Hydrology naturally pr		(If needed, explai		
SUMMARY OF FINDINGS – Attach site map showing				
	y sampling po	int locations,	transects, ir	nportant features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No		npled Area /etland?	Yes	No
		Charles Di	n - n	
Remarks: Wot all three F	201rame	ses pr	esent	
HYDROLOGY				
Wetland Hydrology Indicators:		Sooo	ndan Indiantara	(minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)			Surface Soil Cra	(minimum of two required)
Surface Water (A1)				ted Concave Surface (B8)
High Water Table (A2)			Drainage Patterr	
Saturation (A3)	Odor (C1)		Moss Trim Lines	(B16)
Water Marks (B1)		Roots (C3) 🔲 I	Dry-Season Wat	er Table (C2)
Sediment Deposits (B2)			Crayfish Burrows	
Drift Deposits (B3)				e on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	<b>、</b>		Geomorphic Pos	
Inundation Visible on Aerial Imagery (B7)	(cillarks)		Shallow Aquitard FAC-Neutral Tes	
Water-Stained Leaves (B9)				(D8) (LRR T, U)
Field Observations:	······			
Surface Water Present? Yes No Depth (inches				
Water Table Present? Yes No Depth (inches	;):			1
Saturation Present? Yes No 2 Depth (inches)	):	Wetland Hydro	logy Present?	Yes No <u>&gt;&gt;</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspec	tions), if available		
Remarks:				······································
Wetlande hydrology,	'adicate	ins are	: not	present
••••••••••••••••••••••••••••••••••••••				

UNAHODY-U

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

Sampling Point:

Tree Stratum (Plater ZA)		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species		Number of Dominant Species
1. fine pede			<u>PAC</u>	That Are OBL, FACW, or FAC:((A)
2. Candember Styrec. Ana	10		FAC	Total Number of Deminent
3 Ley oper on	10		FAC	Total Number of Dominant Species Across All Strata:
4. Ace Kubam	10	$\overline{\nabla}$	FAL	
5	-			Percent of Dominant Species / C
6.				That Are OBL, FACW, or FAC: (A/B)
			·	Prevalence Index worksheet:
7				
8			·····	
_		= Total Cov	ver	OBL species x 1 =
50% of total cover: <u>30</u>	) 20% of	total cover	:12	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)				FAC species x 3 =
1. Oxydendryn arboreum	30	$\sqrt{2}$	FACU	FACU species x 4 =
	\$10		FALV	UPL species x 5 =
				Column Totals: (A) (B)
	· ->		FAC	(A)(B)
4. Acer mbrun	<u> </u>		<u>FAC</u>	Prevalence Index = B/A =
5. They opace	10	<u> </u>	FAC	Hydrophytic Vegetation Indicators:
6/	•			
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	10			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7		= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <u>3</u>	<u> </u>	total cover:	12	
Herb Stratum (Plot size:)		(		<sup>1</sup> Indicators of hudric and and the dama to be the
1. Cheethera almitelia	3	$\mathcal{V}$	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Vaccinium steminium	10	1/	FACU	-
3. Pteridium aqualinum		$\rightarrow$		Definitions of Four Vegetation Strata:
	$\rightarrow$	$\underline{\nabla}$	FACU	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	<u> </u>			Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				-
	20=	Total Cove		
50% of total cover:		total cover:		
Woody Vine Stratum (Plot size:)	20% 011			
1. Smilge Atundiclia	<		For	
	<u> </u>	<u> </u>	FAC	
2				
3	<u></u>			
4				
5				
	a -			Hydrophytic
		Total Cove	er	Vegetation Present? Yes <u>No</u>
50% of total cover: 2/2		otal cover:		
Remarks: (If observed, list morphological adaptations below	v).			

WNAH OOLU

SOIL	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confi	irm the absence of indicators.)
Depth <u>Matrix</u> Redox Features	
(inches) <u>Color (moist)</u> % <u>Color (moist)</u> % <u>Type</u> <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
<u>5 VI 0 184/8</u>	SL
4-151 4.546/4	sl
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	2.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	
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)       Stratified Layers (A5)     Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	└ Anomalous Bright Loamy Soils (F20)
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)
Image: Constraint of the second state of the second sta	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, F	P, T) <sup>3</sup> 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)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150E         Sandy Redox (S5)       Piedmont Floodplain Soils (E19) (MLRA 150A, 150E	
Supped Matrix (Sb)	PA 140A 4520 4520
Image: Stripped Matrix (S6)       Image: Anomalous Bright Loamy Soils (F20) (ML         Image: Dark Surface (S7) (LRR P, S, T, U)	RA 149A, 153C, 153D)
	RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed): Type: Depth (inches):	RA 149A, 153C, 153D) Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No

wnah004\_u



Upland data point wnah004\_u facing east



Upland data point wnah004\_u facing north

# wnah004 soils



Wetland/upland soils

#### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nash	1	Sampling Date: 3/7/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: <sup>wnab101f_w</sup>
Investigator(s): TP, CR	Section, Township	o, Range: No PLSS in this area	
Landform (hillslope, terrace, etc.): drainage way		convex, none): <u>concave</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P La	at: <u>36.09009644</u>	Long: <u>-77.84490545</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro fine sandy loam, 0 to	2 percent slopes	NWI classific	cation: None
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes I	No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS Attach aita	man ahawing compling noi	nt locational transacto	important factures ato

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>v</u> Yes <u>v</u> Yes <u>v</u>	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks:					
PFO wetland in drainage way dominated	l by swamp tup	pelo, red maple, swar	np chestnut oak, and titi.		

#### 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 So	oils (C6) Crayfish Burrows (C8)
✓ Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes <u></u>	
Water Table Present? Yes <u>/</u> No Depth (inches): 0	
Saturation Present? Yes <u>V</u> No Depth (inches): 0	Wetland Hydrology Present? Yes <u>✓</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

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

Sampling Point: wnab101f\_w

	Absolute	Dominant Ir	dicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )	<u>% Cover</u>		Status	
Nyssa biflora	15	Yes	FACW	Number of Dominant Species That Are OBL EACW or EAC: $6$ (A)
··	15	Yes		That Are OBL, FACW, or FAC:6 (A)
2. Acer rubrum		Yes	FAC	Total Number of Dominant
<sub>3.</sub> Liquidambar styraciflua	10	Yes	FAC	Species Across All Strata: 6 (B)
4 Nyssa biflora	10	Yes	FACW	
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
/	50			Total % Cover of: Multiply by:
	=	= Total Cover		
50% of total cover: 25	20% of	total cover:	10	OBL species $x = x = x$
Sapling/Shrub Stratum (Plot size: 15 )				FACW species $x = 100$
, Cyrilla racemiflora	10	Yes	FACW	FAC species $\frac{25}{x 3} = \frac{75}{75}$
	10	103	TAON	0
2				FACU species $x 4 = $
3				UPL species $0 \times 5 = 0$
				Column Totals: 75 (A) 175 (B)
4				
5				Prevalence Index = $B/A = 2.33$
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
				✓ 2 - Dominance Test is >50%
9	10			$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
_		= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 5	20% of	total cover:	2	
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)
Arundinaria gigantea	15	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Alanamana giganca</u>	10	165	FACW	
2				1
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
0				more in diameter at breast height (DBH), regardless of
7				height.
8				
9				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	15 _	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.5		total cover:		
	20% 01	iolal cover.		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 )				height.
1				
2				
3				
4				
				Hydrophytic
5	-			Vegetation Present? Yes V No
		= Total Cover		Present? Yes V No
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet )			
Remarks. (include photo numbers here of off a separate s	neet.)			

Profile Des	cription: (Describe t	o the dep	pth needed to docur	nent the	indicator	or confirm	n the absence o	of indicators.)	
Depth	Matrix		Redo	x Feature	s				
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-4	10YR 3/2	100					SL		
4-12	10YR 4/1	95	10YR 4/6	5	С	М	SCL		
	<u> </u>								
						·	·		
	<u> </u>					·			
						·	<u> </u>		
	<u> </u>								
$^{1}$ Type: C-(	Concentration, D=Deple	otion PM	- Roduced Metrix M		d Sond Cr		<sup>2</sup> Location: DL	=Pore Lining, M=Matrix.	
	Indicators:			S=IVIASKE	a Sanu Gia	airis.		ors for Problematic Hydric Soils <sup>3</sup>	
Histoso			Dark Surface	(97)				m Muck (A10) <b>(MLRA 147)</b>	•
	Epipedon (A2)		Polyvalue Be	· · /	ce (S8) (N	II RA 147		ast Prairie Redox (A16)	
	Histic (A3)		Thin Dark Su					(MLRA 147, 148)	
	jen Sulfide (A4)		Loamy Gleye	•	, <b>.</b>	, <b>,</b>		edmont Floodplain Soils (F19)	
	ed Layers (A5)		Depleted Ma		, , ,			(MLRA 136, 147)	
	luck (A10) (LRR N)		Redox Dark	. ,	-6)		Ve	ry Shallow Dark Surface (TF12)	
Deplete	ed Below Dark Surface	(A11)	Depleted Da	rk Surface	e (F7)		Oth	ner (Explain in Remarks)	
Thick E	Dark Surface (A12)		Redox Depre	essions (F	8)				
Sandy	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) <b>(</b>	LRR N,			
	A 147, 148)		MLRA 13						
-	Gleyed Matrix (S4)		Umbric Surfa	. ,	•			ators of hydrophytic vegetation and	I
	Redox (S5)		Piedmont Florence	•	. ,	•	•	and hydrology must be present,	
	d Matrix (S6)		Red Parent N	Material (F	21) <b>(MLR</b>	A 127, 147	7) unle	ss disturbed or problematic.	
Restrictive	Layer (if observed):								
Type:								,	
Depth (ii	nches):						Hydric Soil F	Present? Yes 🥙 No 🔜	_
Remarks:									



Photo 1 Wetland data point wnab101f\_w facing south



Photo 2 Wetland data point wnab101f\_w facing southwest



Photo 3 Wetland data point wnab101f\_w facing west

#### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nash		Sampling Date: 3/7/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: wnab101_u
Investigator(s): TP, CR	Section, Township, R	ange: <u>No PLSS</u> in this are	a
Landform (hillslope, terrace, etc.): hill slope	Local relief (concave, co		Slope (%): <u>2</u>
Subregion (LRR or MLRA): P	Lat: <u>36.09020911</u> Lc	ong: <u>-77.84482186</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro fine sandy loa	m, 0 to 2 percent slopes	NWI classifie	cation: None
Are climatic / hydrologic conditions on the site t	ypical for this time of year? Yes <u> </u> No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrold	gy significantly disturbed? Are	e "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrold	gy naturally problematic? (If r	needed, explain any answe	ers 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?	Yes Yes Yes∕	No No No	Is the Sampled Area 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) Oxidized Rhizospheres on Living F	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 So	ils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>&lt;</u> No <u>Depth</u> (inches): <u>9</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:
Remarks:	
Please note, saturation is present, but it is outside of the growing season. Rain in last 48	hours.

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

Sampling Point: wnab101\_u

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )		Species?	Status	
	20	Yes	FACU	Number of Dominant Species That Are OBL EACW or EAC: $3$ (A)
	15	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
2. Pinus taeda	15	165	FAC	Total Number of Dominant
3				Species Across All Strata: 5 (B)
4		·	·	Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC: 60 (A/B)
6				
				Prevalence Index worksheet:
7	35	·		Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover: 17.5	20% of	total cover:	7	
Sapling/Shrub Stratum (Plot size:15)				FACW species5 x 2 =10
Acer rubrum	5	Yes	FAC	FAC species $20$ x 3 = $60$
••	5	·		FACU species 25 x 4 = 100
2. Ilex opaca	5	Yes	FACU	
3				UPL species x 5 =
				Column Totals: <u>50</u> (A) <u>170</u> (B)
4			·	
5				Prevalence Index = $B/A = $ 3.4
6				
7				Hydrophytic Vegetation Indicators:
			·	1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				
	10	= Total Cove	r	$\_$ 3 - Prevalence Index is $\leq 3.0^1$
50% of total cover: 5			2	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	20% 01	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				
<sub>1.</sub> Arundinaria gigantea	5	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
		·	·	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3		·		be present, unless disturbed or problematic.
4				
			·	Definitions of Four Vegetation Strata:
5		·		<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		·		more in diameter at breast height (DBH), regardless of
7				height.
		·	·	g.m
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	5	·	<u> </u>	Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 2.5	20% of	total cover:	1	Weedware Allowedware restantion 2.00 ft in
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in
,				height.
1				
2		·		
3				
4		·		Hydrophytic
5		·		Vegetation
	0	= Total Cove	r	Present? Yes V No
50% of total cover: 0		total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	cription: (Describe to	o the depth	n needed to docum	nent the in	dicator of	or confirm	the absence of	of indicato	rs.)	
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	10YR 3/1	100					SL			
3-12	10YR 4/3	100					SCL			
	·									
				·						<u> </u>
	oncentration, D=Deple	tion PM-	Poducod Matrix M	-Mackad	Sand Gr	inc	<sup>2</sup> Location: PL:	-Poro Linii	a M-Matrix	
Hydric Soil		$\frac{1}{100}$		S=IVIASKEU	Sanu Gra	1115.				ydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)					(MLRA	-
	pipedon (A2)		Polyvalue Be	· · /	e (S8) <b>(M</b>	LRA 147.			Redox (A16)	
	istic (A3)		Thin Dark Su				·	(MLRA 14	. ,	, ,
	en Sulfide (A4)		Loamy Gleye	. ,	•		Pie	edmont Flo	odplain Soils	s (F19)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)				(MLRA 13	6, 147)	
2 cm Mu	uck (A10) <b>(LRR N)</b>		Redox Dark	Surface (F6	6)			•	Dark Surfac	· ,
	d Below Dark Surface	(A11)	Depleted Dar		· /		Oth	ner (Explai	n in Remarks	s)
	ark Surface (A12)		Redox Depre		,					
	/lucky Mineral (S1) <b>(L</b> l	RR N,	Iron-Mangan		s (F12) <b>(I</b>	_RR N,				
	A 147, 148)		MLRA 13	•			31			and a Constant
-	Gleyed Matrix (S4)		Umbric Surfa					-	drophytic ve	-
	Redox (S5) I Matrix (S6)		Piedmont Flo					•	ogy must be ed or problem	
	Layer (if observed):					~ 127, 147				latic.
Type:										
<u> </u>								)recent?	Vac	No 🖌
Depth (in	cnes):						Hydric Soil F	resent?	Yes	
Remarks:										



**Photo 1** Upland data point wnab101\_u facing east



Photo 2 Upland data point wnab101\_u facing north



Photo 3 Upland data point wnab101\_u facing northeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/County: N736 Sampling Date: 2-23-14
Applicant/Owner: Dominicon State: NC Sampling Point: WNAH003
Landform (hillslope, terrace, etc.): BOHER IANS Local relief (concave, convex, none): CONCAVE Slope (%):
Subregion (LRR or MLRA): Lat: <u>36°05′/8.863</u> ° Long: <u>77°50′47.617</u> ° Datum:
Soil Map Unit Name:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area         Hydric Soil Present?       Yes       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       No       No       No       No         Remarks:       No       No       No       No       No       No       No
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)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dy-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)
Drift Deposits (B3)
Algal Mat or Crust (B4)
Iron Deposits (B5)  Dther (Explain in Remarks)  Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)
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:
Abrubt to rise in topography to adjacent

WNAHOO3f-W

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

Sampling Point:

Trace Other Law (DL to be		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Statist nuarce	25	$\sim$	OBL	- That Are OBL, FACW, or FAC:
2. Quercus lauritalia	10		EWV	
	18-		Trev	Total Number of Dominant
3. Hear million	$\underline{\mathcal{O}}$	V	THC	Species Across All Strata: (B)
4				
<b>-</b>				Percent of Dominant Species /
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	SI	= Total Cov		OBL species x 1 =
		= Total Cov	er	
50% of total cover:	5 20% of	total cover:	IV	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		1		FAC species x 3 =
	10		FILE	FACU species x 4 =
1. Carpines corolindance	10		IR	
2. Salix nicra	15	s.L.	OBL	UPL species x 5 =
	-10		En/	Column Totals: (A) (B)
3. Acor rubrum	ALL.		Inc	
4. Lizud ambra Sturne	tin 10	$\sim$	TAC	Dravalance lades: - D/A -
				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 <sup>1</sup>
	45	= Total Cov		
77				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: $\underline{22}$	20% of	total cover:	<b>/</b>	
Herb Stratum (Plot size:			۲.	Indiantary of hydria pail and wattend hydrology must
	つろ	$\sim$ /	TAG	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Anendinaria Signitica	20	$\rightarrow$	LHCW	be present, unless disturbed or problematic.
2. Signitur monteris	10	$\sim$	PACK	Definitions of Four Vegetation Strata:
3. Attryrun Jolix - fime	K		FAC.	1
			FILLA	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Woodwardize aereolate	x 5		EBL	more in diameter at breast height (DBH), regardless of
5. Microsterin & vinence	20		FA(	height.
				Ŭ
6. Kubus trivally	10		EALW	Sapling/Shrub - Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
8				Herb – All herbaceous (non-woody) plants, regardiess
89				
89				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
8 9 10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
8 9 10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 2 <	70	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 50% of total cover: <u>\$</u>	70		er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 2 <	70	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 50% of total cover: <u>\$</u>	70	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size:) 1 1 <i>Structure</i> (Plot size:)	70	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size:) 1 <u>Yuo dy Vine Stratum</u> (Plot size:) 1 2	70	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size:) 1 1 <i>Structure</i> (Plot size:)	70 20% of 15	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size:) 1 <u>Mue and for the stratum of the strategy</u> ) 1 3	70 20% of 	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8.	70 20% of 	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size:) 1 <u>Mue and for the stratum of the strategy</u> ) 1 3	70 20% of 	  = Total Cov	er , / (	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8.		  = Total Cov	er / 4	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8.	  	= Total Cov total cover:	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8.	  	Total Cov	er    er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

i. mA	4003f
mpling Point:	-w

SOIL			Sampling Point:
Profile Desc	ription: (Describe to the depth	needed to document the indicator or confirm	the absence of indicators.)
Depth	Matrix	Redox Features	,
(inches)	Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-5	IOYR3/1		
NO			LoAm
5-0	104R4/1		Signaly loxin
8-16	OYRSIL		SCI
1			
Type: C=Co	oncentration, D=Depletion, RM=F	educed Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		Polyvalue Below Surface (S8) (LRR S, T, U	
i internet	pipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black His		Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
	cky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
	esence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
	ick (A9) <b>(LRR P, T)</b>	Marl (F10) (LRR U)	Other (Explain in Remarks)
	Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
	irk Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 1	
	airie Redox (A16) (MLRA 150A)		wetland hydrology must be present,
i pressed	lucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
	ileyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
	edox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	
	Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
	face (S7) (LRR P, S, T, U)		
_	_ayer (if observed):		
Туре:			X
Depth (inc	ches):		Hydric Soil Present? Yes No
Remarks:	······		
			$\frown$
		$\Lambda \cap ( \cap )$	
		Audric Soil	Dresen
		5	
		<b>•</b>	•

wnah003f\_w



Wetland data point wnah003f\_w facing east



Wetland data point wnah003f\_w facing south

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: <u>SER</u> City/C	County: Nash Sampling Date: WNAH003 - M
Applicant/Owner:	State: Sampling Point:
Investigator(s): DDwFsf Section	on, Township, Range:
Landform (hillslope, terrace, etc.): <u>h'//c/aper</u> Local Subregion (LRR or MLRA): <u>Lat: 36° QS</u>	relief (concave, convex, none): Convex Slope (%): 4
Subregion (LRR or MLRA): Lat: 36° 05	18,227" Long:77" 50' 48.250" Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	/
	bed? Are "Normal Circumstances" present? Yes $\underline{\lambda}^{\prime}$ No
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing san	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?     Yes     No       Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No	Is the Sampled Area within a Wetland? Yes No
Remarks: Not all thee 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)
Image: Surface Water (A1)       Image: Aquatic Fauna (B13)         Image: High Water Table (A2)       Image: Aquatic Fauna (B13)	U       Sparsely Vegetated Concave Surface (B8)         U)       Drainage Patterns (B10)
Saturation (A3)	
Water Marks (B1) Oxidized Rhizospheres a	$\overline{}$
Sediment Deposits (B2)	n (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	(s) 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)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	ingtors , we not present
portional ingent gy ne	require net present

WNAH003, - U Sampling Point: \_\_\_\_\_

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

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?		Number of Dominant Species
1. <u>Carya glabra</u>	<u> 40</u>		FACU	That Are OBL, FACW, or FAC: (A)
2. Linie denotron teligiter	<u> 40</u>	$\underline{V}$	FALL	Total Number of Dominant
3. Unus alata	10		FACU	Species Across All Strata: (B)
4. Liqui dembas Stracillus	20	$\sim$	PAC	
5. finese fareda	10		FAC	Percent of Dominant Species 7 2 (2) (A/B)
6			•	
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	IM	= Total Cov		OBL species x 1 =
50% of total cover: <u>SO</u>		f total cover	1 S S S	FACW species x 2 =
- 100 · · · · · · · · · · · · · · · · · ·	20% 01	r total cover	: <u></u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:) 1. Analia spinosa	10		5 0 0 T	FACU species x 4 =
	12_	$-\underline{\vee}$	FACU	UPL species x 5 =
2. Carpinus condinigon	15_		FAC	
3. Licewidamber Aprilia	10	$\underline{\vee}$	FAC	Column Totals: (A) (B)
4. Canya glabra'	5		FACU	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
7				☐ 1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	UP			3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: $22$ .	<u>&gt;</u> 20% of	f total cover	:	
Herb Stratum (Plot size:)	10	. /	C10 c	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Microstegium Vining	20		FAC	be present, unless disturbed or problematic.
2. Asplenium platymenons	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
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. DBr and greater than 5.20 m (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				
	55	= Total Cov	/er	
50% of total cover: $27$	5 20% of	f total cover	11	
Woody Vine Stratum (Plot size:)		l	·	
1. With s rotunalibritia	Ĩ	V	FAC	
V., , ,	$\rightarrow$		<u></u>	
2.				
3				
4				
5				Hydrophytic
		= Total Cov	rer ,	Vegetation X
50% of total cover: <u>2</u> 5	20% of	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below	w).			
	,-			

SOIL

WNAH003 -U

Sampling Point: \_

	chpuoli: (Describe to			nonic ulo	ndicator	or comm	the absence of i	indicators.)	
Depth (inches)	Matrix Color (moist)	%		x Feature		Loc <sup>2</sup>	Tautore	Demode	
(inches)	LOXAC 4/2	<u></u>	Color (moist)		_Type <sup>1</sup>	LOC	<u>Texture</u>	Remarks	
1-01	To The	<u> </u>		-	<u></u>		<u> </u>		<u> </u>
$\frac{5}{a}$	10/11/14	<u> </u>					<u>FSC</u> _		
18-16'	1070-04	<u> </u>		<u> </u>	<u> </u>		<u>756</u> _		
<u> </u>		<u></u>							
		<u></u>		_					·
				<u> </u>					
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion. RM=R	educed Matrix, M	- S=Maskeo	Sand Gra	ains	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.	
	Indicators: (Applica							Problematic Hydric Soils <sup>3</sup> :	
Histoso	l (A1)		Polyvalue Be	elow Surfa	ce (S8) <b>(</b> L	.RR S, T, U	) 🛄 1 cm Mucl	k (A9) <b>(LRR O)</b>	
	pipedon (A2)		Thin Dark Su					k (A10) <b>(LRR S)</b>	
	istic (A3) en Sulfide (A4)		Loamy Muck			t O)		√ertic (F18) <b>(outside MLRA 150</b> . Floodplain Soils (F19) <b>(LRR P, S</b>	
	d Layers (A5)		Depleted Ma		F 4)			s Bright Loamy Soils (F20)	5, 1)
	Bodies (A6) (LRR P,	T, U)	Redox Dark	• •	6)		(MLRA		
	ucky Mineral (A7) (LRI	,	Depleted Da					nt Material (TF2)	
	resence (A8) <b>(LRR U)</b> uck (A9) <b>(LRR P, T)</b>		Marl (F10) (L	•	8)			iow Dark Surface (TF12) plain in Remarks)	
	d Below Dark Surface	(A11)	Depleted Oc		(MLRA 1	51)		Jiam in Remarks)	
	ark Surface (A12)	<b>、</b>	Iron-Mangan	. ,	•	,	T) <sup>3</sup> Indicator	rs of hydrophytic vegetation and	
and a second	rairie Redox (A16) (M	•	Umbric Surfa	. ,		, U)		d hydrology must be present,	
	Mucky Mineral (S1) <b>(Ll</b> Gleyed Matrix (S4)	RR 0, S)	Delta Ochric			A 450D)	unless	disturbed or problematic.	
	Redox (S5)		Piedmont Flo				9A)		
	d Matrix (S6)			•		•	A 149A, 153C, 15	3D)	
Dark Su	Irface (S7) (LRR P, S,	T. U)							
							·····		
	Layer (if observed):								
Туре:	Layer (if observed):				1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -				0
Type: Depth (in	Layer (if observed):	· · ·					Hydric Soil Pre	osent? Yes No	0
Type: Depth (in Remarks:	Layer (if observed):				angalan kanganganganganganganganganganganganganga		A		<u>\</u>
Type: Depth (in Remarks:	Layer (if observed):			^ ^			A		0
Type: Depth (in Remarks:	Layer (if observed):			dîca	.ters	G	A		0
Type: Depth (in Remarks:	Layer (if observed):		;~c	dîca	. fe 1 s	G <sup>e</sup>	A		0
Type: Depth (in Remarks:	Layer (if observed):			dîce	. fe 1 <u>s</u>	G C	A		<u>0</u>
Type: Depth (in Remarks:	Layer (if observed):			dîca	fe i s	G (	A		0
Type: Depth (in Remarks:	Layer (if observed):		, p=/,^	dîce	. fe 1 <u>s</u>	G <sup>e</sup>	A		<u></u>
Type: Depth (in Remarks:	Layer (if observed):			dîce	. fe 1 <u>s</u>	G (*	A		⊘
Type: Depth (in Remarks:	Layer (if observed):			dîca	. fe 1 <u>s</u>	G (	A		0
Type: Depth (in Remarks:	Layer (if observed):			dîca	. fe 1 <u>s</u>	G ( 1	A		0
Type: Depth (in Remarks:	Layer (if observed):		, p, / ,'~c	dîce	. fe 1 <u>s</u>	G (	A		0
Type: Depth (in Remarks:	Layer (if observed):			dîce	.Le 1 <u>s</u>	G (	A		0
Type: Depth (in Remarks:	Layer (if observed):			dîca	. fe 1 <u>s</u>	G (	A		0
Type: Depth (in Remarks:	Layer (if observed):		- - - - - - - - - - - - - - - - - - -	dîca	. fe 1 <u>s</u>	G ( 1	A		0
Type: Depth (in Remarks:	Layer (if observed):		- p// ,'~c	dîca	. Le 1 <u>s</u>	G (*	A		<u>0</u>
Type: Depth (in Remarks:	Layer (if observed):			dîca	. fe 1 <u>s</u>	G Ci	A		0
Type: Depth (in Remarks:	Layer (if observed):			dîca	. fe 1 <u>s</u>	G (	A		0
Type: Depth (in Remarks:	Layer (if observed):		- - - - - - - - - - - - - - - - - - -	clî ce	. fe 1 <u>s</u>	G ( 1	A		0
Type: Depth (in Remarks:	Layer (if observed):		- pr// ,'~c	2)îce	. fe 1 <u>s</u>	G (*	A		<u></u>
Type: Depth (in Remarks:	Layer (if observed):			dîca	. fe 1 <u>s</u>	G	A		0

wnah003\_u



Upland data point wnah003\_u facing east



Upland data point wnah003\_u facing north

## wnah003 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region				
Project/Site:SERPCity/County: NashSampling Date: 7-23-14				
Applicant/Owner: Dominism State: NC Sampling Point: WNAH024				
Investigator(s):				
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):				
Subregion (LRR or MLRA): Lat: _26°05°06.6320ng: _7750'58.116' Datum:				
Soil Map Unit Name: PAINS 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 naturally problematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No Ves <u>No</u> within a Wetland? Yes <u>No</u> Wetland Hydrology Present? Yes <u>No</u> Planted pine plantetron				
L 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 (B13) Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) High Warl Deposits (B15) (LRR U) Drainage Patterns (B10)				
Saturation (A3)				
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)				
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)				
Iron Deposits (B5) Other (Explain in Remarks)				
Inundation Visible on Aerial Imagery (B7)				
Water-Stained Leaves (B9)				
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				
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: Hydrobagey present				

WWAH 2029\_~

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

Absolute Dominant Ind	
Tree Stratum (Plot size:) <u>% Cover</u> Species? S	Number of Dominant Species
1. Frestarder 60 V F	That Are OBL, FACW, or FAC: (A)
2. Har rubrym of 10 It	Total Number of Dominant
3. Liquidoutro styracistar 10 F	AC 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 CD (2)	OBL species x 1 =
BD = Total Cover	
50% of total cover: $472$ 20% of total cover: _	FACW species         x 2 =
Sapling/Shrub Stratum (Plot size:)	FAC species x 3 =
1. Deer pubrum 10 V/ \$	FACU species x 4 =
2. Piner toeda a 25 1/1 #	UPL species x 5 =
3. Lignie curifier Sturneither ID	Column Totals: (A) (B)
4.	
	Prevalence Index = B/A =
5	Hydrophytic Vegetation Indicators:
6	I - Rapid Test for Hydrophytic Vegetation
7	2 - Dominance Test is >50%
8	$3$ - Prevalence Index is $\leq 3.0^1$
= Total Cover	
50% of total cover: 22.5 20% of total cover:	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Anendenaria organitica I F	be present, unless disturbed or problematic.
	Definitions of Four Vegetation Strata:
3. Wordleardia Virginica 10 1/ C	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	
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	
<u> </u>	
50% of total cover: $25$ 20% of total cover:	
Woody Vine Stratum (Plot size:	——
1 Smallong Withers Diff. 16 VE	ife
" since a range tone to F	
2. VIH3 POTUMAVISING	MC
3	
4	
5	——— Hydrophytic (
= Total Cover	Vegetation
50% of total cover: 20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations below).	I
nomanto. In observed, not morphological adaptations belowj.	

SOIL

WNAHOD2f W Sampling Point:

Profile Description: (Describe to the dep	th needed to docum	ent the ir	dicator	or confirn	n the absence o	of indicators.)	····
Depth <u>Matrix</u> (inches) Color (moist) %	Color (moist)	Features	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Dame 1	_
0-7 VOYR2/1		70	туре	LOC		Remarks	S
7-11 104R 3/2							
$\frac{1}{11} \frac{1}{17} \frac{1091}{12} \frac{92}{11}$				<u> </u>	loam	L	
11-11-1041 311					SCL		
					<u> </u>		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM	Reduced Matrix, MS	=Masked	Sand Gra	ains.	<sup>2</sup> Location: F	PL=Pore Lining, M=Ma	trix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless other	wise note	d.)			or Problematic Hydri	
Histosol (A1)	Polyvalue Bel					uck (A9) <b>(LRR O)</b>	
Histic Epipedon (A2)	Thin Dark Sur					uck (A10) (LRR S)	
Hydrogen Sulfide (A4)	Loamy Mucky			0)		d Vertic (F18) <b>(outside</b> nt Floodplain Soils (F1	
Stratified Layers (A5)	Depleted Matr		_/			ous Bright Loamy Soils	
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S	urface (F6	5)		(MLR/	A 153B)	(
5 cm Mucky Mineral (A7) (LRR P, T, U)						ent Material (TF2)	
1 cm Muck (A9) (LRR D)	Redox Depres		)			allow Dark Surface (Th Explain in Remarks)	-12)
Depleted Below Dark Surface (A11)	Depleted Ochr		MLRA 15	(1)			
Thick Dark Surface (A12)	🔲 Iron-Mangane	se Masse	s (F12) <b>(L</b>	.RR O, P,	T) <sup>3</sup> Indica	tors of hydrophytic veg	etation and
Coast Prairie Redox (A16) (MLRA 150)				U)		ind hydrology must be	
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (I			14 150B)		s disturbed or problem	natic.
Sandy Redox (S5)	Piedmont Floo						
Stripped Matrix (S6)					A 149A, 153C, <sup>.</sup>	153D)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):					·r		
Type:						,	
Depth (inches):					Hydric Soil P	resent? Yes 🗙	No
Remarks:							<u></u>
	$\sim$			$\cap$			
A. So	r soil		• • •	47			
, Ser		122	<u>e sa</u>	ny			
		۲					
							ĺ

wnah002f\_w



Wetland data point wnah002f\_w facing east



Wetland data point wnah002f\_w facing south

WETLAND DETERMINATION DATA	FORM – Atlantic and	Gulf Coastal Pla	ain Region
Project/Site:	_ City/County:	2	Sampling Date:
Applicant/Owner: DOMINION	· · · · · · · · · · · · · · · · · · ·	_ State:	Sampling Point:
Investigator(s): <u>DD WEST</u>	_ Section, Township, Range:		
Landform (hillslope, terrace, etc.): Gentle Stope	_ Local relief (concave, conve	х, none): <u>/рисц</u>	バミ Slope (%): ノニス
Landform (hillslope, terrace, etc.): <u>Gentle Slope</u> Subregion (LRR or MLRA): Lat: <u>36</u>	. 205 06.220 Long:	77'50'58	-524" Datum:
Soil Map Unit Name: <u></u>			ation: NONE
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significant			
Are Vegetation, Soil, or Hydrology naturally p		, explain any answe	
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locat	ions, transects	, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       X	<ul> <li>Is the Sampled Area</li> <li>within a Wetland?</li> </ul>	1	No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply	Δ	<u> </u>	tors (minimum of two required)
Surface Water (A1)       Aquatic Fauna (B)         High Water Table (A2)       Marl Deposits (B1)         Saturation (A3)       Hydrogen Sulfide         Water Marks (B1)       Oxidized Rhizosp         Sediment Deposits (B2)       Presence of Reduction	113) 15) (LRR U) Odor (C1) pheres along Living Roots (C3) uced Iron (C4) uction in Tilled Soils (C6) ce (C7)	Drainage Pat Moss Trim Lii Dry-Season V Crayfish Burr Saturation Via Geomorphic Shallow Aqui	etated Concave Surface (B8) terns (B10) nes (B16) Water Table (C2) ows (C8) sible on Aerial Imagery (C9) Position (D2) tard (D3)
Field Observations:	_		
Surface Water Present?         Yes No Depth (inche Water Table Present?         Yes No Depth (inche			
Saturation Present? Yes No Depth (inche		Hydrology Presen	t? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho			
Remarks: Wetland hydrology is	**************************************		

WN41602 \_U

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

Sampling Point: \_\_\_\_\_

Tree Stratum (Plot size: 30)			Indicator	Dominance Test worksheet:
	<u>% Cover</u>	Species		Number of Dominant Species 5
1. Pipus feeda	60	-	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidenbor styracion			FAC	Total Number of Dominant
3			· ······	Species Across All Strata:
4				
5				Percent of Dominant Species / Z
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
			· · · · · · · · · · · · · · · · · · ·	Total % Cover of:Multiply by:
8	7.0			OBL species x 1 =
21	$\frac{0}{2}$	= Total Co	ver	FACW species x 2 =
50% of total cover: $32$ -	<u></u> 20% of	total cover	r: <u>13</u>	
Sapling/Shrub Stratum (Plot size:)	~ *			FAC species x 3 =
1. Jines Janda	20		FAC	FACU species x 4 =
2. Lariodendron telipitera	10		FACU	UPL species x 5 =
3. Liquidenber styrer line	10	$\checkmark$	FAC	Column Totals: (A) (B)
4				Denvels on Index DM
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	110			3 - Prevalence Index is ≤3.0 <sup>1</sup>
	<u> </u>	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:C	) 20% of	total cover	<u>, 8</u>	
Herb Stratum (Plot size: 50)		. /		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Vaccinian Stanmian	10	$\underline{\checkmark}$	FACU	be present, unless disturbed or problematic.
2. Annolnance a gentic	_6	$\_V$ (	FALW	Definitions of Four Vegetation Strata:
3. Pteridium aquilinum	-5	$\overline{}$	FACU	
4				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
			<u></u>	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				
	20	= Total Cov		
50% of total cover: $lC$		total cover	. /	
-2.03	2076 01	IUIAI COVEI	·	
Woody Vine Stratum (Plot size:)	10	./	FIL	
······································	_/	<u> </u>	PBC	
2				
3	······			
4				
5				Hydrophytic
	<u> </u>	Total Cov	/er	Vegetation V
50% of total cover:	20% of	total cover	: 2	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations below				
( , , , , , , , , , , , , , , , , , , ,	.,.			

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WU41902 \_\_\_\_

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features	
<u>(inches)</u> <u>Color (moist)</u> <u>%</u> <u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> <u>Loc<sup>2</sup></u>	Texture Remarks
$\left  \begin{array}{c} 0 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\$	<u></u>
<u><u><u>y-9</u></u> <u>1877 4/</u></u>	7-52
9-147 1046/3	FSL
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)	<ul> <li>1 cm Muck (A9) (LRR O)</li> <li>2 cm Muck (A10) (LRR S)</li> </ul>
Black Histic (A3)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	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)	(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)	Uery Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Citici (Explain in Kemarks)
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,	T) <sup>3</sup> 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)         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 14)	
Stripped Matrix (S6)	•
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
Hydric soil indicators are no	1
Hydric Son indicators are ne	present
	/

wnah002\_u



Upland data point wnah002\_u facing east



Upland data point wnah002\_u facing north

## wnah002 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FO	RM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City	RM – Atlantic and Gulf Coastal Plain Region //County: <u>Pash</u> Sampling Date: State: <u>MC</u> Sampling Point: <u>7-23-</u> 14
Applicant/Owner: Dominion	State N2C Sampling Date: 7-73-141
The eccent	ction, Township, Range:
	al relief (concave, convex, none): <u>CONCAUN</u> Slope (%): <u>158.</u> Datum:
Soil Map Unit Name: RAIAS	a G 7 NWI classification 71 F F O
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dist	
Are Vegetation, Soil, or Hydrology significantly dist	
Sommary OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       Yes       No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	
High Water Table (A2)	RR U) Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	(C1) Moss Trim Lines (B16)
	along Living Roots (C3)
Sediment Deposits (B2)       Presence of Reduced Ir         Drift Deposits (B3)       Recent Iron Reduction i	
Algal Mat or Crust (B4)	
Iron Deposits (B5) Dther (Explain in Rema	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes K No Depth (inches):	14"
Saturation Present? Yes X No Depth (inches):	<u>7</u> <sup>(i</sup> Wetland Hydrology Present? Yes <u>X</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
<b>D</b>	
Remarks: Hydrology prese	nt

4

(A) (B) (A/B
(B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (B) (B) (B) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C
(B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (A/B) (B) (B) (B) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C
(A/B)
(A/B)
<u>Aultiply by:</u> 
<u>Aultiply by:</u> 
(B)
s: /egetation Ition <sup>1</sup> (Explain)
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s: /egetation Ition <sup>1</sup> (Explain)
/egetation Ition <sup>1</sup> (Explain)
tion <sup>1</sup> (Explain)
tion <sup>1</sup> (Explain)
hydrology must
nyurology must
ematic.
ata:
s, 3 in. (7.6 cm) or 3H), regardless of
in), regardless of
uding vines, less ft (1 m) tall.
plants, regardless
.28 ft tall.
er than 3.28 ft in
in that 0.20 it it

SOIL
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Sampling Point:

Profile Des	cription: (Describe to	the denth r	ended to doour	ant the la				Sampling Point: _	
Depth	Matrix			K Features		or contirm	the absence of inc	licators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0.7	104R2/1						Tom		
7-12	WYR 3/1						3		
12-16	TOYR 5/1			·			10mm_		
1-1					······································		<u> 201</u>		······
					<u> </u>				
				<u></u> ,					
<sup>1</sup> Type: C=C	oncentration, D=Deple	tion, RM=Red	luced Matrix, MS	=Masked (	Sand Grai	ins.	<sup>2</sup> l ocation: PI =P	ore Lining, M=Matrix.	
Hydric Soll	Indicators: (Applicat	ole to all LRF	ts, unless other	vise noted	d.)		Indicators for Pr	oblematic Hydric So	ils <sup>3</sup> :
Histosol		[	Polyvalue Bel	ow Surface	e (S8) <b>(LF</b>	RR S, T, U)		-	
	pipedon (A2) istic (A3)	4	Thin Dark Sur	face (S9) <b>(</b>	LRR S, T	', U)	2 cm Muck (A	(10) (LRR S)	
	en Sulfide (A4)	Ļ	Loamy Mucky	Mineral (F	<sup>5</sup> 1) (LRR (	0)	Reduced Ver	tic (F18) <b>(outside ML</b>	RA 150A,B)
	d Layers (A5)	- F	Loamy Gleyed		2)			odplain Soils (F19) (L	
🛛 🗖 Organic	Bodies (A6) (LRR P, T	,υ)	Redox Dark S		)		(MLRA 153	right Loamy Soils (F2	0)
📘 5 cm Μι	ucky Mineral (A7) (LRR	P, T, U) 👖	Depleted Dark				Red Parent M		
Muck Pr	resence (A8) (LRR U)	Ţ	Redox Depres	sions (F8)	·			Dark Surface (TF12)	
	ick (A9) (LRR P, T)	ļ	Marl (F10) (LF					n in Remarks)	
	d Below Dark Surface ( ark Surface (A12)	(A11) <u> </u>	Depleted Ochr						
	rairie Redox (A12)		Iron-Mangane	se Masses	(F12) (LI	RR O, P, T	•	f hydrophytic vegetati	
Sandy N	lucky Mineral (S1) (LR		Umbric Surfac	e (⊦13) (Li ≣17) /MID	RR P, T, I	U)		drology must be pres	
Sandy C	Gleyed Matrix (S4)	ιιο,ο, <sub>Γ</sub>	Delta Ochric (F Reduced Verti	- i/)(IMLR c (F18)/M	A 151) I RA 150.	A 150P)	unless dis	urbed or problematic.	
	edox (S5)	Ť	Piedmont Floo				۵)		
Stripped 🗌 🗌	Matrix (S6)	I					- 149A, 153C, 153D)		
🔲 Dark Su	rface (S7) <b>(LRR P, S, 1</b>	r, U)							
Restrictive I	_ayer (if observed):								
Туре:								$\sim$	
Depth (ind	ches):						Hydric Soil Preser	nt? Yes 🔨 N	10
Remarks:						l		<b></b>	
	0	Λ							
	14	L A	ic so	$\cap \cap$		ſ	)		
	1~	Tyde	7C 50	L A	Dro,	Sout	<del>}_</del>		
		0				sent	,		
									1

wnah001f\_w



Wetland data point wnah001f\_w facing east



Wetland data point wnah001f\_w facing south

WETLAND DETERMINATION DATA FO	RM – Atlantic and Gulf Coastal Plain Region いりつけつ
Project/Site: $SERP$ City	RM - Atlantic and Gulf Coastal Plain Region       WN AH OOI         /County:
Applicant/Owner: Dommicon	State: NC Sampling Point: 7, 13, 14
Landform (hillslope, terrace, etc.): <u>hill slopu</u> Loc	al relief (concave, convex, none): <u>Concave</u> Slope (%): <u>2-3</u> 1'58, 229 "Long: <u>77° 51'08, 852 "</u> Datum:
Subregion (LRR or MLRA): Lat: 36064	1 58.229"Long: 77" 51'08.852 " Datum:
Soli Map Unit Name: $\underline{\Gamma CAMS}$	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 dist	Irbed? Are "Normal Circumstances" present? Yes V
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       No       Xes	Is the Sampled Area within a Wetland? Yes <u>No</u>
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 (	R U) Drainage Patterns (B10)
Saturation (A3)       Hydrogen Sulfide Odor (         Water Marks (B1)       Oxidized Rhizospheres a	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	(s) Shallow Aquitard (D3)
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):	
Water Table Present? Yes No Depth (inclus):	
Saturation Present? Yes No X Depth (inches);	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	
Remarks:	P ,
No wetland hydrology in	licators one present
	Ŷ

NNAHOOI - u

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

Sampling Point: \_

	Abcoluto	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:		Species		.7
1. Since tereda	- <u>100ver</u>	<u>opecies</u>	~	Number of Dominant Species
		$\rightarrow \rightarrow \rightarrow$	IAC	That Are OBL, FACW, or FAC: (A)
2. Liquidombar Styracithia	10	$\underline{\checkmark}$	FAC	Total Number of Dominant
3. Querens glbg	10	~/	FACU	Species Across All Strata: (B)
4. Liciodendron felippfera	15	1	FACU	
	10	<u> </u>		Percent of Dominant Species 45
5. Steen Cubrum	10	$\underline{-\nu}_{\not-}$	FAC	That Are OBL, FACW, or FAC: (A/B)
6. Carya glabia	10	$\overline{}$	FACV	
7. Quercas phillos	5		FACW	Prevalence Index worksheet:
8			• • •	Total % Cover of: Multiply by:
••	-90-			OBL species x 1 =
K I		= Total Co		1
50% of total cover:	<u>)</u> 20% of	total cove	r: <u>10</u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	_			FAC species x 3 =
1. Oxydendiam arboram	<	$\sim 1$	FACU	FACU species x 4 =
Xydenador areance		~ <u>~</u>	FACU	UPL species x 5 =
2. Ciquidan Ber, styrac. flow	10	$\rightarrow \rightarrow \rightarrow$	- PAC	
3. Linidendron faligitera	10	$\underline{}$	PACU	Column Totals: (A) (B)
4				Desuglas as ladau as D/A as
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				
	25.	= Total Co		3 - Prevalence Index is ≤3.0 <sup>1</sup>
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: $12$ .	<u></u> 20% of	total cove	r:	
Herb Stratum (Plot size:)		1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Vaccinium stammium	5	$\mathbf{V}_{\mathbf{c}}$	FACU	be present, unless disturbed or problematic.
2. Annolinaria Starantea		~	FACW	-
2. HAN MINIAN - Shafter Ed	$-\mu$		FFICVO	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				
	15 :	= Total Co	ver	
50% of total cover:		total cover	5	
	20% 01	total cover	·	
Woody Vine Stratum (Plot size:)		)		
1. Vites Notenal to /10		)	FAC	
2				
۲ ۲				
4				
5				Hydrophytic ,
	- <b>- - -</b>	= Total Co	ver	Vegetation
50% of total cover:		total cover	/ /	Present? Yes No
		total cover	· <u>·</u> · <u>·</u>	
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL

WNAHOO! \_\_

Sampling Point: \_\_

Profile Description: (Describe to the dept	h needed to docu	iment the in	dicator	or confirm	the absence of i	ndicators.)
Depth <u>Matrix</u>		ox Features			_	
(inches) <u>Color (moist)</u> %	Color (moist)	%	Type'	<u>Loc<sup>2</sup></u>	<u>Texture</u>	Remarks
0-9 10/1-1/3				<u></u>	<u> </u>	
4-3 1071-5/3					<u></u>	
<u>B-14 107154</u>					<u></u>	
					•••••••	
			<u> </u>			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, M	IS=Masked	Sand Gra	ains.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all I	_					Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)						(A9) (LRR O)
Histic Epipedon (A2)		urface (S9) ky Mineral (F				(A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gley		, ,	. 0)		<pre>/ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T)</pre>
Stratified Layers (A5)	Depleted M		_,			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)		Surface (F6	5)		(MLRA 1	
5 cm Mucky Mineral (A7) (LRR P, T, U)		ark Surface (	. ,			t Material (TF2)
		essions (F8)	)			bw Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (			=4)	Uther (Exp	lain in Remarks)
Thick Dark Surface (A12)		chric (F11) (I nese Masse		•	T) <sup>3</sup> Indicator	s of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A					•	hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)		c (F17) (MLF				disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ve					
Sandy Redox (S5)	Piedmont Fl	•	• •	•	•	
Stripped Matrix (S6)		Bright Loam	y Solis (I	-20) (MLRA	A 149A, 153C, 153	3D)
Restrictive Layer (if observed):						
Type:						. /
Depth (inches):					Hvdric Soil Pres	sent? Yes No
Remarks:						
Hydric soi	1 inel;	cater.	1 9	ire	not pr	esent
					/	

wnah001\_u



Upland data point wnah001\_u facing east



Upland data point wnah001\_u facing north

## wnah001 soils



Wetland/upland soils

### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nash		Sampling Date: 1/25/2015
Applicant/Owner: Dominion		State: NC	_ Sampling Point: <u>wnab100f_w</u>
Investigator(s): TP, AS	Section, Township, F	Range: No PLSS in this area	
Landform (hillslope, terrace, etc.): drainageway	Local relief (concave, co		Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat: 36.0	)8006091 L	ong: <u>-77.85626778</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro fine sandy loam, 0 to 2 per	cent slopes	NWI classificat	tion: PFO1/4A
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes 🔽 No	(If no, explain in Rei	marks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? Are	e "Normal Circumstances" pre	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology n	aturally problematic? (If	needed, explain any answers	in Remarks.)
			• • • • • •

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Yes <u>✓</u> No Yes <u>✓</u> No Yes <u>✓</u> No	Is the Sampled Area within a Wetland?	Yes 🥢 No
ed by red maple, sweetgum, and sw	eet bav.	
	Yes Volume No	Yes <u>V</u> No within a Wetland?

#### HYDROLOGY

	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	Dry-Season Water Table (C2)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>V</u> No Depth (inches): 2	
Saturation Present? Yes <u>Ves</u> No Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Saturation Present? Yes <u> Ves No Depth (inches):</u>	· · ·

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

Sampling Point: wnab100f\_w

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )			Status	Number of Dominant Species
1 Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC: $5$ (A)
2. Liquidambar styraciflua	10	Yes	FAC	
3. Nyssa biflora	5	No	FACW	Total Number of Dominant
3. TYSSA DITIOTA			TAOW	Species Across All Strata: 5 (B)
4		<u> </u>		Demont of Deminent Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6.				
				Prevalence Index worksheet:
7	45			Total % Cover of: Multiply by:
	:	= Total Cove		
50% of total cover: 22.5	20% of	total cover:	9	OBL species $0 \times 1 = 0$
Sapling/Shrub Stratum (Plot size: 15 )				FACW species x 2 =
1. Acer rubrum	10	Yes	FAC	FAC species $50   x 3 = 150$
2. Magnolia virginiana	5	Yes	FACW	FACU species x 4 = 0
				UPL species $0 \times 5 = 0$
3				90 230
4				Column Totals: (A) (B)
5				Prevalence Index = $B/A = 2.55$
6			-	
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		<u> </u>		2 - Dominance Test is >50%
9		<u> </u>		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	15	= Total Cove	r	
50% of total cover: 7.5	20% of	total cover:	3	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)
Arundinaria gigantea	30	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			1701	
2		<u> </u>		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3		<u> </u>		be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Deminions 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				
9				<b>Sapling/Shrub</b> – 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: <u>15</u>	20% of	total cover:	6	We advising All used wing a supplementary them 2,00 ft is
Woody Vine Stratum (Plot size: 30)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
,				neight.
1				
2		·		
3				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes <u>No</u>
50% of total assess 15				
50% of total cover: <u>15</u>		total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Des	cription: (Describe t	o the depth	needed to docun	nent the in	ndicator	or confirm	the absend	ce of indicators.)
Depth	Matrix			x Features	4			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks
0-12	10YR 2/1	100					SCL	
1								
				·				
	·							
								<u> </u>
I								
								<u> </u>
				. <u> </u>				
<sup>1</sup> Type: C=C	Concentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Ind	icators for Problematic Hydric Soils <sup>3</sup> :
<u> </u>	l (A1)		Dark Surface	(S7)				2 cm Muck (A10) <b>(MLRA 147)</b>
Histic E	pipedon (A2)		Polyvalue Be	low Surfac	ce (S8) <b>(N</b>	ILRA 147,	148)	Coast Prairie Redox (A16)
Black H	listic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (F	F2)			Piedmont Floodplain Soils (F19)
Stratifie	d Layers (A5)		Depleted Mat	trix (F3)				(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark S					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar					Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre		,			
-	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan		es (F12) <b>(</b> I	LRR N,		
	A 147, 148)		MLRA 13	•			2	
	Gleyed Matrix (S4)		Umbric Surfa					ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	d Matrix (S6)		Red Parent M	Aaterial (F2	21) <b>(MLR</b>	A 127, 147	<b>')</b> เ	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:			_					
Depth (ir	nches):		_				Hydric So	oil Present? Yes 🖌 No
Remarks:								
1								



Photo 1 Wetland data point wnab100f\_w facing east



Photo 2 Wetland data point wnab100f\_w facing south

### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Na	ash	Sampling Date: 1/26/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: wnab100_u
Investigator(s): TP, AS	Section, Towns	hip, Range: No PLSS in this are	a
Landform (hillslope, terrace, etc.): hill slope		ve, convex, none): <u>none</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P	Lat: <u>36.08015445</u>	Long: <u>-77.85599356</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro fine sandy lo	am, 0 to 2 percent slopes	NWI classifie	cation: None
Are climatic / hydrologic conditions on the site	typical for this time of year? Yes	_ No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydro	logy significantly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydro	logy naturally problematic?	(If needed, explain any answe	ers 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?	Yes Yes Yes	No No No	Is the Sampled Area 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) Oxidized Rhizospheres on Living I	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 Sc	ils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions) if available:
Remarks:	

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

Sampling Point: wnab100\_u

		Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30	)		Species?	Status			
1 Pinus taeda	<i>,</i>	30	Yes	FAC	Number of Dominant Species         That Are OBL, FACW, or FAC:         4         (A)		
2. Liriodendron tulipifera		20	Yes	FACU			
2. Enoderidion tulipliera				17100	Total Number of Dominant		
3					Species Across All Strata: 5 (B)		
4							
					Percent of Dominant Species		
5					That Are OBL, FACW, or FAC: 80 (A/B)		
6							
7.					Prevalence Index worksheet:		
		50	= Total Cove	~r	Total % Cover of: Multiply by:		
500/ - (	total cover: 25			10	OBL species x 1 =0		
50% 0	total cover: 25	20% of	total cover:				
Sapling/Shrub Stratum (Plot size:	)				FACW species $\begin{array}{c} 0 \\ x \\ z		
<sub>1.</sub> Aralia spinosa		10	Yes	FAC	FAC species $x_3 = $		
2. Pinus taeda		10	Yes	FAC	FACU species20 x 4 =80		
		5	Yes	FAC	UPL species $0 \times 5 = 0$		
3. Liquidambar styraciflua		5	res	FAC	75 245		
4					Column Totals: (A) (B)		
5				<u> </u>	Prevalence Index = B/A = 3.26		
6					Hydrophytic Vegetation Indicators:		
7							
8					1 - Rapid Test for Hydrophytic Vegetation		
					2 - Dominance Test is >50%		
9					3 - Prevalence Index is ≤3.0 <sup>1</sup>		
			= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
50% of	total cover: 12.5	20% of	total cover:	5			
	)		_		data in Remarks or on a separate sheet)		
	/				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
1	<u> </u>						
2							
3					<sup>1</sup> Indicators of hydric soil and wetland hydrology must		
					be present, unless disturbed or problematic.		
4					Definitions of Four Vegetation Strata:		
5							
6					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
					more in diameter at breast height (DBH), regardless of		
7					height.		
8. <u> </u>					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	<u> </u>				Herb – All herbaceous (non-woody) plants, regardless		
		0	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.		
50% of	total cover: 0	20% of	total cover:	0			
Woody Vine Stratum (Plot size:	30		_		Woody vine – All woody vines greater than 3.28 ft in		
	/				height.		
1							
2							
3				_			
				······			
4					Hydrophytic		
5					Vegetation		
		0.	= Total Cove	er	Present? Yes 🖌 No		
50% of	total cover: 0		total cover:	~			
Remarks: (Include photo numbers here	or on a separate s	heet.)					
L							

Profile Desc	cription: (Describe to	the dep	oth needed to docur	nent the i	ndicator	or confirm	the absence	of indicato	ors.)	
Depth	Matrix		Redo	x Features	S					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-2	10YR 2/1	100					SL			
2-12	10YR 3/3	90	10YR 4/6	10	С	М	SCL			
			. <u></u>							
<sup>1</sup> Type: C=C	oncentration, D=Deple	tion, RM	=Reduced Matrix, MS	S=Masked	I Sand Gra	ains.	<sup>2</sup> Location: P	I =Pore Linii	ng, M=Matrix.	
Hydric Soil		,	,						oblematic H	
Histosol	(A1)		Dark Surface	(S7)					10) <b>(MLRA</b> 1	
	oipedon (A2)		Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)				•			
	istic (A3)		Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)							
	en Sulfide (A4)		Loamy Gleye	• • •	•	,,	F	•	odplain Soils	(F19)
	d Layers (A5)		Depleted Mat		/			(MLRA 13	•	( )
	uck (A10) <b>(LRR N)</b>		Redox Dark \$	. ,	6)		1	•	Dark Surface	e (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	•	,			•	n in Remarks	· ,
	ark Surface (A12)	( )	Redox Depre							,
	/ucky Mineral (S1) (LF	RR N.								
-	A 147, 148)		MLRA 136)							
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	<sup>3</sup> Inc	licators of hy	/drophytic veg	getation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be p							
-	Matrix (S6)		Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.							
	Layer (if observed):						-			
Type:	. , ,									
Depth (in	ches):						Hydric Soi	Present?	Yes	No 🖌
Remarks:							1			



**Photo 1** Upland data point wnab100\_u facing north



**Photo 2** Upland data point wnab100\_u facing west

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site:SERP
Project/Site: <u>SERP</u> Applicant/Owner: <u>Domunicon</u> Investigator(s): <u>Dowson</u> City/County: <u>MAKA</u> Sampling Date: <u>1-24-14</u> Sampling Date: <u>1-24-1</u>
Investigator(s): DOWEST State: NAHOO 84
Section, rownship, Range:
Subregion (LRR or MI RA):
Soil Map Linit Name: A) - ( - ( - Control - Co
Are climatic / hydrologic conditions and the transmission of the second se
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u> (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? Yes No
Wetland Hydrology Present? Yes No Within a Wetland? Yes / ~ No
Remarks:
HYDROLOGY
Wetland Hydrology Indicators:
Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Soil Cracks (B6)
Surface Water (A1)
Water Marks (B1)
Water Marks (B1) U Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)
Algal Mat or Crust (B4)
L Iron Deposits (B5) Other (Explain in Remarks)
The indication visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches): 16
Saturation Present? Yes X No Depth (inches)
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hydrobegy present

WNAHOOSE W

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

	names of plants.	Sampling Point:
Tree Stratum (Plot size:)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
1. Hor rubrune 2. Fraxineis pansylvanas	- 3A FAC	Number of Dominant Species That Are OBL, FACW, or FAC:
3. Liquidanbar Styracitluc	35 V FAC	Total Number of Dominant
5		Percent of Dominant Species
6 7		Prevalence Index worksheet: (A/B)
8		Total % Cover of: Multiply by:
	TOO = Total Cover	OBL species x 1 =
50% of total cover: 5	20% of total cover: 20	FACW species x 2 =
		FAC species x 3 =
1. Lique Cearford Styrner Flue	a 15 , FAC	FACU species x 4 =
2. Alter rubrum	T3 J FAC	UPL species x 5 =
3. Ligustrum Sinense	10 VI FACU	Column Totals: (A) (B)
4. FAAXINES DEMAS DURICH	ID V FACW	
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
	- 50	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total across 7 4	20% = Total Cover 20% of total cover: / $0$	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)	$\geq$ 20% of total cover: $/U$	,
1. Microstegiu vining	30 / FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Athurium folix - fimen	alo V FACU	Definitions of Four Vegetation Strata:
3. Moth marva cytindrica	- 10 V FACW	
4. Walygonum hydropyser		<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
6 7		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
3 2		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
IU.		
11		Woody vine – All woody vines greater than 3.28 ft in height.
	= Total Cover	
50% of total cover: <u>30</u>	20% of total cover: /2	
Noody Vine Stratum (Plot size:)		
Vitis potungetolig	10 V FAC	
- Smily retundition	TO V FAU	
·		
		Hydrophytic Vegetation
50% of total cover: $l$		Present? Yes No
emarks: (If observed, list morphological adaptations belo		
	···· .	

#### SOIL

WNAH008-F-W

Profile Description: (Describe to the deal)	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicato Depth Matrix	r or confirm the absence of indicators.)
(inches) Color (matrix) Redox Features	
$\frac{101 \text{ Color (moist)}}{0 - 10} \frac{107 \text{ (R 3/1)}}{107 \text{ (R 3/1)}} \frac{\%}{107 \text{ Color (moist)}} \frac{\%}{107 \text{ Color (moist)}} \frac{\%}{107 \text{ Color (moist)}}$	Loc <sup>c</sup> Texture Remarks
10-18* 104R 3/2	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Gi	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Tyune Son mulcators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	LRR S, T, U) 1 cm Muck (A9) (I RR O)
Thin Dark Surface (S9) (LRR S,	T, U) $\Box$ 2 cm Muck (A10) (LBR S)
Black Histic (A3)	R O) Reduced Vertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)         5 cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)	(MLRA 153B)
	Red Parent Material (TF2)
	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T	
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	, <u>,</u> , ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Sandy Redox (S5) Piedmont Floodplain Soils (F19)	(MI BA 140A)
Supped Matrix (S6)	(MLRA 149A) E20) (MLRA 149A, 1530, 4530)
$\underline{\Box}  \text{bark surface (S7) (LRR P, S, I, U)}$	20) (merca 145A, 153C, 153D)
Restrictive Layer (if observed):	
Туре:	X-
Depth (inches):	
Remarks	Hydric Soil Present? Ves No
. /	
Hydric Soil	$\cap$
ALLANC Soul	Die PO, tt
$\bigcirc$	1

Wnah008f\_w



Wetland data point wnah008f\_w facing east



Wetland data point wnah008f\_w facing south

WETLAND DETERMINATION DATA F	ORM – Atlantic and Gulf Coastal Plain Region
	ity/County:
Applicant/Owner: Dominion	State:Sampling Point: VSampling Point: V
Investigator(s): DDWEST S	ection, Township, Range:
Subregion (LRR or MLRA):	ocal relief (concave, convex, none):Slope (%): Z- Le 841'37.672ong:51'30.26D' Datum:
Soil Map Unit Name: Norto 1/2 Sondy (	2018 Datum: Datum:
Are climatic / hydrologic conditions on the site typical for this time of year	2 Yes No. (If no overlein in Down du )
Are Vegetation, Soil, or Hydrology significantly di	sturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally probl	ematic? (If needed, explain any answers in Remarks.)
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       0       0	Is the Sampled Area within a Wetland? Yes No X
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	-RR U) Drainage Patterns (B10)
Saturation (A3)	r (C1) Moss Trim Lines (B16)
	s along Living Roots (C3) Dry-Season Water Table (C2)
Image: Drift Deposits (B3)       Image: Recent Iron Reduction         Image: Algal Mat or Crust (B4)       Image: Drift Deposits (B3)	
Iron Deposits (B5)	
LI Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Water Table Present?     Yes No Depth (inches):       Saturation Present?     Yes No Depth (inches):	
(includes capillary fringe)	Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:
Remarks: No Aug	drology present

WNAHOO8 -U

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

- Use scientific na	mes of pl	lants.		Sam	oling Point:	
Tree Stratum (Plot size:	Absolute	Dominan	t Indicator	Dominance Test worksheet:		
1. Ligund an bar Sturger of was		Species	2/ <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	$\langle \phi \rangle$	(A)
2. Craga tomentozo 3. Liroden Dron fulipidera	$\frac{15}{25}$	$- \checkmark$	FALL	) Total Number of Dominant Species Across All Strata:	10	
4					-12-	(B)
5				Percent of Dominant Species	<b>0</b>	
6				That Are OBL, FACW, or FAC:		(A/B)
7				Prevalence Index worksheet:		
8				Total % Cover of:	Multiply by:	
	GD.	= Total Co		OBL species x		
50% of total cover:	20% of	total aguar	r. 18	FACW species x	2 =	
Sapling/Shrub Stratum (Plot size:)	20%01			FAC species x		
1. Ilox opace	20		FIA	FACU species x		
2. Liquie and of sturne flor	TA		FIAT	UPL species x		
3. Facus grande folia	- AZ-		FAC	Column Totals: (A		
4. Liquistram Sinense	7	<u> </u>	FACU		.)	_ (B)
5 0			FACU	Prevalence Index = B/A =		
				Hydrophytic Vegetation Indica		
67			<u></u>	1 - Rapid Test for Hydrophy		
78				2 - Dominance Test is >50%		
8	-QA.			3 - Prevalence Index is ≤3.0		
40	=	= ⊺otal Cov	/er	Problematic Hydrophytic Ver	etation <sup>1</sup> (Explai	n)
50% of total cover: <u>40</u>	20% of	total cover	:_10_			,
Herb Stratum (Plot size:)	20		C.A.	Indicators of hydric soil and wet	and hydrology m	nuet
1. Microstegum umenea.	<u> 70</u>	4	FAC	be present, unless disturbed or p	roblematic.	103(
2. Rubus arguetus	10	$\checkmark$	FACU	Definitions of Four Vegetation		
V						
4				<ul> <li>Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of</li> </ul>		
5				height.		
6				Sanling/Shrub Mondu planta	a sector al frances de la	
7				<ul> <li>Sapling/Shrub – Woody plants, excluding vines, less</li> <li>than 3 in. DBH and greater than 3.28 ft (1 m) tall.</li> </ul>		
8						
Э				<ul> <li>Herb – All herbaceous (non-woody) plants, regardless</li> <li>of size, and woody plants less than 3.28 ft tall.</li> </ul>		
10				Woody vine - All woody vines gr	eater than 3,28 f	ft in
11				height.		•
12	100-					
$\sim$		Total Cove				
50% of total cover: <u>20</u>	20% of to	otal cover:	0			
Woody Vine Stratum (Plot size:)	20	ł	- 1-			
Finally Torancidolia -	20	V/.	MAC			
Uitis Voture. Polia	10		THE			
3						
ł						
5 <b>_</b>				Hydrophytic (		
( ~~~~	30=	Total Cove		Vegetation		
50% of total cover: $\frac{l}{2}$	_ 20% of to	tal cover:	6	Present? Yes	No	
Remarks: (If observed, list morphological adaptations below	).					

SOIL

	optil needed to document the indicate	Sampling Point:
(inches) <u>Color (moist)</u> %	depth needed to document the indicator or cor Redox Features	firm the absence of indicators.)
0-5 (DYR ER	<u>Color (moist)</u> % <u>Type</u> <sup>1</sup> Loc	
K-16+ IDUR (UI		Remarks
CIRGIA		- Stalyloran
(		- 5kindy long
		- y-int
dric Soil Indicators: (Application, RM	Reduced Matrix, MS=Masked Sand Grains.	2
dric Soil Indicators: (Applicable to al Histosol (A1)	wise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2)	Polyvalue Below Surface (S8) // PD o -	The solutions for Problematic Hydric Solle <sup>3</sup> .
Black Histic (A3)		
Hydrogen Sulfide (A4)	Loanry Mucky Mineral (E1) (LBB O)	Left 2 cm Muck (A10) (LRR s)
Stratified Layers (A5)	Loanny Gleyed Matrix (F2)	Heduced Vertic (F18) (outside Mi DA Las
Organic Bodies (A6) (LRR P, T, U)	Depleted Matrix (E3)	
5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Processor (A8)	Redox Dark Surface (F6)	Olight Loamy Soile (Ego)
Muck Presence (A8) (LRR U)	Depleted Dark Surface (F7)	(mcKA 153B)
1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8)	Red Parent Material (TF2)
Depleted Rolew Duct a	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)	Iron-Mangapaso Mass	( provin (centaixs)
Coast Prairie Redox (A16) (MLRA 150A	Iron-Manganese Masses (F12) (LRR O, P,	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) /I PP O O		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)	aness disturbed of problematic.
Stripped Matrix (S6)	Fieumont Floodplain Soils (E10) (ML DA 44)	• • ·
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loamy Soils (F20) (MLRA 14)	A 149A, 153C, 153D)
fictive Layer (if observed):		(1000, 1000)
ре:		
ppth (inches);		
rks;		Hydric Soil Present? Yes No
A Dr	$\int $	$\bigwedge$
	Lydric soils	present

Wnah008\_u



Upland data point wnah008\_u facing east



Upland data point wnah008\_u facing north

## Wnah008 soils



Wetland/upland soils

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

Project/Site: SERP City/County: NASA Sampling Date: 24-14
Project/Site:
Section, Township, Range:
Landform (hillslope, terrace, etc.): "Bobom Wand Local relief (concave, convey, none);
Subregion (LRR or MLRA); Lat 36°04 31378 <sup>*</sup> Long: 77°51'37.575 Datum:
Soil Map Unit Name: we hadkee 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 no, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No X
Are Vegetation Call Call
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Asso
Wetland Hydrology Dresset 2
Remarks:
Recent bene + historic beaver activity causing ponding to occer within deciduous hardwood bottom
HYDROLOGY
Wetland Hydrology Indicators:
Primary Indicators (minimum of one is required; check all that apply)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)
Surface Water (A1)
Saturation (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)
Saturation (A3)     Hydrogen Sulfide Odor (C1)     Moss Trim Lines (B16)
Sediment Denosite (R2)
Drift Deposite (P2)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Uther (Explain in Remarks)
Participation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)
Surface Water Present? Yes No Depth (inches): 6 2 1
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Remarks: Area part of recent and hestoric between activity.
between activity.

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Sampling Point:

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

Tree Stratum (Plot size:)	Absolute	Dominan	Indicator	Dominance Test worksheet:
1. Acer negenda	<u>% Cover</u>	Species		Number of Dominant Species
2. Quercus courifolia	<u>70</u> TE	¥	FAC	That Are OBL, FACW, or FAC: (A)
3. Der rubrum	15	<u> </u>	FAC	Total Number of Dominant
4. Olivers agericance	$\frac{10}{10}$		F	Species Across All Strata:
5. Lique and storage. Here	10		FACU	Percent of Dominant Species
6.	10		_ <u>EAC</u>	That Are OBL, FACW, or FAC: (A/B)
				Provolones Indexes ( )
7	,			Prevalence Index worksheet:
	15			<u>Total % Cover of:</u> Multiply by:
27		Total Cov		OBL species x 1 =
50% of total cover: <u>57, 5</u> Sapling/Shrub Stratum (Plot size:)	<u>20% of </u>	total cover	:_(	FACW species x 2 =
1. <u>Alercus Gustan</u>	10:	./	Eno	FAC species x 3 =
2. Liquie contrar styracture	-18-	<u> </u>	1 Mile	FACU species         x 4 =           UPL species         x 5 =
3. Aler rulerum	10-		1-AC	
4. Acet Normalo		$\rightarrow$	THE	Column Totals: (A) (B)
5.	10		FAC	Prevalence Index = B/A =
	·····			Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.       8.			·	2 - Dominance Test is >50%
···	-Un-			☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:	=	Total Cov	<sup>er</sup> ∉	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:()	20% of t	otal cover:	<u> </u>	
1. Fot ergoneen hydropiperorde	. 16	. /		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Mardunia Reisak	9 <u>~</u> ~-	$-\frac{1}{2}$	FACW	be present, unless disturbed or problematic.
3. Geor comoso	$\frac{10}{10}$ -		DDL	Definitions of Four Vegetation Strata:
	<u> </u>	<u> </u>	when a	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
		. <u> </u>		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.
	20-			
50% of total array ( 7 of	=	Total Cove	"	
50% of total cover: <u>17-5</u> <u>Woody Vine Stratum</u> (Plot size;	20% of to	tal cover:		
1. Junior roterd for	К	. /	Enel	
2.		<u> </u>	1 Att	
3		<u> </u>		
4	·····			
	< _			Hydrophytic (
50% of total cover: $2.5$		otal Cove	r /	Vegetation Yes No
Remarks: (If observed, list morphological adaptations below)		tal cover: _		
(in observed, has morphological adaptations below)				

SOIL

& WNAHOOTG-W

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Profile Desc	ription: (Describe t	o the denth	needed to docum	nont the i	ndiastor	or confirm	<u> </u>	Sampling Point:
Depth	Matrix			x Features		or comann	the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type1	Loc <sup>2</sup>	Texture	Remarks
0-6	104R3/1						10Am	
6-16+	10YR5/2		104R 5/6	.5	C	M	SCL	
							<u> </u>	
					••••••			
					<u></u>			
1 <sub>Tupo: 0-0-</sub>						<u>.</u>		
Hydric Soil I	ncentration, D=Deple ndicators: (Applica	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ins.		_=Pore Lining, M=Matrix.
Histosol			Polyvalue Bel					r Problematic Hydric Soils <sup>3</sup> : sk (A9) (LRR O)
	ipedon (A2)		Thin Dark Su					(A9) (LRR 0) k (A10) (LRR S)
🔲 Black His			Loamy Mucky	/ Mineral (	F1) (LRR	· ·		Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		=2)			Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5) Bodies (A6) ( <b>LRR P,</b>	T IN	Depleted Mat		~			us Bright Loamy Soils (F20)
	cky Mineral (A7) (LRI		Redox Dark S					153B) nt Material (TF2)
Muck Pre	esence (A8) (LRR U)	1 - 1 - 1	Redox Depres					low Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (LI					plain in Remarks)
	Below Dark Surface rk Surface (A12)	(A11)	Depleted Och				. 7	
	airie Redox (A16) (M	LRA 150A)	Umbric Surfac					rs of hydrophytic vegetation and
Sandy M	ucky Mineral (S1) (LF	RR 0, S)	Delta Ochric (			0)		d hydrology must be present, disturbed or problematic.
Sandy G	leyed Matrix (S4)		Reduced Vert	ic (F18) (I	MLRA 150			
	edox (S5)		Piedmont Floo					
	Matrix (S6) face (S7) <b>(LRR P, S,</b>	т н)	Anomalous Br	right Loarr	ny Soils (F	20) <b>(MLRA</b>	149A, 153C, 15	i3D)
	ayer (if observed):	-, 0,						<b>A C</b>
Туре:	·							(/
Depth (inc	hes):						Hydric Soil Pre	esent? Yes No
Remarks:						L		
		,						
		11	$\sim$		$\sim$		ſ	1
		Alo	abric	$\leq_{o}$	- / /	<b>N</b>	et.	+
		~ 'X		ð	Y	pro	sony	/
		$\sim$				Ų		

Wnah007f\_w



Wetland data point wnah007f\_w facing east



Wetland data point wnah007f\_w facing south

		NNAHOOM - U
WETLAND DETERMINATION DATA F Project/Site:	ORM - Atlantic and	Gulf Coastal Plain Region
Applicant/Owner: $Pom \mathcal{N} \mathcal{O} \mathcal{N}$	City/County:	Sampling Date: <u>17/24/1</u> 4 _ State: <u>MC</u> Sampling Point: <u>Wnah007_</u> u
Landform (hillslope terrace etc.): ) $\frac{1}{2} \frac{1}{2}	Section, Township, Range:	
Subregion (LRR or MI RA):	ocal relief (concave, conve	x, none): <u>(onvex</u> Slope (%): <u>6</u>
Landform (hillslope, terrace, etc.):	UT Shill Long:	Datum:
Are climatic / hydrologic conditions on the site typical for this time of the	m - 60 1040 51	ODES NWI classification:
e en and en and en a prear for this time of year	res No	(If no, explain in Remarks )
Are Vegetation, Soil, or Hydrology significantly d Are Vegetation, Soil, or Hydrology naturally prob	Isturbed? Are "Norm	al Circumstances" present? Yes No
		, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locat	ions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No	within a Wetland?	Yes No
Remarks: 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 (B13)         High Water Table (A2)       Marl Deposits (B15) (I		Sparsely Vegetated Concave Surface (B8)
Saturation (A3)		Drainage Patterns (B10)
Water Marks (B1) U Oxidized Rhizosphere	s along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)     Presence of Reduced       Drift Deposits (B3)     Recent Iron Reduction		Crayfish Burrows (C8)
Drift Deposits (B3)       Recent Iron Reduction         Algal Mat or Crust (B4)       Thin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)		Geomorphic Position (D2) Shallow Aquitard (D3)
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):		
Water Table Present? Yes No Depth (inches):		
Saturation Present? Yes No $X$ Depth (inches):		Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	1	
	newous inspections), if ava	inadie:
Remarks:		
Netland hydrology indic	sters are	- not present

WAHOOT -4

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

				Sampling Point:
Tree Stratum (Plot size: 50)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Carya glaboa tomentesa	<u>- 85</u>	Species?	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3				Species Assess All Of
45				Percent of Dominant Species
0.	-			That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:
7.				Total % Cover of:Multiply by:
	85.	= Total Cov	er	OBL species x 1 =
50% of total cover: <u>42.</u> Sapling/Shrub Stratum (Plot size: <u>30</u> )	5 20% of	total cover:		FACW species         x 2 =           FAC species         x 3 =
1. figuetrum simense	10	$\sim$	FACV	FACU species x 3 =
2. Upme clate	·		FACU	UPL species x 5 =
3. They office	5	V.	FIAC	Column Totals: (A) (B)
5.	. <u></u> .			Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
6 7	·			1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	20	Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:	20% of t	otal cover:		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)			ŧ	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2		<u></u>		be present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
5	<u> </u>			<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vine – All woody vines greater than 3.28 ft in height.
12	<u> </u>			č
		Total Cover		
50% of total cover: Woody Vine Stratum (Plot size; 30)	20% of to	tal cover: _		
1 Dite 6 ortend from 1 (	つへ	. ( .	- 00	
2 Apples of Amples	-20	<u> </u>	$\frac{-1}{CAC}$	
B.	<u> </u>	<u> </u>	<u>FATC</u>	
1.				
5.		······		
	20-	······		Hydrophytic
50% of total cover:	<u>&gt;</u> _ = 1 20% of to	fotal Cover tal cover:		Vegetation Present? Yes No
Remarks: (If observed, list morphological adaptations below	·).		<u> </u>	
PEGER CORD LEGO				

WNAHOOT -U

Protile Descriptions (Descriptions)	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confil Depth Matrix Deday Fact	irm the absence of indicators.)
(inches) Color (mainty Redox Features	
$\frac{1}{0-3} \frac{1}{0} \frac{1}{10} \frac$	<u>Texture</u> Rem <b>a</b> rks
7-9 75 456.	
2 Mt 2 ( White	<u>sc</u>
<u></u>	SEL
Type: C=Concentration D=Depletion DM=Deduct AM to the second	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	
Black Histic (A3)	2 cm Muck (A10) (LRR S)
Hydrogen Sunde (A4)	Reduced Vertic (F18) (outside MLRA 150A,E Piedmont Floodplain Soils (F19) (LRR P, S, T
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F19) (LRR P, S, T
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)
	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A12)	T) <sup>3</sup> Indiantary of the last state
Under Fraine Redox (A16) (MLRA 150A)   Umbric Surface (E13) (LRP P. T. II)	<ul> <li>T) <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present,</li> </ul>
Sandy Mucky Mineral (S1) (LRR O, S)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	)
Sandy Redox (S5) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 14 Anomalous Bright Learny Soils (F19) (MLRA 14	49A)
☐ Stripped Matrix (S6) ☐ Dark Surface (S7) (LRR P, S, T, U)	RA 149A, 153C, 153D)
estrictive Layer (if observed):	
estrictive Layer (if observed): Type:	
estrictive Layer (if observed): Type:	
estrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches):	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): marks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): marks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	
estrictive Layer (if observed): Type: Depth (inches): emarks:	

Wnah007\_u



Upland data point wnah007\_u facing east



Upland data point wnah007\_u facing north

## Wnah007 soils



Wetland/upland soils

### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nash		Sampling Date: 11/17/2014
Applicant/Owner: Dominion		State: NC	_ Sampling Point: <u>wnab001f_w</u>
Investigator(s): TP, RH	Section, Township, R	ange: No PLSS in this area	
Landform (hillslope, terrace, etc.): drainageway		nvex, none): <u>concave</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P Lat: <u>36.070559</u>	77 Lo	ng: <u>-77.86585933</u>	Datum: WGS 1984
Soil Map Unit Name: Wedowee coarse sandy loam, 6 to 10 percen	nt slopes	NWI classifica	tion: None
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes 🖌 No	(If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are	"Normal Circumstances" pr	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	v problematic? (If r	needed, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point	locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	ン ン ン	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: PFO wetland in a drainage way. Flows in	to Swift	Creek.	Weak hydrology, s	aturated soils but heavy rain i	n the last 24 hou	rs.

### 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)
	Dry-Season Water Table (C2)
Field Observations:	
Surface Water Present? Yes No <u>/</u> Depth (inches):	
Water Table Present? Yes No <u>/</u> Depth (inches):	
Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):8         (includes capillary fringe)       Ves No Depth (inches):8	Wetland Hydrology Present? Yes <u>✓</u> No
Saturation Present? Yes <u>/</u> No Depth (inches): 8	
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>8</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Ves</u> No Depth (inches): 8 (includes capillary fringe)	
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>8</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>8</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present?       Yes       ✓       No       Depth (inches):       8         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	
Saturation Present?       Yes       ✓       No       Depth (inches):       8         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	
Saturation Present?       Yes       ✓       No       Depth (inches):       8         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	
Saturation Present?       Yes       ✓       No       Depth (inches):       8         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	
Saturation Present?       Yes       ✓       No       Depth (inches):       8         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	
Saturation Present?       Yes       ✓       No       Depth (inches):       8         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	

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

Sampling Point: wnab001f\_w

, ,	Absolute	Dominant In	diantar	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )		Dominant Ir Species?		
Pinus taeda	20	Yes	FAC	Number of Dominant Species That Are OBL EACW or EAC: $5$ (A)
••	15	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Acer rubrum				Total Number of Dominant
3. Fraxinus pennsylvanica	10	Yes	FACW	Species Across All Strata: 6 (B)
4				(=)
4				Percent of Dominant Species
5		······································		That Are OBL, FACW, or FAC: 83.33333333 (A/B)
6				
7				Prevalence Index worksheet:
	45	= Total Cover		Total % Cover of: Multiply by:
50% of total array 22.5			9	OBL species x 1 =0
50% of total cover: 22.5	20% of	total cover:		15 20
Sapling/Shrub Stratum (Plot size: 15)				FACTV species $x = 105$
<sub>1.</sub> Ligustrum sinense	20	Yes	FACU	FAC species x 3 =
2 Carpinus caroliniana	10	Yes	FAC	FACU species20 x 4 =80
				UPL species $0 \times 5 = 0$
3		. <u> </u>		80 245
4				Column Totals: (A) (B)
5				0.00
				Prevalence Index = B/A =3.06
6		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
		·		✓ 2 - Dominance Test is >50%
9	30			3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 15	20% of	total cover:	6	
Herb Stratum (Plot size: 5 )				data in Remarks or on a separate sheet)
Arundinaria gigantea	5	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
··				
2		. <u> </u>		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
				hoight
8				Sapling/Shrub – Woody plants, excluding vines, less
9		. <u> </u>		than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
	5			Herb – All herbaceous (non-woody) plants, regardless
		= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 2.5	20% of	total cover:	1	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 )				height.
1				inoight.
2		<u> </u>		
3				
4				
		· ·		Hydrophytic
5	-	·		Vegetation Present? Yes V No
	0	= Total Cover	-	Present? Yes V No
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	haat )			
Remarks. (include photo numbers here of on a separate si	neet.)			

Profile Desc	cription: (Describe to	o the dep	th needed to docur	nent the i	indicator	or confirm	n the absence of indicators.)	
Depth	Matrix			x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	
0-12	10YR 3/1	95	10YR 4/6	5	С	PL	SCL	
·								
						·		
						. <u> </u>		
	anoantration D Dank	tion DM	Doduced Metrix M	Maaka			<sup>2</sup> Leastion: DL Data Lining M Matrix	
Hydric Soil	oncentration, D=Deple		=Reduced Matrix, Ma	S=IVIASKet	a Sanu Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric So	oils <sup>3</sup> .
Histosol			Dark Surface	(97)			2 cm Muck (A10) (MLRA 147)	/10 .
	pipedon (A2)		Polyvalue Be	. ,	ce (S8) <b>(N</b>	II RA 147		
	istic (A3)		Thin Dark Su				(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye	•	, .	,,	Piedmont Floodplain Soils (F19)	
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)	<b>`</b>		(MLRA 136, 147)	
2 cm Mu	uck (A10) <b>(LRR N)</b>		Kedox Dark	Surface (F	=6)		Very Shallow Dark Surface (TF12)	)
Deplete	d Below Dark Surface	(A11)	Depleted Date	k Surface	e (F7)		Other (Explain in Remarks)	
	ark Surface (A12)		Redox Depre					
	/lucky Mineral (S1) <b>(Ll</b>	RR N,	Iron-Mangan		es (F12) <b>(</b> I	LRR N,		
	A 147, 148)		MLRA 13	,			3	
	Gleyed Matrix (S4)		Umbric Surfa				<sup>3</sup> Indicators of hydrophytic vegetation	
	Redox (S5)		Piedmont Flo					,
	Matrix (S6)		Red Parent M	laterial (F	·21) (MLR.	A 127, 147	7) unless disturbed or problematic.	
	Layer (if observed):							
Type:							· · · · · · · · · · · · · · · · · · ·	
Depth (in	ches):						Hydric Soil Present? Yes <u>V</u> No	
Remarks:								



Photo 1 Wetland data point wnab001f\_w facing east



Photo 2 Wetland data point wnab001f\_w facing west

### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Nas	h	Sampling Date: 11/17/2014
Applicant/Owner:		State: NC	_ Sampling Point: WNAB001_u
Investigator(s): TP, RH	Section, Townshi	ip, Range: No PLSS in this area	
Landform (hillslope, terrace, etc.): hillslope		e, convex, none): <u>none</u>	Slope (%): <u>4</u>
Subregion (LRR or MLRA): P Lat: 36.070	062588	Long: <u>-77.86582375</u>	Datum: WGS 1984
Soil Map Unit Name: Wedowee coarse sandy loam, 6 to 10 pe	ercent slopes	NWI classifica	tion: None
Are climatic / hydrologic conditions on the site typical for this ti	me of year? Yes	No (If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology sign	nificantly disturbed?	Are "Normal Circumstances" pr	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology nat	urally problematic?	(If needed, explain any answers	s 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?	Yes 🖌	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Upland point taken in a 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 R	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 So	ils (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:	
4	
Surface Water Present? Yes No 🖌 Depth (inches):	
Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):	
Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):	Wetland Hydrology Present? Yes No
Water Table Present? Yes No 🖌 Depth (inches):	; ;;
Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Ves No _       Depth (inches):	; ;;
Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Ves 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 inspect	; ;;
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 inspect	; ;;
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 inspect	; ;;
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 inspect	; ;;
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 inspect	; ;;
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 inspect	; ;;
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 inspect	; ;;
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 inspect	; ;;

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

Sampling Point: WNAB001\_u

Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Pinus taeda	60	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
2. Liriodendron tulipifera	20	Yes	FACU	
3				Total Number of Dominant Species Across All Strata: 5 (B)
4				Dereent of Deminent Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC:60 (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove	10	Total % Cover of: Multiply by:
	40 20% of	total cover:	16	OBL species $x_1 = 0$
Sapling/Shrub Stratum (Plot size:)	10			FACW species $x 2 = 0$
1. Liquidambar styraciflua	10	Yes	FAC	FAC species $x_3 = 100$
2. Acer rubrum	10	Yes	FAC	FACU species X 4 =
3				UPL species $x 5 = \frac{340}{340}$
4				Column Totals: (A) (B)
5		·		Prevalence Index = $B/A = 3.23$
6		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				$3$ - Prevalence Index is $\leq 3.0^1$
		= Total Cove	4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	10 20% of	total cover:	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)	_			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Polystichum acrostichoides	5	Yes	FACU	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Contine/Chrysh Maashunlanta avaludine vines lass
9				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	5	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:		total cover:		We advise All we advise a sector than 2.00 ft is
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				
2				
3				
4				Indeenhutie
5				Hydrophytic Vegetation
	-	= Total Cove	ər	Present? Yes <u>No</u>
50% of total cover:		total cover:	<u>^</u>	
Remarks: (Include photo numbers here or on a separate	e sheet.)			

Profile Desc	cription: (Describe t	o the depth	n needed to docun	nent the in	dicator of	or confirm	the absence of	of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 4/4	100					SL	
4-12	10YR 5/6	100					SCL	
	·			·			·	
·	·							
		<u> </u>						
1				. <u> </u>			2	
	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		=Pore Lining, M=Matrix.
Hydric Soil				(0-)				tors for Problematic Hydric Soils <sup>3</sup> :
Histosol	· · /		Dark Surface	. ,				cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be					oast Prairie Redox (A16)
	stic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye	. ,	•	47, 148)		(MLRA 147, 148) edmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat	,	2)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S	. ,	5)			ry Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	•	,			her (Explain in Remarks)
	ark Surface (A12)	( )	Redox Depre		. ,			
	/ucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane	• •	,	LRR N,		
	A 147, 148)		MLRA 13					
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) <b>(N</b>	ILRA 13	6, 122)	<sup>3</sup> India	cators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain So	ils (F19)	(MLRA 14	8) wet	land hydrology must be present,
	l Matrix (S6)		Red Parent M	laterial (F2	1) <b>(MLR</b>	A 127, 147	') unle	ess disturbed or problematic.
Restrictive	Layer (if observed):							
Туре:								
Depth (in	ches):						Hydric Soil I	Present? Yes 🖌 No
Remarks:							1	



**Photo 1** Upland data point WNAB001\_u facing east



Photo 2 Upland data point WNAB001\_u facing west

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

Project/Site: SERP	City/County:
- QUISSINGON	Saction Trumphin D
Investigator(s): DDUEST	Section, Township, Range: State Sampling Point: WnahU13f w
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): <u>Loncrowl</u> Slope (%):
	DH       07,56 (Long: 17° 52' 11,683 "Datum:
Are climatic / hydrologic conditions on the site typical for this time of ye	NWI classification:
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
	- important features, etc.
Hydrig Spil Deservice	Is the Sampled Area
Wetland Hydrology Present? Yes No No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum di
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Sparsely Vegetated Concerns Surface (Do
High Water Table (A2) Saturation (A3)	(LRR U) Drainage Patterns (R10)
	dor (C1) Moss Trim Lines (B16)
Sediment Deposits (B2)	res along Living Roots (C3) Dry-Season Water Table (C2)
Aigai Wat or Crust (B4)	C7) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Iron Deposits (B5)	
Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Denth (inches):	
Saturation Present? Yes No X Dopth (inches)	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Remarks:	previous inspections), if available:
	$\bigcirc$
Hadrolou	jeg present
$\mathcal{O}$	331 -

J

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

WNAHO13	$\mathbf{\mathbf{G}}$	
Sampling Point:	<b></b>	$\mathcal{N}$

1. Circus teacor       20       Circus       Number of Dominant Species       (A)         2. Macer crubprum       30       FEAC       Total Number of Dominant       (B)         3. Our crub allog       15       FEAC       Total Number of Dominant       (B)         4. Lindenand full publics       10       FEAC       Total Number of Dominant       (B)         5.       FEAC       FEAC       Total Number of Dominant       (B)         6.       7       Feace club multipublics       (AB)         7.       6       7       Face club multipublics       (AB)         8.       75       Fotal Cover       Multipublics       (AB)         9       Prevalence Index worksheet:       Total X species       x 1 =         50% of total cover 37.5       20% of total cover:       15       FACW       FACW         2. Macar cubrum       15       FACW       FACW       FACW       FACW         4.       10       FACW       FACW       FACW       (A)       (B)         4.       10       FACW       FACW       FACW       (A)       (B)         50% of total cover       10       FACW       FACW       FACW       (A)       (B)	Tree Stratum (Plot size:)	Absolute	Dominant	Indicator	Dominance Test worksheet:
2. Mear rule allow       30       4. In the Are BBL, FACW, or FAC.       (A)         3. Outer rule allow       15       4. EAR       Total Number of Dominant Species Provent of Dominant Species Across All Strats.       (B)         4. EAR       15       4. EAR       Species Across All Strats.       (B)         5. Sector full particles       15       4. EAR       Species Across All Strats.       (AB)         7. Sector full particles       15       2. EAR       Species Across All Strats.       (AB)         7. Sector full particles       15       2. EAR       Species Across All Strats.       (AB)         7. Sector full particles       15       2. EAR       Species Across All Strats.       (AB)         7. Sector full particles       15       2. EAR       Species Across All Strats.       (AB)         7. Sector full particles       15       2. Sector full particles       15       7. Sector full particles       16         8. Sector full particles       15       2. Sector full particles       17       1. Rand Test for Mytophytic Vegetation Mytophytophytophytophytophytophytophytoph	1. Pinus faceda	<u>% Cover</u>	Species?	Status	Number of Dominant Species
3. Observice allog       Image: Second Strate:       Image: Second Strate	2. Acer rubrum	30		FINC	That Are OBL, FACW, or FAC: (A)
5.	3. Overing alling	15	<u> </u>	FAC	Total Number of Dominant
5.	4. Linodendron Fulgatera	$\overline{10}$		FRU	Species Across All Strata: (B)
6.       That Are OBL, FACK, or FAC:       LO       (AB)         7.       Provision factor of the Worksheet:       Multiply by:         8.       50% of total cover       20% of total cover       FACW species       x 2 =         50% of total cover       20% of total cover       FACW species       x 2 =         1.       Marting Viriaguas Zanao       15       FACW species       x 3 =         2.       Marting Viriaguas Zanao       15       FACW species       x 4 =         2.       Marting Viriaguas Zanao       15       FACW species       x 4 =         2.       Marting Viriaguas Zanao       15       FACW       Species       x 4 =         2.       Marting Viriaguas Zanao       15       FACW       Species       x 4 =       (B)         2.       Marting Viriaguas Zanao       15       FACW       FACW       Provience Index is 3.0       (B)         3.       Marting Viriaguas Zanao       20% of total cover       20       30% of total cover       20       30%       1       Rapid Statum (Plot size       1       Rapid Statum (Plot size       1       Indicators of hydric soil and wetland hydrology must be present, unless disclassiburbed or problematic.         3.       Marting Statum (Plot size       30       10	5	<u></u>			Percent of Dominant Species
**       Provalence Index worksheet:         50% of total cover       7.5         Sauking/Shub Stratum (Plot size)       FACU species					
30       75       = Total Cover       Total 2: Cover of Multiply by:         50% of total cover 37.5       20% of total cover.       5       FAC species       x 1 =         51% of total cover 37.5       20% of total cover.       5       FAC species       x 1 =         2.       Acchr cubruch       15       FAC       Species       x 3 =         2.       Acchr cubruch       15       FAC       Species       x 3 =         3.       FPTXLINED Council cover       FAC       Species       x 5 =         4.       FAC       Species       x 5 =       Column Totals:       (A)       (B)         7.       1.       Repeation Indicators:       1.       Raid Total Cover       (A)       (B)         7.       1.       Raid Total Cover       2.       Dominance Test is >60%       (Explain)         160 Statum (Plot size       30       Fracular Cover       30       Indicators of hydric soil and wetland hydrology must be present. unless distructed or problematic Hydrophytic Vegatation (Explain)         11.       Micro Statum (Plot size       30       Fracular Cover       Septimities of hydric soil and wetland hydrology must be present. unless distructed or problematic Hydrophytic Vegatation (Explain)         12.       Micro Statum (Micron' Grow Matheteeeeeeeeeeeeeeeeeeeeeeeeeeee	7			······	Prevalence Index worksheet:
50% of total cover       75       = Total Cover       15         Sapling/Shub Stratum (Plot size)       15       2% of total cover       15       FACW species	8				<b>T</b> ( 10) -
Suppling/Shub Stratum (Plot size)       1       20% of total cover.       1       FACU species       x 2 =         1       Macharol (a, Macha		75 -	Total Cov		
Statum (Plot size	50% of total cover:37.5	20% of i		15	FACW species x 2 =
1 Marganzlia Vingun za na	Saping/Shrub Stratum (Plot size:)		, iotal cover		FAC species x 3 =
2       PEAC       FAC       VPL species       x 5 =	1. Magnolia Virgin, Zung.	15	Jac -	FACW	FACU species x 4 =
3.       FrtXLINES Park (1) (1001) (201)       ID       FALM       Column Totals:(A)(B)         4.	2. Het cuonim	15	$\overline{\mathbf{\nabla}}$		
4.       Prevalence Index = B/A =         5.       Hydrophytic Vegetation Indicators:         7.       1. Rapid Test for Hydrophytic Vegetation         8.       4/D. = Total Cover         9.       50% of total cover         2.0% of total cover       20% of total cover         9.       50% of total cover         2.0% of total cover       20% of total cover         9.       Statum (Plot size:         1.       Problematic Hydrophytic Vegetation' (Explain)         1.       Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic.         1.       Micropstechtin Minuted in the cover         1.       FACU         1.       Saping/Shrub – Woody plants, excluding vines, isas than 3.28 ft (1 m) tail.         1.       Saping/Shrub – Woo	3. Traxiner pennsylvanice	10	$\checkmark$		
S.       Intervention loak × BIA =	4				
7.	5				Prevalence Index = B/A =
B.	6				
410       = Total Cover         50% of total cover       20% of total cover:         60       20% of total cover:         7       20% of total cover:         8       20% of total cover:         9       20% of total cover:         9       20% of total cover:         9       20% of total cover:         20% of total cover:       20% of total cover:         20       20% of total cover:         20% of total cover:       20% of total cover:         20% of total cover:       25         20% of total cover:	7		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
4D       = Total Cover         50% of total cover:       20% of total cover:         6ch Stratum (Plot size:       20% of total cover:         7       10         7       10         7       10         7       10         7       10         10       10         10       10         11       10         11       10         12       10         14       10         150% of total cover:       10         160       10         17       10         18       10         19       10         10       10         10       10         10       10         10       10         10       10         10       10         11       10         11       10         11       10         11       10         11       10         12       10         13       10         14       10         14       10         150% of total cover:       10	8		······································		2 - Dominance Test is >50%
Solv of total cover:       20% of total cover:       0         Image: Solve of total cover:       20% of total cover:       0         Image: Solve of total cover:       20% of total cover:       0         Image: Solve of total cover:       10       10		410 =	Total Cove		
tends Stratum (Plot size:       3D       FACu       Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.         Mucrosstcarium Vimynoa       D       FACu       Definitions of Four Vegetation Strata:         Mucrosstcarium Vimynoa       D       FACu       Definitions of Four Vegetation Strata:         Mucrosstcarium Vimynoa       D       FACu       Definitions of Four Vegetation Strata:         Tree - Woody plants, excluding vines. 3 in: (7.6 cm) or more in diameter at breast height (DBH), regardless of height.       Saphing/Shrub - Woody plants, excluding vines. 3 in: (7.6 cm) or more in diameter at breast height (DBH), regardless of height.         0       Saphing/Shrub - Woody plants, excluding vines. less than 3.28 ft (1 m) tall.         1       Body vine - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.         2       SD = Total Cover         50% of total cover:       25 20% of total cover:         50% of total cover:       50% of total cover:         1       End Cover         50% of total cover:       50% of total cover:         20% of total cover:       20% of total cover:         20% of total cover:       20% of total cover:         20% of total cover:       20% of total cover:	50% of total cover: $20$	20%  of  t		8	Problematic Hydrophytic Vegetation' (Explain)
Implicit provide the state of the state	Herb Stratum (Plot size		Mai cover.		
Implicit provide the state of the state	1. CAREX INTUMESCONS 7	0	11	FACIL	Indicators of hydric soil and wetland hydrology must
FWULACUACERIA GUDEADEA       LO       FALL         Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.         Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         0	2 MICANSTONIC MARINA	12	7		be present, unless disturbed or problematic.
more in diameter at breast height (DBH), regardless of height.         Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Herb – All herbaceous (non-woody) plants. regardless of size, and woody vines greater than 3.28 ft tall.         Woody vine – All woody vines greater than 3.28 ft in height.         50% of total cover:       25 20% of total cover:         50% of total cover:       50% of total cover:         20% of total cover:       7         Yes       No	3. Anundencorra gammea	10-		and the second se	
Index in drameter at breast height (DBH), regardless of height.         Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Image: Index in the second plants is the second plants in the second plants is the second plants. It is than 3 in. DBH and greater than 3.28 ft tall.         Image: Index in the second plants is the second plants.         Image: Index in the second plants is the second plants.         Image: Index in the second plants is the second plants.         Image: Index in the second plants.         Image: Index i	4	finden	V	Inch	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         0	5				more in diameter at breast height (DBH), regardless of
than 3 in. DBH and greater than 3.26 ft (1 m) tall. than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody vines greater than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. 50% of total cover: $25$ 20% of total cover: $1050%$ of total cover: $25$ 20% of total cover: $1050%$ of total cover: $50%$ of total cover: $25%$ of total cover: $2%50%$ of total cover: $50%$ of total cover: $50%$ of total cover: $2%50%$ of total cover: $50%$ of total cover: $20%$ of total cover: $2%$	6	<u> </u>		1	
$\frac{  erb  - All herbaceous (non-woody) plants. regardlessof size, and woody plants less than 3.28 ft tall.Woody vine - All woody vines greater than 3.28 ft inheight.\frac{50\% \text{ of total cover:}}{25 20\% \text{ of total cover:}} \frac{  D  }{2}$	7.				Sapling/Shrub – Woody plants, excluding vines, less
of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Yes X No	8				
$\frac{1}{2}$ $\frac{50}{50\% \text{ of total cover:}} 25 20\% \text{ of total cover:} 10$ $\frac{1}{2}$ $\frac{50\% \text{ of total cover:}}{25 20\% \text{ of total cover:}} 10$ $\frac{10}{50\% \text{ of total cover:}} 5 \frac{10}{20\% \text{ of total cover:}} 2$ $\frac{10}{20\% \text{ of total cover:}} 2$	9				Herb – All herbaceous (non-woody) plants, regardless
height. 50%  of total cover: 25 20%  of total cover: 10 50%  of total cover: 25 20%  of total cover: 10 50%  of total cover: 5 20%  of total cover: 2 10 = Total Cover 2 50%  of total cover: 5 20%  of total cover: 2 10 = Total Cover 2 20%  of total cover: 5 20%  of total cover: 2	10				or size, and woody plants less than 3.28 ft tall.
2	11				Woody vine - All woody vines greater than 3.28 ft in
$\frac{50}{50\% \text{ of total cover:}} = \text{Total Cover}$ $\frac{50\% \text{ of total cover:}}{2520\% \text{ of total cover:}} = \frac{10}{740}$ $\frac{10}{50\% \text{ of total cover:}} = \frac{10}{20\% \text{ of total cover:}} = \frac{10}{7}$ $\frac{10}{20\% \text{ of total cover:}} = \frac{10}{7}$ $\frac{10}{20\% \text{ of total cover:}} = \frac{10}{7}$ $\frac{10}{7} = \text{Total Cover}$ $\frac{10}{7} = \text{Total Cover}$ $\frac{10}{7} = \text{Total Cover}$	12		·		neight.
$\frac{50\% \text{ of total cover:}}{20\% \text{ of total cover:}} \frac{20\% \text{ of total cover:}}{20\% \text{ of total cover:}} \frac{10}{20\% \text{ of total cover:}} \frac{10}{20\% \text{ of total cover:}} \frac{10\% \text{ of total cover:}}{2} 10\% \text{ of total $		50-1			
Image: Stratum (Plot size:	50% of total cover 25	$\frac{20\%}{20\%}$ of tot		101	
$\frac{\partial mullax so fundulation}{                                    $	Noody Vine Stratum (Plot size:	20 % 01 101	al cover	ro	
$\frac{ D }{20\% \text{ of total cover}} = \frac{17 \text{ tc}}{20\% \text{ tc}} = \frac{17 \text{ tc}}{20\% $	1. milax sotundition.	D	$\checkmark$ .	SAL	
ID     = Total Cover     Hydrophytic       50% of total cover:     50% of total cover:     Present?			<u> </u>	All	
ID     = Total Cover     Hydrophytic       50% of total cover:     50% of total cover:     Present?	3	······			
$\frac{10}{20\% \text{ of total cover:}} = Total Cover \\ \frac{20\% \text{ of total cover:}}{20\% \text{ of total cover:}} = \frac{1}{2}$					
50% of total cover: 5 20% of total cover: 7 Vegetation Present? Yes No	j				
50% of total cover: 20% of total cover: Present? Yes / No		ID -T		!	
emarks: (If observed, list morphological adaptations below).	50% of total cover: 5			2	
	Remarks: (If observed, list morphological adaptations below)	20 % 01 101	ar cover:		
	,				

SOIL

WNAHO13f_	M
Samalia D i r	ALC: N

Profile Des	scription: (Describe	e to the dep	th needed to docum	ent the	ndicator	oroonfirm	Alternation	Sampling Point:
			Redo	<u>x Feature</u>		or confirm	the absence of indi	cators.)
(inches)	Color (moist)	%	Color (moist)	<u>~ %</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Daw
0-8_	104R3/2							Remarks
56.16+	OYRS/2		104R 4/4		~	1.0	LOAM	
0-10-	for the star		10/1 7/7	<u> </u>		M.	SCL_	
······································								
						·		
							·	
					-			
		_						
'Type: C=C	oncentration, D=Dep	oletion, RM=	Reduced Matrix, MS	-Maakad				
Hydric Soil	Indicators: (Applic	able to all I	RRs, unless otherv	vise note	Sand Gra	ins.	Location: PL=Por	e Lining, M=Matrix.
Histosol	l (A1)							blematic Hydric Soils <sup>3</sup> :
Histic E	pipedon (A2)		Polyvalue Belo	ow Surfac	e (S8) (LF	RR S, T, U)		) (LRR O)
🗍 Black H	istic (A3)		Thin Dark Sur	race (S9)	(LRR S, T	', U)	2 cm Muck (A1	0) (LRR S)
🔲 Hydroge	en Sulfide (A4)		Loamy Mucky	Mineral (I	=1) (LRR (	0)	Reduced Vertic	(F18) (outside MLRA 150A B)
Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F	2)		Piedmont Floor	plain Soils (F19) (LRR P. S. T)
🔲 Organic	Bodies (A6) (LRR P	. T. U)	Redox Dark Si	X (F3)			Anomalous Brig	ht Loamy Soils (F20)
🔄 5 cm Mu	cky Mineral (A7) (LF	R P. T. UI	Depleted Dark		9) (F-7)		(MLRA 153B	)
🔲 Muck Pr	esence (A8) (LRR U	() ()	Redox Depres	Surface (	F7)		Red Parent Ma	terial (TF2)
🔲 🚛 1 cm Mu	ick (A9) (LRR P, T)	,	Marl (F10) (LR	sions (F8)			L Very Shallow D	ark Surface (TF12)
X Depleted	Below Dark Surface	e (A11)	Depleted Ochri	RU) 6 (514) (1			Uther (Explain i	n Remarks)
Thick Da	ark Surface (A12)	(			WLRA 151	)	2	
🔄 Coast Pr	airie Redox (A16) (N	LRA 150A)	Iron-Manganes		6 (F12) (LF	<b>RO, Ρ, Τ</b> )		hydrophytic vegetation and
📃 Sandy M	lucky Mineral (S1) (L	.RR 0. S)	Delta Ochric (F	* (FI3) (L 17) (MIL D	RR P, I, L	J)	wetland hydi	ology must be present,
] Sandy G	leyed Matrix (S4)			1/)(IVILR	(A 151)		unless distur	bed or problematic.
] Sandy R	edox (S5)		Reduced Vertic	;(F18)(M Indain O	LRA 1504	A, 150B)		
	Matrix (S6)		Piedmont Floor	piain Sol	IS (F19) (N	ILRA 149A	N)	
	face (S7) (LRR P, S	. T. U)		int Loamy	/ Solls (F2	0) <b>(MLRA</b> '	, 149A, 153C, 153D)	
Restrictive L	ayer (if observed):	, , _,						
Туре:	,							
Depth (inc	hes):	·····						
Remarks:							Hydric Soil Present?	Yes No
ternarka.								
		11	Dric 50	· A	_		$\Delta$	
		Hu	Dric 50	-eV	BA	200	4517	
		Vero	acco		1		- A	
		0						

Wnah013f\_w



Wetland data point wnah013f\_w facing east



Wetland data point wnah013f\_w facing south

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

Project/Site: $\Box = \sum \mathcal{E} \mathcal{R} \mathcal{P}$	
Project/Site: City/County: NASA Sampling Date: 7-25-14 Applicant/Owner: Dominium	
Investigator(s): DUI State: TOC Sampling Point: WNATHOLS	17
Landform (hillslope, terrace, etc.):	0
Landform (hillslope, terrace, etc.): <u>G1USUBPE</u> Local relief (concave, convex, none): <u>Slope (%): <math>O = 2</math></u> Subregion (LRR or MLRA): <u>Lat: <math>3604'06.486''</math> Long: <math>77'52'11.091'''</math> Datum: <u>Datum</u>: <u>Datum</u></u>	
Soil Map Unit Name: Nortfolk promy some 2-620 Stopes NMU classification	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)	
Are Vegetation Soil at Hudstein and Are Vegetation	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present?     Yes     No     Is the Sampled Area       Wetland Hydrology Present?     Yes     No     within a Wetland?     Yes     No	
Wethand Hydrology Present?     Yes     No       Remarks:     No	
HYDROLOGY	
Wetland Hydrology Indicators: Secondary Indicators	
Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)	
Surface Water (A1)	
Drainage Patterns (B10)	
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4)	
Inundation Visible on Aerial Imagons (P7)	
Water-Stained Leaves (R0)	
Field Observations: Sphagnum moss (D8) (LRR T, U)	
Surface Water Present? Yes NoDepth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	
No hydrology present	

## WNAH213 Sampling Point: \_\_\_\_\_ - V

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

Tree Stratum (Plot size:	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	Species?	Status	
1. Pours tacada,	_20	0	1-AC	That Are OBL, FACW, or FAC:
2. Liriochadron fulipitera	28		FALI	A)
3. Querus alpa	20	()	TIACI	Total Number of Dominant
4. Cranya alba	- A	$\underline{\frown}$	FALL	B)
5.	_ 10_	$\underline{\nabla}$	<u>FAC</u>	Boroont of During to the Third
				Percent of Dominant Species DURING (A/B)
6				(A/B)
1.				Prevalence Index worksheet:
8			<u> </u>	Total % Cover of: Multiply by:
	75			
50% of total array 3 *	7 <	= Total Cov	er	OBL species x 1 =
50% of total cover: <u>3</u> Sapling/Shrub Stratum (Plot size:	<u>[, )</u> 20% of	total cover:	12	FACW species × 2 =
	1	/	r	FAC species x 3 =
1. Contron tulysitera	12	V	FACL	FACU species x 4 =
2. Queorgus alba	15	$\lambda / i$	FACU	UPL species x 5 =
3. Liquistrum schense	10	5	FARD	Column Totals: (A) (B)
4			1	
5		-		Prevalence Index = B/A =
6			·····	Hydrophytic Vegetation Indicators:
67	•		·····	1 - Rapid Test for Hydrophytic Vegetation
	. <u></u> .			2 - Dominance Test is >50%
8	·			
	50 =	Total Cove	er	$3$ - Prevalence Index is $\leq 3.0^{1}$
50% of total cover: 2<	20% of t	otal cover:	10	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:		otar cover.		
1. Microskein Viminea	60	1	TA/	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2 hours and on the			FAL	be present, unless disturbed or problematic.
2. honicera suponies	_20_	<u> </u>	FAC	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.
6		·····		-
7.				Sapling/Shrub - Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				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
12				height.
	50-			
50% of total cover: $\frac{2}{C}$		Total Cover	1/ 1	
Woody Vine Stratum (Plot size:)	20% of to	tal cover: _	10	
1. Smulax hotunali più	$\sim$	. / -		
C C C C C C C C C C C C C C C C C C C	<u>~5</u> _	V	AC	
2				
3				
4				
5				
				Hydrophytic ,
المر المسيا ا		otal Cover		Vegetation V
50% of total cover: 25	20% of tot	al cover:	5	Present? Yes No
Remarks: (If observed, list morphological adaptations below	/).		L	

SOIL

WNAHO13	U
Sampling Point:	

Depth		oth needed to document the indicator or confirm	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Matrix	Redox Features	,
(inches)	<u>Color (moist)</u> %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
n-6	104R417		Swhen Lown
7-15	TOYRSIZ	······	JERGHARM
010	TOROJO		5 Andy Loran
	· · · · · · · · · · · · · · · · · · ·		<u> </u>
		······································	
<sup>1</sup> Type: C=Cc	ncentration, D=Depletion, RM	=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		Polyvalue Below Surface (S8) (LRR S, T, I	
	ipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black His	. , ,	Loamy Mucky Mineral (F1) (LRR O)	
	n Sulfide (A4)	Loamy Gleyed Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,B)
	Layers (A5)	Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20)
	cky Mineral (A7) (LRR P, T, U)		(MLRA 153B)
	esence (A8) (LRR U)	Redox Depressions (F8)	Red Parent Material (TF2)
	ck (A9) (LRR P, T)		Very Shallow Dark Surface (TF12)
	Below Dark Surface (A11)	Mari (F10) (LRR U)	Uther (Explain in Remarks)
	rk Surface (A12)	Depleted Ochric (F11) (MLRA 151)	
	airie Redox (A16) (MLRA 150)	Iron-Manganese Masses (F12) (LRR O, P,	
	ucky Mineral (S1) (LRR O, S)		wetland hydrology must be present,
	eyed Matrix (S4)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
	edox (S5)	Reduced Vertic (F18) (MLRA 150A, 150B)	
	Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 14	
	face (S7) (LRR P, S, T, U)	Anomalous Bright Loamy Soils (F20) (MLR	(A 149A, 153C, 153D)
	over life abaarved h		
	ayer (if observed):		
Туре:	· · ·		
Туре:	ayer (if observed): hes):		Hydric Soil Present? Yes No
Туре:	· · ·		Hydric Soil Present? Yes No
Type: Depth (inc	hes):		
Type: Depth (inc	hes):	9010	
Type: Depth (inc	hes):	- Do hunc ser	
Type: Depth (inc	hes):	- Do hypne so	
Type: Depth (inc	hes):	- Do hydric so	
Type: Depth (inc	hes):	) o hydra so	
Type: Depth (inc	hes):	- Do hydra so	
Type: Depth (inc	hes):	To hydra so	
Type: Depth (inc	hes):	To hydra so	
Type: Depth (inc	hes):	20 hyona so	
Type: Depth (inc	hes):	Do hydra So	
Type: Depth (inc	hes):	Do Lyona So	
Type: Depth (inc	hes):	Do hydra So	
Type: Depth (inc	hes):	Do hydra So	
Type: Depth (inc	hes):	Do hydra So	
Type: Depth (inc	hes):	20 hydra So	
Type: Depth (inc	hes):	20 hyona so	
Type: Depth (inc	hes):	20 hydra So	
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Type: Depth (inc	hes):	20 hydra So	
Type: Depth (inc	hes):	20 hydra So	

Wnah013\_u



Upland data point wnah013\_u facing east



Upland data point wnah013\_u facing north

## Wnah013f soils



Wetland/upland soils

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Project/Site: <u>SERP</u> City/County: <u>Nash</u> \_\_\_\_\_ Sampling Date: 7/25/14 Applicant/Owner: DOMINICN \_\_ Sampling Point: wnah012f w State: Investigator(s): IDDWEST \_\_\_\_\_ Section, Township, Range: \_\_ Landform (hillslope, terrace, etc.): Bread Flat Local relief (concave, convex, none): CONLAVE \_\_\_\_\_ Slope (%): \_\_\_\_ Subregion (LRR or MLRA): Lat: 36°03'58, 426 Long: 77°52 18,510" Datum: Wild 89 Rains Soil Map Unit Name: 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 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes < No Is the Sampled Area Hydric Soil Present? Yes Yes No\_\_\_\_ Yes 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) $\Box$ 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); \_\_\_\_No \_\_X\_\_\_ Depth (inches): \_\_\_\_\_\_ Saturation Present? Yes Wetland Hydrology Present? Yes 📈 No \_\_\_\_\_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

WNAHOIZF\_w Sampling Point:

20	Absolute Dominant Indicator	
Tree_Stratum (Plot size:)	<u>% Cover</u> <u>Species?</u> <u>Status</u>	
1. linus ferda	-15 FAC	I Number of Dominant Species
2. Liquidanbar storacitha	- to - FAC	That Are OBL, FACW, or FAC: (A)
3. Liriadendron the lirity na		
Dave a Marine ha	_ ZS V PACI	Species Across All Strata:
4. Oxydendrum grboreum	<u></u>	
5. Acer Mbrum	<u>15</u> EAC	Percent of Dominant Species
6		That Are OBL, FACW, or FAC: (A/B)
7		Prevalence Index worksheet:
8		
F	$\frac{9}{10} = \text{Total Cover}$	OBL species x 1 =
50% of total cover:	17.5 20% of total cover: <u>19</u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:	)	FAC species x 3 =
1. Sasifras albidum	<u> </u>	FACU species x 4 =
2. Liquidanber styraciting	TO J FAC	UPL species x 5 =
3. Oxydendrum arborem	10 J FACU	Column Totals: (A) (B)
4. Ace rubrom		(b)
5. Growing pur blig	$-\frac{s}{13} - \frac{FAC}{FBC}$	Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
1,		2 - Dominance Test is >50%
8		
	<u>45</u> = Total Cover	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:	27.5 20% of total cover:	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size: 30		
1. Cleathra Arilelia	20 / EA.	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2 Hogel the	- 10 V FACIN	be present, unless disturbed or problematic.
2. Vaccinium ateminium		Definitions of Four Vegetation Strata:
3. Osmunda cinimonia	- 10 FACW	
4. Headmardia ariolata	$-\frac{10}{\sqrt{0BI}}$	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or 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		Herb – All herbaceous (non-woody) plants, regardless
9		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		noight.
	$45^{}$ = Total Cover	
50% of total cover: 7	2.5 20% of total cover: 9	
Woody Vine Stratum (Plot size;)	20% of total cover:	
1. Smilare rotundi (1 101 size,)	$10$ $\sim$	
	$-\frac{10}{10}$ $-\frac{10}{10}$	
2. Vitas peteroplelia	- TO FAC	
3	· · · ·	
4		
5		
	20 = Total Cover	Hydrophytic
50% of total cover:		Vegetation Present? Yes No
		Present? Yes <u>V</u> No
Remarks: (If observed, list morphological adaptations b	pelow).	
US Army Corps of Engineers		Atlantic and Gulf Coostal Diain Denian Maria of

### SOIL

WNA HOIZE - W Sampling Point:

Profile Des	scription: (Describe	to the depth	needed to docu	ment the i	ndicator o	or confirm	the absence of	indicators.)
Depth _(inches)	Matrix Color (moist)		Redo	ox Feature	s			
0-12	10th 7/1		Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	<u>    Texture                                    </u>	Remarks
171		·					<u>3L</u>	
1/-16	1071- 4/1						56	
								An
							<u> </u>	
		·						
	- <u></u>	·		_				
<sup>1</sup> Type: C=C	Concentration, D=Dep	letion, RM=Re	educed Matrix, M	S=Masked	Sand Gra	ins	<sup>2</sup> Location: RL	=Pore Lining, M=Matrix.
inyune son	indicators: (Application	able to all LR	Rs, unless othe	rwise note	od.)		Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histoso	I (A1)		Polyvalue Be			RR S. T. U		(A9) (LRR O)
	pipedon (A2)		Thin Dark Su	irface (S9)	(LRR S, T	, U)		(A10) (LRR S)
	listic (A3) en Sulfide (A4)	-	Loamy Muck	y Mineral (	F1) (LRR (	0)	Reduced V	/ertic (F18) (outside MLRA 150A.B)
	d Layers (A5)	-	Loamy Gleye		-2)		Piedmont F	Floodplain Soils (F19) (LRR P, S, T)
	Bodies (A6) (LRR P,	тш	Depleted Mat		-			s Bright Loamy Soils (F20)
5 cm Mi	ucky Mineral (A7) (LR	R P. T. U)	Redox Dark S	Surface (Fi	) /E7\			
Muck Pi	resence (A8) (LRR U)	)	Redox Depre	ssions (F8	( <i>Г1</i> )			t Material (TF2)
1 cm Mi	uck (A9) (LRR P, T)	1	Marl (F10) (L	RR U)	,		Other (Evp	ow Dark Surface (TF12) Iain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Och		MLRA 151	)		an in Remarks)
	ark Surface (A12)		Iron-Mangane	ese Masse	s (F12) (Ll	RR 0. P. T	r) <sup>3</sup> Indicators	s of hydrophytic vegetation and
Coast P	rairie Redox (A16) <b>(M</b>	ILRA 150A)	Umbric Surfa	ce (F13) <b>(L</b>	.RR P, T, I	U)		hydrology must be present,
Sandy R	Mucky Mineral (S1) (L Gleyed Matrix (S4)	RR 0, S) ]	Delta Ochric	(F17) <b>(ML</b> F	RA 151)			listurbed or problematic.
Sandy F	Redox (S5)	l I	Reduced Ver	tic (F18) <b>(N</b>	ILRA 150	A, 150B)		
	Matrix (S6)		Piedmont Flo	odplain So right Loom	ils (F19) <b>(F</b>	MLRA 149	A)	
	rface (S7) (LRR P, S,	. T, U)		ngni Loam	y 50115 (F2	20) (MLRA	149A, 153C, 153	iD)
Restrictive I	Layer (if observed):					T		
Type:			_					
Depth (in	ches):		_				Hydric Soil Pres	sent? Yes No
Remarks:								

Wnah012f\_w



Wetland data point wnah012f\_w facing east



Wetland data point wnah012f\_w facing south

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

Project/Site: <u>SERP</u>	City/County: KSH Sampling Date: 7-25-14 State:/\Sampling Point: Wnah012_u
Applicant/Owner: Dominion	
	Section Township Dense:
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Slope (%): $2-4$
Subregion (LRR or MLRA):	03 57. 466 Long: 77 52 (8.994 "
Soil Map Unit Name: Cooldsbood fine &	Stang lengen 2% NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No. (the subject to be and the second seco
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
	sampling point locations, transects, important features, etc.
	in portant reatures, etc.
	Is the Sampled Area
Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No	within a Wetland? Yes No
Remarks:	
Not all three pa	vameters present
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Surface Soil Cracks (B6)
High Water Table (A2)	e oparación vegetated Concave Surface (B8)
Hydrogen Sulfide Oc	
Vater Marks (B1) U Oxidized Rhizosphere	res along Living Roots (C3) Dry-Season Water Table (C2)
Presence of Reduce	ed Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	on in Tilled Soils (C6) Saturation Visible on Aerial Imagen (C0)
Algal Mat or Crust (B4) Thin Muck Surface ( Iron Deposits (B5) Other (Explain in Red	C7) Geomorphic Position (D2)
Iron Deposits (B5) U Other (Explain in Rei 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 X Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
	<b>^</b>
No hydrobog	- ff-r
Rycholog	y present
$\bigcirc$ $\bigcirc$	

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# WNAHOIZ -U

VEGETATION (Four Strata) - Use scientific names of plan

\_)

\_\_\_\_\_

Tree Stratum (Plot size:

Qbo

2.

3. 4. 5.

6.

7. \_

8. \_

1. Carya tomantosa

( US

10

DXy Dendron asbored

\_\_\_\_\_

nes of plants.	Sampling Point:
Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
25 1 EACU	Number of Dominant Species That Are OBL, FACW, or FAC:
30 FACU	Total Number of Dominant Species Across All Strata: (B)
	Percent of Dominant Species That Are OBL, FACW, or FAC:
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
90 = Total Cover	OBL species x 1 =
20% of total cover: 18	FACW species x 2 =
~ ~ /	FAC species x 3 =
20 V FACU	FACU species x 4 =
15 J FACU	UPL species x 5 =
5 PACU	Column Totals: (A) (B)
20 V FACU	Prevalence Index = B/A =

		Wulliply by:
	10 = Total Cover	OBL species x 1 =
50% of total cover: $\frac{45}{5}$	20% of total cover: 18	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:		FAC species x 3 =
1. C. FINTA FOMOMOR KH	20 V FACU	FACU species x 4 =
2. Quercus alba	15 J FAC	UPL species x 5 =
3. Querque stellata	5 _ FACU	Column Totals: (A) (B)
4. Oxydendron arborea	<u>20 V FACU</u>	Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
ſ	······	2 - Dominance Test is >50%
8	A	$ 3 - \text{Prevalence Index is } \le 3.0^{1} $
	= Total Cover	
50% of total cover: $30$	20% of total cover: ( 2	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum, (Plot size:		1 matter to a final to a fin
1. Clethin almitolia	5_ FACN	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Ditis rotunelitolia	D V FAC	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.
0		Somling/Charles 14/
/·		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
0		
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 height.
12		neight.
	15 = Total Cover	
50% of total cover: 7 .5	20% of total cover:	
Woody Vine Stratum (Plot size:		
1. Vitis rotunditolia	5 / FA	
2		
3		
4		
5		
	= Total Cover	Hydrophytic Vegetation
50% of total cover: 2,5		Present? Yes No
Remarks: (If observed, list morphological adaptations below).		···· /

### SOIL

WNAHOIZ \_U

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Profile Description: (Describe to the depth peopled to description:	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confir Depth <u>Matrix</u> Redox Features	m the absence of indicators.)
$\sim$ Color (moist) $\sim$ Color (moist) $\sim$ Type <sup>1</sup> Loc <sup>2</sup>	
0-1 $104R 3/1$	<u>remarks</u>
$\frac{4.8}{104R}$ $\frac{104R}{10}$	
<u>8-16<sup>+</sup>/04R 4/3</u>	
Type: C=Concentration D=Deptation DN D	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U	Indicators for Problematic Hydric Soils <sup>3</sup> :
Thin Dark Surface (S0) (I PR C T U)	
Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Law (An)	Piedmont Floodplain Soils (F19) (LRR P. S. T)
Organic Bodies (A6) (LRR P, T, U)	Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	(MLRA 153B) Red Parent Material (TF2)
Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)
Thick Dark Surface (A12)	<b>T</b> ) 31
Umbric Surface (F13) (LRR P, T, U)	<ul> <li><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present,</li> </ul>
Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149)	
Anomalous Bright Loomy Calle (50)	9A) A 149A 153C 152D)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	
Type:	
Depth (inches):	
Remarks:	Hydric Soil Present? Yes No X
	$\cap$
No hydriz sols	Drotent
	$\langle \mathcal{F} = \mathcal{F} \rangle$
	v

Wnah012\_u



Upland data point wnah012\_u facing east



Upland data point wnah012\_u facing north

## Wnah012 soils



Wetland/upland soils

WETLAND DETERMINATION DATA		antic and	Gulf Coastal P	lain Basian
WETLAND DETERMINATION DATA         Project/Site:       SERP         Applicant/Owner:       Dominion         Investigator(s):       Determinion		NAKL		WNAHOTTE U
Applicant/Owner: Dominion	_ City/County:	LUNN	n 1/	_ Sampling Date:
Investigator(s):	C 11		State: <u>10</u>	Sampling Point: 7-25-1
Landform (hillslope, terrace, etc.):	Section, Town			
	$\frac{1}{2}$ Local relief (co	ncave, conve	x, none): <u></u> マンタンマン	CHUR Slope (%):
Soil Map Unit Name:	<u> </u>	<u>030</u> Long:	77°52'3.	
Are climatic / hydrologic conditions on the site typical for this time of y		/	NWI classifie	
Are Vegetation, Soil, or Hydrology significantly	ear? Yes		(If no, explain in F	
Are Vegetation, Soil, or Hydrology naturally pr	volsturbed?		al Circumstances"	
		(If needed	, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling p	point locat	ions, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the C			
Hydric Soil Present?     Yes       Wetland Hydrology Process(2)     No		ampled Area Wetland?	v >	
Remarks:			res	<u> </u>
HYDROLOGY				
Wetland Hydrology Indicators:	·····		Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)			Surface Soil (	
High Water Table (A2)				etated Concave Surface (B8)
Saturation (A3)			Drainage Pati	
Water Marks (B1) Oxidized Rhizosphe		Roots (C3)	Moss Trim Lir	vater Table (C2)
Presence of Reduc	ed Iron (C4)		Crayfish Burro	
	ion in Tilled Soil	s (C6)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)       Infin Muck Surface         Iron Deposits (B5)       Other (Explain in Reference)				
Inundation Visible on Aerial Imagery (B7)	emarks)			
∠ Water-Stained Leaves (B9)			Sphagnum me	oss (D8) <b>(LRR T, U)</b>
Field Observations:	······································			
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):		•		
Deptin (inches);	77			$\checkmark$
(includes capillary fringe)			lydrology Present	? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspe	ections), if ava	ilable:	
Remarks:				
Hydrology (		A		
( your uged (	rese	nt		
- 0 .				

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

Atlantic and Gulf Coastal Plain Region - Version 2.0

Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species 1. Acern EAC ۱ That Are OBL, FACW, or FAC: (A) 2 -A( 3 Total Number of Dominant FAN Species Across All Strata: (B) 6 Zne lawin 5 Percent of Dominant Species FACI That Are OBL, FACW, or FAC: 6. (A/B) 7. Prevalence Index worksheet: 8. Total % Cover of: Multiply by: OBL species \_\_\_\_\_ ×1=\_\_\_\_ \_ = Total Cover FACW species \_\_\_\_\_ x 2 = \_ 50% of total cover: 20% of total cover: Sapling/Shrub Stratum (Plot size: FAC species x 3 = 1. ercus me FACU species \_\_\_\_ ×4= 2. Den UPL species \_\_\_\_x5=\_\_ 3 Column Totals: \_ \_ (A) \_\_\_\_\_ (B) 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  $\leq 3.0^{1}$ = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover; 20% of total cover: Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must Att 1. be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: 3. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 40 more in diameter at breast height (DBH), regardless of 5. FACI, 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. = Total Cover 50% of total cover: 20% of total cover: Woody Vine Stratum (Plot size Va 1 ULAS rotu 2 11 3 4. 5. Hydrophytic  $12_=$  = Total Cover, Vegetation Present? 5 50% of total cover: 20% of total cover: No Remarks: (If observed, list morphological adaptations below).

WNAHOILF-W

WNAHOILF\_W

1			th needed to doour	and the L	a all a set a				
Depth	Matrix		th needed to docum			or confirm	the absence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	<u>&lt; Features</u> %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Damadu	
0-9	LOYR3/1							Remarks	
9-14	1048411		104R 4/4	27			Loxm_	C	
121-77+	INTRELA			<u> </u>	<u> </u>	M	-SANDy	loson	
1-1-10	10913/2		JOYR 4/6	ZL	<u> </u>	m	SCH	•	
				<u></u>					
<sup>1</sup> Type: C=C	ncentration D-Donk		Deduce the second						
Hydric Soil I	ncentration, D=Deple ndicators: (Applica	ble to all I	Reduced Matrix, MS	=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL	=Pore Lining, M=Mat	rix.
Histosol	(A1)							Problematic Hydric	Soils <sup>3</sup> :
	ipedon (A2)		Polyvalue Bel	ow Surrac	e (S8) (L	RR S, T, U		k (A9) <b>(LRR O)</b>	
Black Hi	stic (A3)		Loamy Mucky	Mineral (F	ERR 5,	1, 0) : (1)	2 cm Mucl	k (A10) (LRR S)	
	n Sulfide (A4)		Loamy Gleyed	Matrix (F	2)	,		Vertic (F18) <b>(outside</b> Floodplain Soils (F19	
	Layers (A5)	<b></b>	Depleted Matr	ix (F3)			Anomalou	s Bright Loamy Soils	(F20)
	Bodies (A6) <b>(LRR P,</b> cky Mineral (A7) <b>(LRF</b>	T, U) P D T UN	Redox Dark S	urface (F6	)		(MLRA 1	153B)	(
Muck Pre	esence (A8) (LRR U)	<b>ΥΡ, Ι, Ο</b> )	Depleted Dark	Surface (	F7)		Red Parer	nt Material (TF2)	
🔲 🛄, 1 cm Mu	ck (A9) (LRR P, T)		Mari (F10) (LF				Very Shall	ow Dark Surface (TF	12)
Depleted	Below Dark Surface	(A11)	Depleted Ochr		ILRA 15	(1)		plain in Remarks)	
Thick Da	k Surface (A12)		Iron-Mangane	se Masses	(E12) (L	.RR 0, P, 1	) <sup>3</sup> Indicator	rs of hydrophytic vege	tation and
Coast Pri	airie Redox (A16) (MI	RA 150A)	) 🔄 Umbric Surfac	e (F13) (L	RR P, T,	U)		hydrology must be p	resent.
Sandy G	ucky Mineral (S1) (LF eyed Matrix (S4)	(R 0, S)	Delta Ochric (F	-17) (MLR	A 151)		unless	disturbed or problema	itic.
Sandy Re	edox (S5)		Reduced Verti	с (F18) (М dalaia Cai	LRA 150	DA, 150B)			
	Matrix (S6)		Piedmont Floo	opiain Soi obt Loam	IS (F19) ( ∕Soile /E	(MLRA 149	A) 149A, 153C, 15;		
Dark Sur	ace (S7) <b>(LRR P, S,</b>	T, U)		grit Loanij			149A, 153C, 153	3D)	
Restrictive L	NOT (If a har a must i)								
	ayer (if observed):				······································	T			
Туре:	•				-				
	•						Hydric Soll Pres	sent2 Vos	No
Туре:	•						Hydric Soil Pres	sent? Yes	No
Type: Depth (incl	nes):						Hydric Soll Pres	sent? Yes	No
Type: Depth (incl	nes):	. Dri					Hydric Soll Pres	sent? Yes	No
Type: Depth (incl	nes):	zdri	ic soil		re	sen	Hydric Soll Pres	sent? Yes	No
Type: Depth (incl	nes):	zdri	ic soil		re	sen	Hydric Soll Pres	sent? Yes	No
Type: Depth (incl	nes):	zdri	c soi	06	2re	sen	Hydric Soll Pres	sent? Yes	No
Type: Depth (incl	nes):	zdri	- C 501				J		No
Type: Depth (incl	nes):	zOri	C Soi	06		sen	J		No
Type: Depth (incl	nes):	zOri	c soi	06			J		No
Type: Depth (incl	nes):	zdri	C Soi				J		No
Type: Depth (incl	nes):	zdri	C Soi				J		No
Type: Depth (incl	nes):	zdri	- C 501				J		No
Type: Depth (incl	nes):	zOri	ic soil				J		No
Type: Depth (incl	nes):	zOri					J		No
Type: Depth (incl	nes):	zOri	C Soi				J		No
Type: Depth (incl	nes):	zdri	C Soi				J		No
Type: Depth (incl	nes):	zdri					J		No
Type: Depth (incl	nes):	zOri					J		No
Type: Depth (incl	nes):			•			J		
Type: Depth (incl	nes):			• • • • • • • • • • • • • • • • • • • •			J		
Type: Depth (incl	nes):			• • • • • • • • • • • • • • • • • • • •			J		
Type: Depth (incl	nes):								
Type: Depth (incl	nes):				· · · · ·				

SOIL

Wnah011f\_w



Wetland data point wnah011f\_w facing east



Wetland data point wnah011f\_w facing south

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

Project/Site: $SERP$	
Applicant/Owner: Dominicon	City/County: NASH Sampling Date: 7-25-14
Investigation DALITECT	State: NC Sampling Point: NAHO
	Section, Township, Range:
Subregion (LRR or MLRA):	Local relief (concave, convex, none):
Soil Map Unit Name: Not Colk Joseph Lat: 26 0	$\frac{3'34.317''}{1000} \text{ Long: } \frac{77'52'32.753'}{1000} \text{ Datum: } \frac{1000}{1000} \text{ Datum: } $
	62 5 hapes NWI classification:
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	
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If needed, explain any answers in Remarks.) sampling point locations, transects, important features, etc.
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No	within a Wetland? Yes No
Remarks:	
Not all	s present
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum ()
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15)	(LRR U) Drainage Patterns (B10)
U Saturation (A3) Water Marks (B1)	dor (C1) Moss Trim Lines (B16)
	res along Living Roots (C3) Dry-Season Water Table (C2)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Other (Explain in Re	
L Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
No. And	
Water Table Brosent0	
Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Viral direction present?	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	$\wedge$
No hydrole	sgy present
abrubpt (32	undery to adjacent
	and is a weather
wettand	

US Army Corps of Engineers

Balance (Point Production)       Miccore Seeders 2 Status       Number of Dominant Species       3       (A)         Charling and the construction of the constend of the construction of the construction of the con	ee Stratum (Plot size:	Absolute	Dominan	t Indicator	Dominance Test worksheet:	
Total Number of Dominant       (B)         Ducarizes allow       20       (P)         Total Number of Dominant       (B)         Prevalence index cores All State:       (A)         Total X-cores All State:       (A)         Prevalence index worksheet:       (A)         Total X-cores All State:       (A)         Prevalence index worksheet:       (A)         Call X-cores All X-core		% Cover	Species	<u>? Status</u>	Number of Dominant Species	$\sim$
Total Number of Dominant Brocks Acress Al Stratz       (B)         Prevalence Index worksheet:       (B)         Total Number of Dominant Brocks Acress Al Stratz       (B)         Prevalence Index worksheet:       (AB)         Total Number of Dominant Brocks Acress Al Stratz       (B)         SR% of total cover:       [AB]         SR% of total cover:       [AB]         Prevalence Index worksheet:       Total % Correct         Total X Correct       [AB]         Prevalence Index worksheet:       Total X Correct         Construction       [AC]         Prevalence Index worksheet:       [AC]         Construction       [AC]         Prevalence Index worksheet:       [AC]         Construction       [AC]         Prevalence Index is 5.01       [B]         Provalence Index is 5.01       [C]         Problematic Hydrophytic Vegetation Indicators       [H]         Hydrophytic Vegetation Indicators       [A] </td <td>CAN'LO GIANOLION</td> <td><u>~ 70</u></td> <td>_<u></u></td> <td>FAC</td> <td>) That Are OBL, FACW, or FAC:</td> <td> (A)</td>	CAN'LO GIANOLION	<u>~ 70</u>	_ <u></u>	FAC	) That Are OBL, FACW, or FAC:	(A)
Image: statum       Percent of Dominant Species       (P)         Percent of Dominant Species       (Add)         Providence Index vorshares:       (Add)         S0% of total cover:       (P)         S0% of total cover:       (P) <t< td=""><td></td><td><u>-30</u></td><td><u> </u></td><td><u></u></td><td>j .</td><td></td></t<>		<u>-30</u>	<u> </u>	<u></u>	j .	
Percent of Dominant Species       (A/B)         Provalence Index worksheet:       (A/B)         Tatal % Cover of:       Multiply by:         50% of total cover:       //2         Particle Cover:       /2         Provalence Index worksheet:       X1 =         PACW species       X2 =         PACW species       X3 =         PACW species       X3 =         PACW species       X3 =         PACW species       X3 =         PACW species       X4 =         Pacwalence Index = B/A =       Provalence Index = B/A =         Pydrophytic Vegetation filtectors:       (A)         Q2       Provalence Index = S Q3         Q2       Provalence Index = S Q4         Q3       Prevelance Index = S Q4         Q4       Problematic Hydrophytic Vegetation filtectors:         Q3       Prevelance Index = S Q4         Q4       Problematic Hydrophytic Vegetation filtectors:         Q4       Problematic Hydrophytic Vegetation	Wiercus alber	20		EACU	Species Across All Strata	X
That Are OBL, FACW, or FAC:       (AB)         Intervention of the term of term		······································	·····	· · · · · · · · · · · · · · · · · · ·		<u> </u>
Image: Stratum (Plot size:					Percent of Dominant Species	
Prevalence Index worksheet:         S0% of total cover:				· · · · · · ·	That Are OBL, FACW, of FAC:	(A/B)
Total & Cover of S0% of total cover:       Total Cover S0% of total cover:       Y = FAC species       X 1 = FAC species         S10       Stratum (Plot size:       Y = CAC species       X 3 = FAC species       X 3 = FAC species         Can prime G       S10       S10       FAC       Species       X 3 = FAC species         Can prime G       S10       S10       FAC       Species       X 4 = FAC species         Can prime G       S10       S10       FAC       Species       X 5 = Column Totals:       (A)       (B)         Can prime G       S10       S10       FAC       Species       X 5 = Column Totals:       (A)       (B)         Can prime G       S10       S10       Fac       Secores       X 5 = Column Totals:       (A)       (B)         Can prime S10       S10       Fac       S10       Problematic Hydrophylic Vegetation       (B)         S10       Fac       S10       Fac       S10       (C)       S10       (C)       (C)         S10       S10       Fac       S10       S10       (C)       S10       (C)       (					Prevalence Index worksheet:	
So% of total cover:					Total % Cover of:	Multiply by:
50% of total cover:       20% of total cover:       72       FACW species       x3 =		90	= Total Cov		OBL species x 1	
Data of the street of the s	50% of total cover: 4	5 20% of	total cover		FACW species x 2	!=
FACU species       x 4 =         Carpping C Fract       YC         Carpping C Fract       YC         Carpping C Fract       YC         Carpping C Fract       YC         Carpping C Fract       YC         Provalence Index = BIA =       Hydrophytic Vegetation Indicators:         In Carpping C Fract       YC         So% of total cover:       Indicators of hydric soil and wetland hydrology must         Problematic Hydrophytic Vegetation Italicators:       Indicators of hydric soil and wetland hydrology must         Problematic From Vegetation Strata:       Tree - Woody plants, excluding vines, is soil (Explan)         'Indicators of hydric soil and wetland hydrology must       Pointernatic Strata:         Tree - Woody plants, excluding vines, is soil and wetland hydrology must       Pointernatic Strata:         Tree - Woody plants, excluding vines, is soil and wetland hydrology must       Pointernatic Strata:         Tree - Woody plants, excluding vines, is soin (7.6 cm) or more in diameter at breast height	pling/Shrub Stratum (Plot size:		ισιαι cover γ	·		
Cart priorie       Cart priorie       X 5 =	taque avanditalia	30	$\mathcal{I}_{i}$	FACI	FACU species	=
Column Totals:       (A)       (B)         Prevalence Index = B/A =	Cathinia Caroliniana	20	$\rightarrow$	FAC	UPL species	
Prevalence Index = B/A =	Linideadron fulinter			GALI		
Provestication Indicators is in the provide vegetation indicators:         1       - Rapid Test for Hydrophytic Vegetation         2       - Ominance Test is >60%         50% of total cover:       20% of total cover:         0       - Problematic Hydrophytic Vegetation (Explain)         1       - Rapid Test for Hydrophytic Vegetation (Explain)         1       - Rapid Test for Hydrophytic Vegetation (Explain)         1       - Problematic Hydrophytic Vegetation (Explain)         1       - Problematic Hydrophytic Vegetation (Explain)         1       - Problematic Hydrophytic Vegetation (Explain)         1       - No bitmance Test is >60%         1       - Problematic Hydrophytic Vegetation (Explain)         1       - No bitmance Test is >60%         1       - No bitmance Test is >60%         1       - Rapid Test for Hydrophytic Vegetation (Explain)         1       - No bitmance Test is >60%         1       - Sapting/Shrub – Voody plants, excluding vines, less than 3.28 ft in height.         1       - All nerbaceous (non-woody plants, regardless of size, and woody vines greater than 3.28 ft in height.         1       - Total Cover         20% of total cover:       - 20% of total cover:         20% of total cover:       - 20% of total cover:         20% of total cover: <td>, in pireia</td> <td>-20</td> <td></td> <td>FALL</td> <td>(A)</td> <td> (B)</td>	, in pireia	-20		FALL	(A)	(B)
Hydrophytic Vegetation Indicators:         1 - Rapid Vegetation Indicators:         1 - Rapid Vegetation Indicators:         2 - Dominance Test is >50%         3 - Prevalence Index is s3.01         Problematic Hydrophytic Vegetation* (Explain)         'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         Definitions of Four Vegetation Strata:         Tree - Woody plants, excluding vines, less than 3 in. (7.6 cm) or more in diameter at breast height (DEH), regardless of height.         Statum (Plot size:			······		Prevalence Index = B/A =	· · · · · · · · · · · ·
Image: stratum       Image		·····				
2       Dominance Test is >50%         50% of total cover:						
SD = Total Cover       3 - Prevalence Index is \$3.01         fb Stratum (Plot size:)       Problematic Hydrophytic Vegetation1 (Explain)         'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         Definitions of Four Vegetation Strata:         Tree - Woody plants, excluding vines, a in (7.6 cm) or more in diameter at breast height (DBH), regardless of height.         Saping/Shrub - Woody plants, excluding vines, less than 3.28 ft (1m) tall.         Herb - All herbaceus (non-woody plants, regardless of size, and woody plants, less than 3.28 ft tall.         Woody vine - All woody vines greater than 3.28 ft in height.         Sol% of total cover:       20% of total cover:         Sol% of total cover:       20% of total cover:         Hydrophytic       Yes		<u>.</u>		<u> </u>	2 - Dominance Test is >50%	• ····
50% of total cover:		-5277		<del> </del>		
b0% of total cover:	[17	<u>_80</u> =	= Total Cov	/er / /		etation <sup>1</sup> (Evoluin)
Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.         Definitions of Four Vegetation Strats:         Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.         Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.         Woody vine – All woody vines greater than 3.28 ft in height.         So% of total cover:       20% of total cover:         So% of total cover:       50% of total cover:         So% of total cover:       20% of	50% of total cover: <u>10</u>	20% of	total cover:	16		
be present, unless disturbed or problematic.         Definitions of Four Vegetation Strats:         Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.         Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft 11.         Woody vine - All woody vines greater than 3.28 ft in height.         Sublect rotund under the size - 20% of total cover:         Sublect rotund under the size - 20% of total cover:         Sublect rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover:         Solver rotund under the size - 20% of total cover: <td></td> <td></td> <td></td> <td></td> <td>Indicators of hydric soil and woth</td> <td>nd hydrology must</td>					Indicators of hydric soil and woth	nd hydrology must
Definitions of Four Vegetation Strata:         Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in dlameter at breast height (DBH), regardless of height.         Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.         Woody vine – All woody vines greater than 3.28 ft in height.         Solve of total cover:       20% of total cover:         Solve of total cover:       50% of total cover:         Solve of total cover:       50% of total cover:         Yes       No         Yes       No		·			be present, unless disturbed or pro	blematic.
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.         Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.         Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.         Woody vine – All woody vines greater than 3.28 ft iall.         Woody vine – All woody vines greater than 3.28 ft in height.         Stratum (Plot size:       20% of total cover:         Smillox rotumolity in the factor of total cover:       FAC         Smillox rotumolity in tall.       FAC         Solve of total cover:       20% of total cover:         Yespender       Yespender         Model in the factor of total cover:       Yespender         Solve of total cover:       20% of total cover:         Yespender       Yespender         Yespender       Yespender         Solve of total cover:       Yespender         Mydrophytic       Yespender         Yespender       No         Yespender       No         Hydrophytic       Yespender         Yespender       No <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
more in diameter at breast height (DBH), regardless of height.         Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Herb – All herbaceous (non-woody) plants, regardless of fize, and woody plants less than 3.28 ft tall.         Woody vine – All woody vines greater than 3.28 ft in height.         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         =       =         >       =         >       =         >       =         >       =         >       =         >       =         >       =         >       =         >       =         >       =         >       =         >					Definitions of Four Vegetation S	trata:
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.         Woody vine – All woody vines greater than 3.28 ft in height.         50% of total cover:       20% of total cover:         by Vine Stratum (Plot size:       0         Smllox rotum entrified       5         Smllox rotum entrified       5         FAC         So% of total cover:       5         So% of total cover:       20% of total cover         So% of total cover:       5         Somulox rotum entrified       5         Yes       No         Antis rotum entrified       20% of total cover:         So% of total cover:       5         So% of total cover:       5         Yes       No						
Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, regardless         Image: Supering Strind - woody plants, regardless         Image: Supering Strind - woody plants, regardless         Image: Supering String - Supering String - Supering String - Supering String - Supering - Su					Tree – Woody plants, excluding vi	nes. 3 in. (7.6 cm) or
Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, excluding whes, less         Image: Supering Strind - woody plants, regardless         Image: Supering Strind - woody plants, regardless         Image: Supering Strind - woody plants, regardless         Image: Supering String - Supering String - Supering String - Supering String - Supering - Su				1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	<b>Tree –</b> Woody plants, excluding vi more in diameter at breast height (	nes. 3 in. (7.6 cm) or
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of size, and woody plants less than 3.28 ft tall. woody vine – All woody vines greater than 3.28 ft in = Total Cover 50% of total cover:20% of total cover: 20% of total cover:20% of total cover: 20% of total cover: 20% of total cover:     					Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, e:	nes, 3 in. (7.6 cm) or DBH), regardless of
Woody vine – All woody vines greater than 3.28 ft in         = Total Cover         50% of total cover:         20% of total cover:         5         Y-tip:         FAC         Yes         No         Mydrophytic         Yes         No					Tree – Woody plants, excluding via more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3.	nes, 3 in. (7.6 cm) or DBH), regardless of xcluding vines, less 28 ft (1 m) tall.
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Image: Solution of total cover:       Image: Solution of total cover:       Image: Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution of total cover:       Solution of total cover:         Solution of total cover:       Solution					Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
50% of total cover:       20% of total cover:         ody Vine Stratum (Plot size:       )         Smllox rotum (Arline)       5         Ytts rotum (Arline)       7         Ytts rotum (Arline)       7 <t< td=""><td></td><td></td><td></td><td></td><td>Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre</td><td>nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.</td></t<>					Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
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bdy Vine Stratum (Plot size:)       5       FAC         Smllox rotumoutions       5       FAC         Vitis rotumoutions       5       FAC					Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Smllox rotungitistic       S       FAC         Vitis rotungitistic       S       FAC         Solver       Solver       FAC         Solver       Solver       Solver         Solver       Solver       Yes         No       Solver       No         Narks: (If observed, list morphological adaptations below).       Solver			Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Vitts roture     S     FAC	50% of total cover:		Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Image: Second	50% of total cover:		Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Solution       Yes       No         Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution	50% of total cover:		Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Solution       Yes       No         Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution	50% of total cover:		Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Solution       Yes       No         Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution	50% of total cover:		Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
Solution       Yes       No         Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution         Solution       Solution       Solution       Solution       Solution       Solution       Solution	50% of total cover:		Total Cove		Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
arks: (If observed, list morphological adaptations below).	50% of total cover:	=  	Total Cove	FAC FAC	Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-woody of size, and woody plants less thar Woody vine – All woody vines gre height.	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:	=  	Total Cove	FAC FAC	Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-wood) of size, and woody plants less thar Woody vine – All woody vines gre height.	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:		Total Cove	FAC FAC	Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-wood) of size, and woody plants less thar Woody vine – All woody vines gre height.	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:		Total Cove	FAC FAC	Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-wood) of size, and woody plants less thar Woody vine – All woody vines gre height.	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:		Total Cove	FAC FAC	Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-wood) of size, and woody plants less thar Woody vine – All woody vines gre height.	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:		Total Cove	FAC FAC	Tree – Woody plants, excluding vi more in diameter at breast height ( height. Sapling/Shrub – Woody plants, ex than 3 in. DBH and greater than 3. Herb – All herbaceous (non-wood) of size, and woody plants less thar Woody vine – All woody vines gre height.	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:	$\frac{5}{5}$	Total Cove otal cover:	EFAC EFAC	Tree – Woody plants, excluding via more in diameter at breast height (height.         Sapling/Shrub – Woody plants, exthan 3 in. DBH and greater than 3.         Herb – All herbaceous (non-woody of size, and woody plants less than Woody vine – All woody vines gre height.         Woody vine – All woody vines gre height.         Hydrophytic Vegetation Present?         Yes	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.
	50% of total cover:	$\frac{5}{5}$	Total Cove otal cover:	EFAC EFAC	Tree – Woody plants, excluding via more in diameter at breast height (height.         Sapling/Shrub – Woody plants, exthan 3 in. DBH and greater than 3.         Herb – All herbaceous (non-woody of size, and woody plants less than Woody vine – All woody vines gre height.         Woody vine – All woody vines gre height.         Hydrophytic Vegetation Present?         Yes	nes, 3 in. (7.6 cm) or DBH), regardless of kcluding vines, less 28 ft (1 m) tall. 1) plants, regardless 1 3.28 ft tall.

US Army Corps of Engineers

### SOIL

WNAHO	l	t	 ٩
Sampling Point:			 /

Profile Description: (Describe to the c	epth needed to docur	ment the indicato	r or confirm	n the absence of i	Sampling Point:
Matrix	Redo	x Features		in the absence of t	nucators.)
(inches) Color (moist) %	Color (moist)	<u>%</u> Type <sup>1</sup>	_Loc <sup>2</sup>		Remarks
$\frac{0-5}{-5}$ <u><math>10YR4/3</math></u>				Signalion	m
5-9 104R514				051	BM
9-16 IDYR 3/6				<b>P</b> ) (	
				-sundy [	RAIM
		· ·····	-	` <u>`</u>	
		·	•		
	-				
<sup>1</sup> Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, MS	S=Masked Sand G	rains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
Applicable to a	II LRRs, unless other	wise noted.)		Indicators for I	Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Bel	low Surface (S8) (	-RR S, T, L		(A9) (LRR O)
Histic Epipedon (A2)	Thin Dark Su	rface (S9) (LRR S	T, U)	2 cm Muck	(A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Mucky	/ Mineral (F1) (LR	२ ०)		ertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Loamy Gleye	u Matrix (F2)		Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S				Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T,		k Surface (F7)		(MLRA 1)	Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depres				w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	🔲 Mari (F10) (LI	RR U)		Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Och	ric (F11) <b>(MLRA 1</b>	51)		
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 15	Iron-Mangane	ese Masses (F12)	LRR O, P,	T) <sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy Mucky Mineral (S1) (LRR 0, S	1-1-1-1	ce (F13) (LRR P, T	, U)	wetland	hydrology must be present,
Sandy Gleyed Matrix (S4)		F17) (MLRA 151)		unless di	sturbed or problematic.
Sandy Redox (S5)		ic (F18) (MLRA 15 odplain Soils (F19)	0A, 150B) /881 DA 44/	0.4.)	
Stripped Matrix (S6)	Anomalous Br	right Loamy Soils (	(MLKA 14) F20) (MLR)	9A) A 149A, 153C, 153	
Dark Surface (S7) (LRR P, S, T, U)		gan Louiny Cono (	20) (ШЕГО	A 149A, 1930, 193	5)
Restrictive Layer (if observed):				[	
Туре:					,
Depth (inches):				Hydric Soil Pres	ent? Yes No 🗡
Remarks:				J	
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No hey	doir s	$\sim 1 \sim$		A	
5	one a	ser Osis	2301	V -	
		· ·		•	

Wnah011\_u



Upland data point wnah011\_u facing east



Upland data point wnah011\_u facing north

Wnah011 soils



Wetland/upland soils

WETLAND	DETERMINATION DAT	A FORM – Atla	intic and Gulf Coas	tal Plain Region
Project/Site SERP		City/County:	NASA	Sampling Date: /-25 - [4
Applicant/Owner Domuni	on	oxy.county	Ct-t-	Sampling Date: ( ~ )
Investigator(s) DDWE	57	Section Towns	hip. Range	Sampling Point WNAHOD
Landform (hillslope, terrace, etc.)	Botomalinad			
Subregion (LRR or MLRA).	- 20 with the full	- 12'28 2N	cave convex none)	<u>Store (%)</u>
	Each Call Care Con	<u>0570.500</u>	<u>     Long:</u> <u>77 5</u> 2	_ <u>36 - 7 - 7 - 7</u> Datum
	and the second s			lassification PFD
Are climatic / hydrologic conditions of Are Vegetation, Soil	of bydrology	year? Yes		
Are Vegetation, Soil	or Hydrology significar	ntly disturbed?		nces" present? Yes <u>/</u> No
			(If needed, explain any	answers in Remarks.)
SUMMARY OF FINDINGS -	Attach site map showi	ng sampling po	pint locations, trans	sects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks	Yes No No Yes No	— Is the Sa — within a l	mpled Area Wetland? Yes	No nall intermittant
Strefan .				made instermition
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one	is required: check - 14-	-1		Indicators (minimum of two required)
Surface Water (A1)	Aquatic Fauna (B			e Soil Cracks (B6)
High Water Table (A2)	Marl Deposits (B			ly Vegetated Concave Surface (B8)
Saturation (A3)	Hydrogen Sulfide		· · · ·	je Patterns (B10)
Water Marks (B1)		heres along Living		rim Lines (B16) ason Water Table (C2)
Sediment Deposits (B2)	Presence of Redu	uced Iron (C4)		Burrows (C8)
Drift Deposits (B3)		iction in Tilled Soils		on Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	L Thin Muck Surfac			rphic Position (D2)
Inundation Visible on Aerial Ima	Other (Explain in	Remarks)	Shallow	Aquitard (D3)
Water-Stained Leaves (B9)	igery (B7)			eutral Test (D5)
Field Observations:	<u> </u>		Sphagn	um moss (D8) <b>(LRR T, U)</b>
Surface Water Present? Yes	No X Depth (inche	s)		
Water Table Present? Yes	No Depth (inche.	s) 20		
Saturation Present? Yes	No Depth (inche:		Wetland Hydrology Pr	esent? Yes No
(includes capillary fringe) Describe Recorded Data (stream ga	uge, monitoring well, aerial pho-	tos, previous inspec	1	
Remarks.				
	Hydrolog	y pre:	sont	

WNAHOIOF-W

Trace Ohio (P) ( )	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species'	<u>? Status</u>	
1. Liquidcembrar styrac. three	20	1/	FAC	Number of Dominant Species
2. LindenOrm telipitera	30	-V	FACI	
3. Hor alnum	20	1	PAC	Total Number of Dominant
4				Species Across All Strata: (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7	······			Prevalence Index worksheet:
8				
	7~			
500/-64-14 3 5-	_00=	= Total Co	ver	OBL species x 1 =
50% of total cover: 35	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	20	/		FAC species x 3 =
1. <u>Tox opea</u>	<u> 40</u> .		-FAL	FACU species x 4 =
2. Froxinus pennalizanica	15	$-\sqrt{-}$	PACIN	UPL species x 5 =
3. Lignatrum sinense 20	2 <b>30</b>	$-\mathcal{V}_{-}$	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Prevalence Index = B/A =
Ο,				Hydrophytic Vegetation Indicators:
/				1 - Rapid Test for Hydrophytic Vegetation
8				∠ 2 - Dominance Test is >50%
	55 =	Total Cov	er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: $27$ v	5 20% of t	otal cover	{	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)		/		
1. Microspectum UTMIMAR	30	$\mathbf{X}$	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	10		FAUN	be present, unless disturbed or problematic.
3. Woodwardin mesketer	$\frac{10}{10}$ -	$\overline{}$	OBL	Definitions of Four Vegetation Strata:
		V		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.
0,				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
				Woody vine – All woody vines greater than 3.28 ft in height.
12				
	50 =	Total Cove	er ,	
50% of total cover: $25$	_ 20% of to	tal cover:	600	
Woody Vine Stratum (Plot size:)		/		
1. UNBrotunelide	5	$\checkmark$	EA1	
2. 3 milox rohenditolia	10	1	FAL	
3. Borchomia schn Jons	5	$\overline{\nabla}$	FAC	
4				
5		_		
	20 =-			Hydrophytic Vegetation
50% of total cover: $/ \bigcirc$		tal cover:	'4	Present? Yes No
Remarks: (If observed, list morphological adaptations below)				
	•			
			······································	

NNAHDIOR_W

	CONDUCTION (DESCRIDE)	to the denth :	needed to doou	mont the l	ndianter		the absence of indic		
Depth	Matrix		Red	ox Feature:	nuicator	or contirm	the absence of indic	ators.)	
(inches)	Color (moist)		Color (moist)			_Loc <sup>2</sup>	Texture	Remarks	
<u>Q-8</u>	WIR B/Z						lorm	i Keinarka	
8-16+	LOYR 411	1/	54R 5/6	77		60			
			<u></u>				<u>-900</u>		
				-					
	·····								
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=Re	duced Matrix. M	S=Masked	Sand Gra	aine			
Hydric Soil	Indicators: (Applica	ble to all LR	Rs, unless othe	rwise note	id.)		<sup>2</sup> Location: PL=Por Indicators for Prol	e Lining, M=Matrix	nile <sup>3</sup> :
🔲 Histosol	(A1)	1	Polyvalue Be	elow Surfac	e (S8) (Ll	RR S, T, U)	1 cm Muck (A9		0115 .
	pipedon (A2)		Thin Dark Sເ	urface (S9)	(LRR S,	T, U)	2 cm Muck (A1		
	istic (A3) en Sulfide (A4)	4	Loamy Muck	y Mineral (	F1) <b>(LRR</b>	0)	Reduced Vertic	(F18) (outside M	LRA 150A,B)
	f Layers (A5)	l V	Loamy Gleye		-2)			Iplain Soils (F19) (	LRR P, S, T)
🔲 Organic	Bodies (A6) (LRR P,	т, и) 1	Redox Dark		3)			ht Loamy Soils (F	20)
📃 5 cm Mu	icky Mineral (A7) (LRI	R P, T, U) 👖	Depleted Da				(MLRA 153B Red Parent Ma		
Muck Pr	esence (A8) (LRR U)	Į	Redox Depre	essions (F8			Very Shallow D	ark Surface (TF12	)
Depleted	ick (A9) <b>(LRR P, T)</b> Below Dark Surface		Marl (F10) (L				Other (Explain i	n Remarks)	
	irk Surface (A12)	(ATT) <u>I</u>	Depleted Ocl	hric (F11) (	MLRA 15	1)	. 3.		
Coast Pr	airie Redox (A16) (MI	LRA 150A)	Iron-Mangan Umbric Surfa	ese Masse	S(⊢12)(L ВРРТ	.RR O, P, T		ydrophytic vegeta	
Sandy M	lucky Mineral (S1) (LF	२R O, S) 🏾 👖	Delta Ochric	(F17) (MLF	RA 151)	0,		ology must be pre bed or problemation	
Sandy G	leyed Matrix (S4)	ו	Reduced Ver	tic (F18) <b>(N</b>	ILRA 150	A, 150B)		bed of problemation	<i>.</i>
	edox (S5)	+	Piedmont Flo	odplain So	ils (F19) (	MLRA 149	A)		
	Matrix (S6) face (S7) <b>(LRR P, S,</b>	τ	Anomalous B	iright Loam	y Soils (F	20) <b>(MLRA</b>	149A, 153C, 153D)		
Restrictive L	ayer (if observed):	1,0)				T			
Туре:									
Depth (inc	:hes):						Hydric Soil Present	X	
Remarks:			•				Hydric Soli Present	Yes	No
	1	1	_			~			
	/~	ful ?	2 soil			A			
	l	igan	2 200	( p	esen	V.			
				· ·					

Wnah010f\_w



Wetland data point wnah010f\_w facing east



Wetland data point wnah010f\_w facing south

Project/Site: <u>SERP</u> Applicant/Owner: Dominion	_ City/County:						
Investigator(s):DDCDEST							
	Section, Township, Range:						
Landom (nillslope, terrace, etc.): <u>HINSLOPE</u>	Local relief (concave, convex, none): Slope (%): $2-6$						
	ACC J FU: JUI Long: 11 DF Sky (10/m Datum)						
Soil Map Unit Name: KLACLALA CHARGE CH	antel at mannen ESCKT2 el volan i in in						
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks)						
Are Vegetation, Soil, or Hydrology significantly	tly disturbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrology naturally pr	problematic? (If needed, explain any answers in Remarks.)						
	ng sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes X No							
Hydric Soil Present? Yes No	- Is the Sampled Area						
Wetland Hydrology Present? Yes No	within a Wetland? Yes No						
Remarks: Not all thee pe	circemeters and 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)	13) Sparsely Vegetated Concave Surface (B8)						
High Water Table (A2) Marl Deposits (B16	5) (LRR U) Drainage Patterns (B10)						
Sediment Deposits (B2)	heres along Living Roots (C3) Dry-Season Water Table (C2)						
	Iced Iron (C4)     Crayfish Burrows (C8)       Iction in Tilled Soils (C6)     Saturation Visible on Aerial Imagery (C9)						
Algal Mat or Crust (B4)							
Iron Deposits (B5)	Remarks) Shallow Aquitard (D3)						
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)	c).						
	s):						
Saturation Present? Yes No Control (inches)	s): Wetland Hydrology Present? Yes No						
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo							
Remarks:							
No hydro	logy present						
	The second se						

ETATION (Four Strata) – Use scientific na		Dominant Indicator	Sampling Point:
Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u> Status	Dominance Test worksheet:
Lipidanbur Styrnalluc	25	C, FAC	Number of Dominant Species That Are OBL, FACW, or FAC:
Clenia alba	25	TT UPI	I hat Are OBL, FACW, or FAC: (A)
Dustaus alla	70	FACI	Total Number of Dominant
Ulmis anericana	_10		openes Across All Strata, (B)
and server cana	$\underline{-\omega}$	EACU	Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
	RA.	= Total Cover //	OBL species x 1 =
50% of total cover:	1		FACW species x 2 =
	20% of	total cover:6	
Arya aloca	1	1.1.0	FAC species x 3 =
	12	<u></u> <u>UPL</u>	FACU species x 4 =
pudambor styracitua	15	_V/ FAC	
igustnem Schense	25	FACE	Column Totals: (A) (B)
derus alba	.E	FALL	
			Prevalence Index = B/A =
	······································		Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			$3$ - Prevalence Index is $\leq 3.0^{1}$
	_GD =	Total Cover	
50% of total cover: $\underline{3C}$	20% of t	otal cover: 1Z	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
tratum (Plot size:			
licrostegium Uminoa	30	_ KAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
onicerta japonica			be present, unless disturbed or problematic.
to along with a failed	<u></u>	V FAC	Definitions of Four Vegetation Strata:
Splenium platy neurons		<u>FAC</u>	
alystichen acrostoides	<u> </u>	FACE	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
		,	height.
			Sapling/Shrub - Woody plants, excluding vines, less
			than 3 in, DBH and greater than 3.28 ft (1 m) tall.
	·····		Herb - All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
			Woody vine – All woody vines greater than 3.28 ft in height.
			neight.
	70 -	Tatal O	
50% of total cover:		Total Cover	
ine Stratum (Plot size:)	_ 20% of to	tal cover: $\frac{72}{2}$	
	1.5	11 50	
NE Drandidona	<u>10</u>	V/ FAC	
wax rotundibolia	D	FAC	
-			
			<b>1</b>
	777 -	······	Hydrophytic
		Fotal Cover	Vegetation
50% of total cover: <u>1D</u>	20% of to	tal cover:/	Present? Yes No
(If observed, list morphological adaptations below			Management (1997)

Sampling Point: \_\_\_\_\_ - U

Profile Description: (Describe to the dept	h needed to doo	ument the in	dicator	or confirm	m the absence of indicators )
iviatrix	Re	dox Features			
$\frac{\text{(inches)}}{2}$ $\frac{\text{Color (moist)}}{2}$ %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
$\frac{0-6}{107K^{4}/3}$	·····				SANDY LOOM
6-10 Z.S V 5/3					
10-16-2.546/3		······			Sandy lovan
	·····				Survey loron
					-
	······				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, I	MS=Masked 9	Sand Gra	ine	
Hydric Soil Indicators: (Applicable to all L	RRs, unless oth	erwise noted	1.)		<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Below Surface		RR S. T. U	J) 1 cm Muck (A9) (LRR O)
Histic Epipedon (A2)	🛄 Thin Dark S	Surface (S9) (	LRR S, T	(, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	📃 Loamy Mud	ky Mineral (F	1) (LRR	0)	Reduced Vertic (F18) (outside MLRA 150A,E
Stratified Layers (A5)		yed Matrix (F2	2)		Piedmont Floodplain Soils (F19) (LRR P, S, T
Organic Bodies (A6) (LRR P, T, U)	Depleted M				L Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)		k Surface (F6) ark Surface (F	)		(MLRA 153B)
Muck Presence (A8) (LRR U)	Redox Dep	ressions (F8)			Red Parent Material (TF2)
1 cm Muck (A9) (LRR P, T)	Marl (F10)	(LRR U)			Ury Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted O	chric (F11) <b>(N</b>	ILRA 151	1)	
Thick Dark Surface (A12)	Iron-Manga	nese Masses	(F12) <b>(</b> L	RR 0, P, 1	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S)	1. The second seco	face (F13) <b>(Lf</b>	RR P, T, I	U)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Delta Ochri	c (F17) ( <b>MLR</b>	A 151)		unless disturbed or problematic.
Sandy Redox (S5)		ertic (F18) <b>(M</b> I loodplain Soil	LRA 150/	A, 150B)	
Stripped Matrix (S6)	Anomalous	Bright Loamv	s (r 19) (1 Soils (F)	VILKA 149 20) /MI RA	<sup>9A)</sup> A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			0010 (11		- 149A, 1930, 193D)
Restrictive Layer (if observed):					
Type:					
Depth (inches):					Hydric Soil Present? Yes No
Remarks:				l.	
		۵			
	NO	h C		C	()
	ND	nya	WOC	- >	or present

Wnah010\_u



Upland data point wnah010\_u facing east



Upland data point wnah010\_u facing north

Wnah010 soils



Wetland/upland soils

Project/Site: <u>SERP</u> City/County: <u>NASA</u> Sampling Date: <u>7/25/14</u> Applicant/Owner: <u>Dom(nion</u> State: <u>NC</u> Sampling Point: <u>WNAHOD</u> GFW
Applicant/Owner Dominicon State: NC Sampling Point W/NAHCDQC .
Investigator(s) Section, Township, Range: Sampling Folder.
Landform (hillslope, terrace, etc.); Bottom word Local relief (concave, convex, paper) ( 574 C124AR, at 199
Subregion (LRR or MLRA) Lat: <u>36°03′24.942</u> <sup>C</sup> Long: <u>77°52′40.134</u> <sup>C</sup> Datum:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no. explain in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?     Yes     No     Is the Sampled Area       Hydric Soil Present?     Yes     No     within a Wetland?       Wetland Hydrology Present?     Yes     No
HYDROLOGY
Wotland Hydrology Indiastan
Brimony Indicators (minimum of two required)
Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6)
High Water Table (A2) Harl 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)
Image: Difference of the second problem in the second pro
Iron Deposits (B5)     Other (Explain in Remarks)     Shallow Aguitard (D3)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)
Field Observations: Surface Water Present? Yes No X Depth (inches):
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:
Hydrology present
2 $0$ $1$

## WN44009f-W Sampling Point

	- 1-			
Tree Stratum (Plot size:	Absolute	Dominan	t Indicator	Dominance Test worksheet:
1. Liquidantar stures unlua		Species	<u>Status</u>	Number of Dominant Species
1. Liquecompart Styrautua	- <u>-30</u>		PAC	That Are OBL, FACW, or FAC: (A)
2. Acor rybum		$\sim$	FAL	
3. Lirrodonalrox talipolora	10		FACU	Total Number of Dominant
4				Species Across All Strata: (B)
			·	
5				Percent of Dominant Species 107
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
7				
8				Total % Cover of:Multiply by:
	70	= Total Co	ver .	OBL species x 1 =
50% of total cover: 3	2004 -	And all and	14	FACW species x 2 =
Sanling/Shruh Stratum (Dist size)	<u>2</u> 20% of	total cover		
Sapling/Shrub Stratum (Plot size:)	$\sim$	./		FAC species x 3 =
1. Lyustrum sinense	30	~ /	FAC	FACU species x 4 =
2. Lacidan Stymeitug	30	57	FAC	UPL species x 5 =
3. Her rubrum	5%	~/-		Column Totals: (A) (B)
			FAC	(B)
4	•	***		Prevalence Index - P/A -
5				Prevalence Index = B/A =
6	-			Hydrophytic Vegetation Indicators:
6	• •		······	1 - Rapid Test for Hydrophytic Vegetation
7	• <u></u>			2 - Dominance Test is >50%
8				
	80	= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>
	$\frac{-\omega}{-\omega}$	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover	40	
Herb Stratum (Plot size:)				
1. Microstegiun Viminea	30	./	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Polystichum acasstordes		<u> </u>	A	be present, unless disturbed or problematic.
			FACU	Definitions of Four Vegetation Strata:
3. VITIS rotundi filia	20	$\mathcal{V}$	FAC	
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				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.				
8		·····		Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11			[	Woody vine - All woody vines greater than 3.28 ft in
12				height.
12				
(	LeD =	Total Cov	er,	
50% of total cover:		otal cover:	12	
Woody Vine Stratum (Plot size:)	20 /0 01 (			
Revealed the stratum (Flot size)	<b>1</b> •			
1. Derchamia scandons	10		HAK	
2. Imiker rotundy toolia	20	J	FAC	
3 litic mandily	$\frac{1}{1}$		- in e	
3. DITZ TOTUMATIONA	_10	<u> </u>	FAC	
4				
5				
				Hydrophytic
20		Total Cove		Vegetation X
50% of total cover: $-\frac{2}{5}$		otal cover:	<u>/</u>	Present? Yes / No
Remarks: (If observed, list morphological adaptations below	w).		l,,	······································
				1
JS Army Corps of Engineers				

WNAH009 -W	
Sampling Point:	

Depth       Matrix       Redox Features         Inchces       Color (moist)       %       Color (moist)       %       Type'       Loc'       Texture       Remarks         O - 6       (DY/R_3/L)       Junch	Profile Desc	cription: (Describe t	o the depth	needed to docur	nent the i	ndicator	or confirm	the absence of in	dicators.)
Order       Dyne       Dodyne       Remarks         0 - 6       Dyne	Depth	Matrix		Redo	x Features	3			
0-6       DYR. 3/ (         2-16       DYR. 4/2         1-16       DYR. 5/2         10/R. 5/2       DYR. 4/6         7       2         2       DYR. 5/2         10/R. 5/2       DYR. 4/6         2       DYR. 5/2         10/R. 5/2       DYR. 4/6         2       DYR. 5/2         10/R. 4/6       SCL         10/R. 4/6       SCL         10/R. 4/6       SCL         10/R. 4/6       DYR. 5/2         10/R. 4/6       DYR	<b>C</b> 2				%		Loc	Texture	Remarks
Image: Content ation, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils*:         Histic Epipedon (A2)       Polyvalue Below Surface (S8) (LRR S, T, U)       Indicators for Problematic Hydric Soils*:         Black Histic (A3)       Damy Gleyed Matrix (F2)       Indicators for Problematic Hydric Soils*:         Stratified Layers (A5)       Depleted Matrix (F2)       Reduced Vertic (F18) (URR P, T, U)         Stratified Layers (A5)       Depleted Matrix (F2)       Redox Dark Surface (F6)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         Stratified Layers (A5)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Depleted Dark Surface (F7)         Depleted Bolw Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Tindicators of hydrophytic vegetation and weitand hydrology must be present. so and y Mucky Mineral (S1) (LRR O, S)         Sandy Medox (S5)       Detar Ochric (F12) (LRR P, T, U)       Pletamont Floodplain Soils (F12) (MLRA 150A, 150B)         Sandy Redox (S5)       Detar Ochric (F13) (MLRA 150A, 150B)       Pletadoret (F20) (MLRA 149A)<	0-6	OVA 311	<u></u>					h man	
104/16       104/16       72_0       M       500         *Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         *Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils*:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S9) (LRR O)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Muck YMineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         S cm Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Redox Depressions (F8)         Muck YMineral (A7) (LRR P, T)       Mari (F10) (LRR U)       Red Parent Material (TF2)         Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Depleted Dark Surface (F7)       Nortalous Bright Loamy Soils (F20)         Thrick Dark Surface (A12)       Umbric Surface (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)       Sandy Mucky Mineral (S6)       Pieleta Ochric (F17) (MLRA 150A, 150A)       Indic	$\frac{1}{1}$	ITUR 4/2	<u></u>						· · · · · · · · · · · · · · · · · · ·
*Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils*:         Histic Epipedon (A2)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Black Histic (A3)       Damy Mucky Mineral (F1) (LRR O)       Peduced Vertic (F18) (outside MLRA 150A,B)         Hydrogen Sulfide (A4)       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F6)       (MLRA 153B)         1 nm Muck (A9) (LRR P, T, U)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Inor-Manganese Masses (F12) (LRR O, P, T)       *Indicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic.         Sandy Gleyed Matrix (S6)       Piedmont Floodplain Soils (F10) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)         Striped Matrix (S6)       Piedmont Floodplain Soils (F11) (MLRA 149A)       Indicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic.         Sandy Gleyed Matrix (S6)       Piedmont Floodplain Soils (F10) (MLRA 149A)       Anomal	8-117	IDVATA		12/10/11/	$\overline{\overline{}}$			Sotray (C	Am
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       2 cm Muck (A10) (LRR S)         Hydric Soil For Problematic Hydric Soils       Polyvalue Below 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)         Hydric Soil Miced (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Depressions (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)       Depleted Ochric (F11) (MLRA 151)       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 (F13) (MLRA 151)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Sandy Redox (S5)       Piedmont Floodplain Soils (F12) (MLRA 150A), 150B)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Redox (S5) <t< td=""><td>1-16</td><td>10416512</td><td></td><td>10 9R 4/6_</td><td>12</td><td></td><td>M</td><td><u>_S(L</u>_</td><td>· · · · · · · · · · · · · · · · · · ·</td></t<>	1-16	10416512		10 9R 4/6_	12		M	<u>_S(L</u> _	· · · · · · · · · · · · · · · · · · ·
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       2 cm Muck (A10) (LRR S)         Hydric Soil For Problematic Hydric Soils       Polyvalue Below 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)         Hydric Soil Miced (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Depressions (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)       Depleted Ochric (F11) (MLRA 151)       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 (F13) (MLRA 151)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Sandy Redox (S5)       Piedmont Floodplain Soils (F12) (MLRA 150A), 150B)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Redox (S5) <t< td=""><td></td><td></td><td><u> </u></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			<u> </u>						
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       2 cm Muck (A10) (LRR S)         Hydric Soil For Problematic Hydric Soils       Polyvalue Below 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)         Hydric Soil Miced (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Depressions (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)       Depleted Ochric (F11) (MLRA 151)       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 (F13) (MLRA 151)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Sandy Redox (S5)       Piedmont Floodplain Soils (F12) (MLRA 150A), 150B)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Redox (S5) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       2 cm Muck (A10) (LRR S)         Hydric Soil For Problematic Hydric Soils       Polyvalue Below 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)         Hydric Soil Miced (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Depressions (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)       Depleted Ochric (F11) (MLRA 151)       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 (F13) (MLRA 151)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Sandy Redox (S5)       Piedmont Floodplain Soils (F12) (MLRA 150A), 150B)       Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Redox (S5) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A9) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       2 cm Muck (A10) (LRR S)         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)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck (A9) (LRR P, T, U)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       3Indicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       3Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Redox (S5)       Piedmont Floodplain Soils (F20) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F20	<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	=Masked	Sand Gra	iins.	<sup>2</sup> Location: PL=F	Pore Lining, M=Matrix.
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S), T, U)       Image: Construction of the	Hydric Soil I	ndicators: (Applica	ble to all LI			•		Indicators for P	roblematic Hydric Soils <sup>3</sup> :
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR 0)       Reduced Vertic (F18) (outside MLRA 150A,B)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Reduced Vertic (F18) (outside MLRA 150A,B)         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)       Depleted Ochric (F11) (MLRA 151)       Red Parent Material (TF2)         1 cm Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Depleted Ochric (F11) (MLRA 151)         Thick Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 150A, 150B)       Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Restrictive Layer (if observed):       Type:				Polyvalue Bel	ow Surfac	e (S8) (L	RR S, T, U)		
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)       Other (Explain in Remarks)         1 coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U) <sup>3</sup> 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.         Stripped Matrix (S6)       Piedmont Floodplain Soils (F20) (MLRA 149A)       stripped Matrix (S6)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Restrictive Layer (if observed):       Type:         Type:				Loamy Mucky	Tace (S9) Mineral (I	(LRR S, T F1) (LRR	r, u) O)		
Organic Bodies (A6)       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         S 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)       Mari (F10) (LRR U)       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.         S andy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       Delta Ochric (F18) (MLRA 150A, 150B)         S andy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Piedmont Floodplain Soils (F20) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)         Dark Surface (S7) (LRR P, S, T, U)       Reduced Vertic (F18) (MLRA 149A)         Restrictive Layer (if observed):       Type:         Type:				Loamy Gleyer	d Matrix (F	<sup>5</sup> 2)	0,	Piedmont Fi	oodplain Soils (F19) (I RR P S T
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)       Mari (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       alndicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       unless disturbed or problematic.         Stripped Matrix (S6)       Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D)       Maria 149A, 153C, 153D)         Restrictive Layer (if observed):       Type:	Stratified	Layers (A5)		Depleted Mat	rix (F3)	•		Anomalous	Bright Loamy Soils (F20)
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)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> 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 Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Restrictive Layer (if observed):       Type:         Type:	5 cm Mu	cky Mineral (A7) /I P	1,U) RPT11					(MLRA 15	3B)
1 cm Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Copleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Iron-Manganese Masses (F12) (LRR O, P, T)       Irdicators 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)       unless disturbed or problematic.         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Restrictive Layer (if observed):       Type:	Muck Pre	esence (A8) (LRR U)	, i, uj	Redox Depres	ssions (FR	(r/) )			
A Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Determine Matrix (S6) Determine Matrix (S6) Determine Matrix (S6) Determine Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	1 cm Mu	ck (A9) (LRR P, T)				,			
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)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Cestrictive Layer (if observed):       Type:		Below Dark Surface	(A11)						
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)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):       Type:			RA 150A)	Iron-Mangane	se Masse	s (F12) (L	.RR O, P, 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)         Restrictive Layer (if observed):         Type:         Depth (inches):         Depth (inches):	Sandy M	ucky Mineral (S1) (LF	R O, S)	Delta Ochric (	F17) (MLF	-RR P, I, RA 151)	U)		
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:         Type:       Hydric Soil Present? Yes	Sandy G	leyed Matrix (S4)		Reduced Vert	ic (F18) <b>(N</b>	ILRA 150	A, 150B)		statued of problematic,
Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (if observed):         Type:         Depth (inches):				Piedmont Floo	odplain So	ils (F19) <b>(</b>	MLRA 149	A)	
Restrictive Layer (if observed):         Type:         Depth (inches):         Model			τ. υ	Anomalous Br	ight Loam	y Soils (F	20) ( <b>MLRA</b>	149A, 153C, 153E	))
Depth (inches): No			., .,				ſ		
	Туре:								<u>_</u>
Remarks	Depth (inc	hes):	·····					Hydric Soil Prese	ent? Yes X No
	Remarks:								
	*								

Wnah009f\_w



Wetland data point wnah009f\_w facing east



Wetland data point wnah009f\_w facing south

WETLAND DETERMINATION DATA	A FORM – Atlantic and (	Gulf Coastal Plain Region
Project/Site:		Sampling Date: <u>7 25 14</u>
Applicant/Owner: DOMNION		_ State: Sampling Point:
Investigator(s): $DDWEST$	Section Township Panao	
andform (hillslope, terrace, etc.):		Capille.
Subregion (LRR or MLRA):	33'25.757" Long	x, none): <u>CONVEX</u> Slope (%): <u>3</u> <u>177°52′37.508</u> Datum: <u>V/558</u> Y
Soil Map Unit Name: Nortolk John Smarl	North Shares	NWI classification: Datum: <u>\// 8</u> Y
Are climatic / hydrologic conditions on the site typical for this time of	C-6 CO KOLOS	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of Are Venetation		
Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally p		al Circumstances" present? Yes X No , explain any answers in Remarks.)
		· · · · · · · · · · · · · · · · · · ·
SUMMARY OF FINDINGS – Attach site map showin	ig sampling point locati	ions, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No       X         Hydric Soil Present?       Yes       No       X         Wetland Hydrology Present?       Yes       No       X         Remarks.       Remarks.       Remarks       Remarks	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) Aquatic Fauna (B High Water Table (A2) Marl Deposits (B1	,	Sparsely Vegetated Concave Surface (B8)
		Drainage Patterns (B10)
		Moss Trim Lines (B16)
Sediment Deposits (B2)	heres along Living Roots (C3)	Dry-Season Water Table (C2)
	ction in Tilled Soils (C6)	└── Crayfish Burrows (C8) └── Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in f	Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (87)		FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)
Surface Water Present?     Yes     No     Depth (inches)       Water Table Present?     Yes     No     Depth (inches)	S).	
Saturation Present? Yes No Depth (inches		
(includes capillary minde)		Hydrology Present? Yes No
Describe Recorded Data (stream gauge monitoring well, aerial phot	os, previous inspections), if ava	ailable
Remarks		
Wetland hydrology indic	stors are net	present

WNAH009 - U Sampling Point:

Tree Stratum (Plot size: 30			nt Indicator	Dominance Test worksheet:
1. List's denetron ful piferen			<u>?</u> <u>Status</u>	Number of Dominant Species
Correction full. p. feren	30		PACI	That Are OBL, FACW, or FAC: (A)
2. Coquidamber styre, this	30		<u> </u>	
3. Juglan night	30		_ UPL	Total Number of Dominant Species Across All Strata:
4				
5				Percent of Dominant Species
6			•	That Are OBL, FACW, or FAC:(A/B)
7.				Prevalence Index worksheet:
78		•	-	
	775			
1		= Total Co		OBL species x 1 =
50% of total cover: 45	20% of	total cove	r: <u>18</u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		/		FAC species x 3 =
1. Corners flugida	10	$\sim$	FACL	FACU species x 4 =
2. Liquidember styrac. Mun	15	$\overline{}$	FIAC	UPL species x 5 =
3. Juglans nigra	10	1/	TAT	Column Totals: (A) (B)
4		<u> </u>	<u>N/C</u>	(A)(B)
5	+ ·			Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
0				
1				1 - Rapid Test for Hydrophytic Vegetation
8				└── 2 - Dominance Test is >50%
	-25-	Total Co		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: $17.5$				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size: 30	20% 011	otal cover	ÿ	
	00		town of the	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Aficrostegium vimines	<u>40</u> -	$\sim$	FAC	be present, unless disturbed or problematic.
2. Aglenin platinumons	4R		FACU	Definitions of Four Vegetation Strata:
3. Jolystichun achroctoplec	\$3		FACI	
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				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.
δ				
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
12				height.
	<u> </u>			
119		Total Cov		
50% of total cover: <u>48</u>	20% of to	tal cover:	<u>19. E</u>	
Woody Vine Stratum (Plot size:)		1		
1. Vitas rotund, telia	20	$\sim$	FAL	
2				
3				
4.				
5		······································		
···	~ ~ ~	······		Hydrophytic
-		Fotal Cove	er , ,	Vegetation
50% of total cover:		tal cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below	).			
	•			
			······	

SOIL

WNAHOOS - U

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) % Type Loc <sup>2</sup>	Texture Remarks
0-3 1048 3/2	5L
19-7 2,574h	
D-14+ 25 4 3/4	36
<u>11-11 (J 7)14</u>	SLL
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U	
Histic Epipedon (A2)	
Black Histic (A3)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	(MLRA 153B)
Muck Presence (A8) (LRR U)	Red Parent Material (TF2)
1 cm Muck (A9) (LRR P, T)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	└─ Other (Explain in Remarks)
Thick Dark Surface (A12)	<sup>3</sup> todiates of budgets (
Coast Prairie Redox (A16) (MLRA 150A)	
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	wetland hydrology must be present.
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Sandy Redox (S5)	٨
Stripped Matrix (S6)	
Dark Surface (S7) (LRR P, S, T, U)	(1400, 1030, 1030)
Restrictive Layer (if observed):	
Туре	$\sim$
Type: Depth (inches):	Hydric Soil Present? Yes No $\underline{\times}$
Type: Depth (inches): Remarks	
Type: Depth (inches): Remarks	
Type: Depth (inches):	
Type: Depth (inches): Remarks	

Wnah009\_u



Upland data point wnah009\_u facing east



Upland data point wnah009\_u facing north

# Wnah009 soils



Wetland/upland soils

Project/Site: SERP	City/County:	19AS14			te: 9/20/14
Applicant/Owner: Do Musical		S	tate: NC	Sampling Poi	int: WNA40347
Investigator(s): DOWEST	Section, Towns	hip, Range:	NA		
Landform (hillslope, terrace, etc.): Hoop Place				WE S	Slope (%):
	Lat: 36'07'09.643"	Long	77'52'63.	428	Datum: 1065 84
	_ Lat	Long		cation:	
Soil Map Unit Name:	V				
Are climatic / hydrologic conditions on the site typical for		_ No (I	f no, explain in F	kemarks.)	V
Are Vegetation, Soil, or Hydrology					No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, ex	kplain any answe	ers in Remarks	.)
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling p	oint location	ns, transects	s, importan	t features, etc.
Hydrophytic Vegetation Present?     Yes       Hydric Soil Present?     Yes       Wetland Hydrology Present?     Yes	No	ampled Area Wetland?	Yes	(No	
We Hand present HYDROLOGY					
			Secondary Indic	ators (minimun	m of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check	all that apply)			Cracks (B6)	
	atic Fauna (B13)				ave Surface (B8)
	Deposits (B15) (LRR U)			atterns (B10)	
	rogen Sulfide Odor (C1)		🔀 Moss Trim		
	dized Rhizospheres along Livin	g Roots (C3)	Dry-Seasor	Water Table (	C2)
	sence of Reduced Iron (C4)		🔀 Crayfish Bu	rrows (C8)	in the second
	ent Iron Reduction in Tilled So	ils (C6)			al Imagery (C9)
	Muck Surface (C7)		Geomorphi		
	er (Explain in Remarks)		Shallow Aq FAC-Neutral		
Inundation Visible on Aerial Imagery (B7)				moss (D8) (LR	RT.U)
Water-Stained Leaves (B9)			Spriagnum	11035 (00) (21	
Field Observations:	Depth (inches):				_
×		-			,đ
<u> </u>	Depth (inches):	- Wetland H	ydrology Prese	nt? Yes	No
(includes capillary fringe)				7	mail
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous ins	pections), if avai	lable:		
Remarks:					
Hydrology prese	t.				
99					
1					
					1. A.

Sampling Point: WMAA0344

Dominance Test worksheet: Absolute Dominant Indicator % Cover Species? Status Tree Stratum (Plot size: Number of Dominant Species That Are OBL, FACW, or FAC: FAC 20 1. Liquidam - atimacific 20 OBL Nycia Total Number of Dominant FAI (B) 20 Species Across All Strata: rer ruh 3 20 I sieden dron 4 Percent of Dominant Species 00 (A/B)That Are OBL, FACW, or FAC: 5 6. Prevalence Index worksheet: 7. Total % Cover of: Multiply by: 8. OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_ 80 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: 40 20% of total cover: FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ Lieucton Sincose. UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ uilambur styraciflere Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) 21 rens lowritelia Prevalence Index = B/A = brf 010 Len Hydrophytic Vegetation Indicators: 5 1 - Rapid Test for Hydrophytic Vegetation 6 2 - Dominance Test is >50% 7. \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup> 8 26 = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: 30 <sup>1</sup>Indicators of hydric soil and wetland hydrology must Herb Stratum (Plot size: \_ ) OB be present, unless disturbed or problematic. 1. Woodwardia grielof Definitions of Four Vegetation Strata: FACU Athurium Aspleniadicz\_ FAC4) mondingrin gragentic Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or FACU more in diameter at breast height (DBH), regardless of Mitchelly ripens height. FACW STAC 100 5. On ac Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 6 7. Herb - All herbaceous (non-woody) plants, regardless 8.\_\_\_\_\_ of size, and woody plants less than 3.28 ft tall. 9.\_\_\_\_\_ Woody vine - All woody vines greater than 3.28 ft in 10. height. 11. 12. 21 = Total Cover 50% of total cover: 10.5 20% of total cover: 26 Woody Vine Stratum (Plot size: 1. Vatric noting 2. Toxicolognation radicans 3. 4. Hydrophytic 5. U Vegetation = Total Cover Yes X No Present? 50% of total cover: 2 20% of total cover: 0.8 Remarks: (If observed, list morphological adaptations below). Hydrophytic vegetation is dominant.

# Sampling Point: WNAtto340w

Depth			needed to docum	one the h	idiodico		the absence o	
	Matrix		Redox	Features		-		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc		Remarks
0-3	104R4/2						laam .	
3-167	10 YR 5/1	90	7.54R4/6	10			(vam	
	-							
<sup>1</sup> Type: C=C	concentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.	Location:	PL=Pore Lining, M=Matrix. or Problematic Hydric Soils <sup>3</sup> :
	Indicators: (Applica	ble to all L	Polyvalue Bel			DRSTI		uck (A9) (LRR O)
Histoso			Polyvalue Bel					uck (A10) (LRR S)
	pipedon (A2) listic (A3)		Loamy Mucky				Reduce	d Vertic (F18) (outside MLRA 150/
	en Sulfide (A4)		Loamy Gleye					nt Floodplain Soils (F19) (LRR P, S
	d Layers (A5)		ZDepleted Mat					ous Bright Loamy Soils (F20)
Organi	Bodies (A6) (LRR P,		Redox Dark S					A 153B)
	ucky Mineral (A7) (LR		Depleted Dar					rent Material (TF2) nallow Dark Surface (TF12)
	Presence (A8) (LRR U)		Redox Depre Marl (F10) (L		0)			Explain in Remarks)
	luck (A9) (LRR P, T) ed Below Dark Surface	(A11)	Depleted Och	nric (F11)	(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12) (I	RR O, P,		ators of hydrophytic vegetation and
	Prairie Redox (A16) (N	ILRA 150A	) Umbric Surfa	ce (F13) (	(LRR P, T		wetla	and hydrology must be present,
Sandy	Mucky Mineral (S1) (L		Delta Ochric					ss disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver	tic (F18) (	(MLRA 15	0A, 150B)	(0.0.)	-
	Redox (S5)		Piedmont Flo	odplain S	my Soils (F19)	(WILKA 14	RA 149A, 153C,	153D)
	d Matrix (S6) urface (S7) (LRR P, S	т п	Anomaious B	ingrit Loai	iny Sons (i	20) (ME	un 1400, 1000,	
	Layer (if observed):							
Type:	Layer (i obserred).							,
	nches):						Hydric Soil	Present? Yes K No
Remarks:	nones).						1	
Remarks.								
							1	
	11 1.5 5	2	indicator	s i	o resp	ut.		
1	Hydre S.	0.1	indicator	s 1	o resp	nt.		
1	Hydre S.	0.1	indicator	rs 1	o resio	nt.		
1	Hydre S.	0.(	indicator	rs 1	o resio	nt.		
1	Hydree S.	0.(	indicator	rs 1	l resia	ut.		
1	Hydre S.	0.)(	indicator	rs 1	l resu	nt.		
1	Hydre S.	o.(	indicator	rs 1	O TESQ	nt.		
1	Hydre S.	o.(	indicator	rs 1	Ø TESA	nt.		
1	Hydre S.	o. (	indicator	rs 1	l reso	nt.		
1	Hydre S.	o. (	indicator	rs 1	0 <i>5</i> 830	nt.		
1	Hydric S.	o.(	indicator	rs 1	l reso	nt.		
1	Hydric S.	o`(	indicator	rs 1	<i>l res</i> u	nt.		
1	Hydre S.	o`(	indication	rs 1	<i>l res</i> u	nt.		
1	Hydre S.	o`(	indicator	rs 1	<i>l res</i> e	nt.		
1	Hydre S.	o`.(	indicator	rs 1	<i>l res</i> e	nt.		
1	Hydric S.	o. (	indicator	rs 1	0 <i>5</i> eso	nt.		
1	Hydric S.	o`(	indicator	rs 1	<i>l res</i> e	nt.		
1	Hydre S.	o`(	indicator	rs 1	<i>0 583</i> 0	nt.		
1	Hydre S.	o`(	indicator	rs	<i>0 583</i> 0	nt.		
1	Hydre S.	o. (	indicator	rs /	<i>l res</i> e	nt.		
	Hydric S.	o`(	indicator	rs /	<i>0 583</i> 0	nt.		
1	Hydric S.	o`(	indicato	rs	<i>0 583</i> 0	nt.		

wnah034f\_w



Wetland data point wnah034f\_w facing east



Wetland data point wnah034f\_w facing south

roject/Site: SEKeliability City/Cou	unty: Nash Sampling Date: Hagust 20
	State: NC Sampling Point: WNAH034
oplicant/Owner:	
Vestigator(s).	, Township, Range:
andform (hillslope, terrace, etc.): Local re	lief (concave, convex, none): Slope (%):
ubregion (LRR or MLRA): Lat: 36'63'07.	.9% Long: 77° 52'52.446" Datum:
oil Map Unit Name: Nankin 75%	NWI classification:
re climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no explain in Remarks.)
re Vegetation, Soil, or Hydrology significantly disturbe	
re Vegetation, Soil, or Hydrology naturally problemation	
UMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No I	is the Sampled Area within a Wetland? Yes No
Remarks: Not a wetland	
IYDROLOGY	
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	
Saturation (A3) Hydrogen Sulfide Odor (C1	
Water Marks (B1) Oxidized Rhizospheres alo	
Sediment Deposits (B2) Presence of Reduced Iron	
Drift Deposits (B3) Recent Iron Reduction in T	Geomorphic Position (D2)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks)	
	KAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9)	
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 🔀
Saturation Precent? Yes No 7 Depth (Inches).	
(includes canillary fringe)	
(includes canillary fringe)	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ious inspections), if available:
(includes capillary fringe)	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ Remarks:	ious inspections), if available:

Sampling Point: WNAH034\_u

VEGETATION (Four Strata) - Ose scientific i		Berringer Testwerkehest
Tree Stratum (Plot size: 30)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet:
Tree Stratum (Plot size)	10 FAC	Number of Dominant Species (A)
1. Cappinus caroliniana		
2. Cargo tomention glabra	5 FACU	I total Number of Dominant
3. Liquidambar styniflua 4. Liciodendron tulipitara	30 Y FAC	Species Across All Strata: (B)
4. Licidendron tuliaiters	20 Y FAC	Descent of Deminent Species 100
	1 1.	Percent of Dominant Species / 00 (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species x 1 =
	65 = Total Cover 13	FACW species x 2 =
50% of total cover: 3	2. 5 20% of total cover: 13	
Sapling/Shrub Stratum (Plot size: 30)	- 11 -	FAC species x 3 =
1 Caraba Carabalan	5 Y FAC	FACU species x 4 =
2. Fraxinus pennsylvenian	5 Y FACU	UPL species x 5 =
2. Francing penning livenia		Column Totals: (A) (B)
3		
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		
7		
8	10 = Total Cover	3 - Prevalence Index is ≤3.0 <sup>1</sup>
		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	5 20% of total cover: 2	•
Herb Stratum (Plot size: <u>30</u> )	V FAR	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Eulalin Vinine	ZIFAC	be present, unless disturbed or problematic.
2. 5. Lodo For Athyrium asplenial	is Z Y FACU	Definitions of Four Vegetation Strata:
2		
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
		of size, and woody plants less than 3.28 ft tall.
9		
10		Woody vine – All woody vines greater than 3.28 ft in
11		height.
12.		
	= Total Cover	
50% of total cover:	2 20% of total cover: 0.8	
0		·
woody while outduin in for size.	E Y FAC	
1. Vitis rotundifolia	THE	
2. Condera ) aponica	_ S Y FAC	
3. Toxicadendron radicas	Z FAC	
4		
E		Underschutig
5	12 = Total Cover	- Hydrophytic Vegetation
		Present? Yes X No
50% of total cover:	20% of total cover: 2.9	
Remarks: (If observed, list morphological adaptations t	below).	
		Mi I
Hydrophytic veg. is p	resent	
1 your provide a start		
-		

Sampling Point: WNAH 034\_4

	rm the absence of indicators.)
Depth Matrix Redox Features	Texture Remarks
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	
0-10 104R 4/4 (00	loam
4-718 7.54R416 100	Oan
	2 Di Di di la Mattin
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T,	
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Lavers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Stratified Layers (A5) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
S chi Macky Mineral (A7) (LINCE, 1, 0) Depicted Data Condoc (17) Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Mari (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, T) <sup>3</sup> 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, 150	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (ML	_RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Туре:	
Type: Depth (inches):	Hydric Soil Present? Yes No
Depth (inches): Remarks:	
Depth (inches): Remarks:	
Depth (inches): Remarks:	
Depth (inches):	
Depth (inches): Remarks:	



Upland data point wnah034\_u facing east



Upland data point wnah034\_u facing north

# wnah034 soils



Wetland/upland soils

Project/Site: Atlantic Coast Pipeline	City/County: N	lash	Sampling Date: 3/9/2015
Applicant/Owner: DOMINION		State: NC	
Investigator(s):	Section, Town	ship, Range: <u>No PLSS in this a</u>	area
Landform (hillslope, terrace, etc.): Floodplain			Slope (%): <u>5</u>
Subregion (LRR or MLRA): <u>P</u>	Lat: <u>36.04487702</u>	Long: <u>-77.88678867</u>	Datum: WGS 1984
Soil Map Unit Name: Norfolk loamy sand, 2 to 6 percer	nt slopes	NWI class	ification: PFO1A
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing sampling	point locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the s	Sampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes	within a Wetland?	Yes 🖌	No
Remarks:				

Wetland associated with an intermittent and a perennial stream. Recievesrunoff from a nearby agricultural field. Crayfish burrows and shell piles were found at the data point.

#### HYDROLOGY

Wetland Hydrology Indicato	ors:				Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				Surface Soil Cracks (B6)		
			<ul> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>			
Field Observations:	,			I		
Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes 🖌 N Yes 🖌 N	10 10	Depth (inches): 0 Depth (inches): 0 Depth (inches): 0 ell, aerial photos, previous inspec		Hydrology Present? Yes <u>v</u> No ailable:	

Sampling Point: <u>wnac002f\_w</u>

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)		<u>Species?</u>		Number of Dominant Species
1. Acer rubrum	35	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2. Liquidambar styraciflua	5	No	FAC	Total Number of Dominant
3. Pinus taeda	5	No	FAC	Species Across All Strata: 5 (B)
4				(-)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 80 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
		= Total Cov	er	
50% of total cover:22.5	20% of	total cover	9	FACW species $\frac{15}{75}$ x 2 = $\frac{30}{225}$
Sapling/Shrub Stratum (Plot size:15)				FAC species $x 3 = $
1. Ilex opaca	15	Yes	FAC	FACU species $5   x 4 = 20$
2. Liquidambar styraciflua	15	Yes	FAC	UPL species 0 x 5 = 0
				Column Totals: 95 (A) 275 (B)
3. <u>Magnolia virginiana</u>	5	No	FACW	
4				Prevalence Index = B/A =2.89
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
				∠ 2 - Dominance Test is >50%
8	25		<u> </u>	$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:17.5	20% of	total cover	7	
Herb Stratum (Plot size: 5 )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Osmundastrum cinnamomeum	10	Yes	FACW	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
2				Deminions 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			<u> </u>	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				
	10	= Total Cov	er	
50% of total cover: 5		total cover	•	
	20 % 01		·	
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> )	~	Vee		
1. Lonicera japonica	5	Yes	FACU	
2				
3				
4				
5	_			Hydrophytic
		= Total Cov	4	Vegetation Present? Yes <u>Ves</u> No
50% of total cover:2.5	20% of	total cover	: <u> </u>	
Remarks: (If observed, list morphological adaptations belo	w).			1
	,			

Profile Desc	ription: (Describe t	o the depth	n needed to docu	ment the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	6			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10 YR 2/1	100					SL	
	oncentration, D=Deple					ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	ble to all L	RRs, unless othe	rwise note	ed.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	elow Surfac	ce (S8) <b>(L</b>	.RR S, T, U)	1 cm I	Muck (A9) <b>(LRR O)</b>
Histic Ep	oipedon (A2)		Thin Dark Su	urface (S9)	(LRR S,	T, U)	2 cm I	Muck (A10) <b>(LRR S)</b>
Black Hi	stic (A3)		Loamy Muck	y Mineral (	(F1) <b>(LRR</b>	l O)	Reduc	ced Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		Piedm	nont Floodplain Soils (F19) (LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			Anom	alous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	6)		(ML	RA 153B)
5 cm Mu	icky Mineral (A7) (LR	R P, T, U)	Depleted Da	rk Surface	(F7)		Red P	Parent Material (TF2)
	esence (A8) (LRR U)		Redox Depre	essions (F8	3)		Very S	Shallow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (L	.RR U)			Other	(Explain in Remarks)
Depleted	d Below Dark Surface	(A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		
	ark Surface (A12)	. ,	Iron-Mangan				) <sup>3</sup> Indio	cators of hydrophytic vegetation and
	rairie Redox (A16) (M	LRA 150A)					•	tland hydrology must be present,
	lucky Mineral (S1) (L		Delta Ochric			. ,		less disturbed or problematic.
	Bleyed Matrix (S4)		Reduced Ve	· / ·		0A, 150B)		·
-	edox (S5)		Piedmont Flo				A)	
	Matrix (S6)		Anomalous I					C. 153D)
	rface (S7) (LRR P, S,	T. U)		5	<b>,</b> (	-7 🕻	- ,	, ,
	_ayer (if observed):	, -,						
Type:	.,.,							
, <u> </u>								
Depth (in	cnes):						Hydric Soi	I Present? Yes <u>V</u> No
Remarks:								
Hydric soil pre	esent							



Photo 1 Wetland data point wnac002f\_w facing east



Photo 2 Wetland data point wnac002f\_w facing south

Project/Site: Atlantic Coast Pipeline	City/County: N	lash	_ Sampling Date: <u>3/9/2015</u>
Applicant/Owner: DOMINION		State: NC	_ Sampling Point: <u>wnac002_u</u>
Investigator(s): Team C	Section, Town	ship, Range: <u>No PLSS in this ar</u>	
Landform (hillslope, terrace, etc.): Hill Slope		oncave, convex, none): <u>none</u>	10
Subregion (LRR or MLRA): <u>P</u>	Lat: 36.04493027	Long: <u>-77.88661188</u>	Datum: WGS 1984
Soil Map Unit Name: Norfolk loamy sand, 2 to 6 percent sl	opes	NWI classif	fication: None
Are climatic / hydrologic conditions on the site typical for th	is 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 answ	vers in Remarks.)
		noint locations transat	- immentant feetunee etc

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area 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) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	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):	
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes No 🗸
(includes capillary fringe)	
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	

Sampling Point: <u>wnac002\_u</u>

Trop Stratum (Plat aiza: 30)	Absolute			Dominance Test worksheet:
		<u>Species?</u>		Number of Dominant Species
1. Pinus taeda	15	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				、 ,
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	15	= Total Cove	r	OBL species x 1 =
50% of total cover:7.5		total cover:	3	FACW species x 2 =
	2070.01		<u> </u>	FAC species $\frac{65}{x 3} = \frac{195}{x 3}$
Sapling/Shrub Stratum (Plot size:15) 1. Ilex opaca	25	Yes	FAC	FACU species $0   x 4 = 0$
2 Liquidambar styraciflua	15	Yes	FAC	UPL species 0 x 5 = 0
<b>L</b> .				Column Totals: 65 (A) 195 (B)
3. Acer rubrum	10	Yes	FAC	
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				$\checkmark$ 3 - Prevalence Index is $\leq 3.0^1$
	<b>FO</b>	= Total Cove	r	9 of revelence index is 20.0 Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:25				
5	2070.01		<u> </u>	
,				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1				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				
				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants less than 3.20 it tall.
10			<u> </u>	Woody vine – All woody vines greater than 3.28 ft in
11			<u> </u>	height.
12				
	0	= Total Cove	r	
50% of total cover: 0	20% of	total cover:	0	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cove		Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations belo	w).			

Depth	Matrix		Redo	ox Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	S
0-10	10 YR 3/2	100					SL		
10-16	2.5 Y 5/3	95	10 YR 5/8	5	С	М	SL		
	Concentration, D=Dep					ains.		Pore Lining, M=M Problematic Hydr	
Histosc			Polyvalue Be		•	.RR S. T. U	J) 1 cm Muck	(A9) <b>(LRR O)</b>	
	Epipedon (A2)		Thin Dark St					(A10) <b>(LRR S)</b>	
	Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)						Reduced Vertic (F18) (outside MLRA 150A,B		
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (	(F2)		Piedmont F	Floodplain Soils (F	19) <b>(LRR P, S, 1</b>
Stratifie	ed Layers (A5)		Depleted Ma	atrix (F3)			Anomalous	Bright Loamy Soil	s (F20)
Organie	c Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F	-6)		(MLRA 1	53B)	
5 cm M	lucky Mineral (A7) <b>(LF</b>	R P, T, U	Depleted Da	rk Surface	e (F7)		Red Paren	t Material (TF2)	
	Presence (A8) (LRR U		Redox Depr	essions (F	8)		Very Shallo	w Dark Surface (T	F12)
1 cm M	luck (A9) (LRR P, T)		Marl (F10) (I	_RR U)			Other (Exp	lain in Remarks)	
Deplete	ed Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)			
Thick D	Oark Surface (A12)		Iron-Mangar	ese Mass	es (F12) (	LRR O, P,	T) <sup>3</sup> Indicator	s of hydrophytic ve	getation and
Coast I	Prairie Redox (A16) (N	ILRA 150	A) Umbric Surfa	ace (F13)	(LRR P, T	, U)		hydrology must be	
Sandy	Mucky Mineral (S1) (I	.RR O, S)					unless o	listurbed or problem	matic.
-	Gleved Matrix (S4)		Reduced Ve			0A, 150B)			
Sandy	Redox (S5)		Piedmont Fl	oodplain S	ioils (F19)	(MLRA 14	9A)		
Strippe	d Matrix (S6)		Anomalous I	Bright Loa	my Soils (	F20) <b>(MLR</b>	A 149A, 153C, 153	BD)	
Dark S	urface (S7) (LRR P, S	, T, U)		•		, .			
Restrictive	Layer (if observed):								
Type:									
Depth (ir	nches):						Hydric Soil Pre	sent? Yes	No
Remarks:							1		
	il indicators present								



Photo 1 Upland data point wnac002\_u facing south



**Photo 2** Upland data point wnac002\_u facing west

Project/Site: Atlantic Coast Pip	peline	City/Coun	<sub>ty:</sub> Nash		_ Sampling Date: 3/9/2015
Applicant/Owner: DOMINION				State: NC	_ Sampling Point: wnac001f_w
Investigator(s): Team C		Section, 1	ownship, Range: N	o PLSS in this ar	ea
Landform (hillslope, terrace, et	C). Drainage system		ef (concave, convex	none). none	Slope (%): 2
Subregion (LRR or MLRA): P				,	Oldpe (76) Datum: WGS 1984
Soil Map Unit Name: Rains fin			Long		
Are climatic / hydrologic condit		-			
				I Circumstances"	present? Yes <u></u> No
Are Vegetation, Soil	, or Hydrology	naturally problematic?	(If needed, o	explain any answ	vers in Remarks.)
SUMMARY OF FINDING	GS – Attach site n	nap showing sampli	ng point locatio	ons, transect	s, important features, etc.
Hydrophytic Vegetation Prese	ent? Yes 🖌	No			
Hydric Soil Present?		No	the Sampled Area	Vec	No
Wetland Hydrology Present?	Yes 🔽	No	thin a Wetland?	Tes	NO
the growing season so there is	s likely more water pres	ent now than at other time	s of the year. Wetlar	ld drains into a di	itch that contains excessive algae.
HYDROLOGY					
Wetland Hydrology Indicators         Primary Indicators (minimum	of one is required; chec Aq Ma Hy Ox Pro Re Th Oth rial Imagery (B7)	k all that apply) uatic Fauna (B13) Irl Deposits (B15) <b>(LRR U)</b> drogen Sulfide Odor (C1) idized Rhizospheres along esence of Reduced Iron (C cent Iron Reduction in Tille in Muck Surface (C7) her (Explain in Remarks)	Living Roots (C3) 4)	<ul> <li>Surface So</li> <li>Sparsely Va</li> <li>Drainage P</li> <li>Moss Trim</li> <li>Dry-Seasor</li> <li>Crayfish Bu</li> <li>Saturation V</li> <li>Geomorphi</li> <li>Shallow Aq</li> <li>FAC-Neutra</li> </ul>	egetated Concave Surface (B8) atterns (B10) Lines (B16) n Water Table (C2) nrrows (C8) Visible on Aerial Imagery (C9) c Position (D2) uitard (D3)
Field Observations:		Dopth (inchas):			
Surface Water Present? Water Table Present?	Yes <u> </u>		[		
Saturation Present?	Yes <u></u> No	<u>۸</u>	Wetland H	-lydrology Pres∉	ent? Yes 🖌 No
(includes capillary fringe) Describe Recorded Data (stre	eam gauge, monitoring	well, aerial photos, previou	is inspections), if ava	ailable:	
, , , , , , , , , , , , , , , , , , ,			. ,		
Remarks: Wetland hydrology present. D year.	ata point was recorded	outside the growing seaso	n so there is likely m	lore water preser	it now than at other times of the

Sampling Point: <u>wnac001f\_w</u>

Tree Stratum (Plot size:30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Quercus phellos	35	Yes	FACW	Number of Dominant Species           That Are OBL, FACW, or FAC:         7         (A)
2. Acer rubrum	20	Yes	FAC	
3. Pinus taeda	10	No	FAC	Total Number of Dominant Species Across All Strata: 7 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8				$\begin{array}{c c} \underline{\text{Total } \% \text{ Cover of:}} \\ \hline \text{OPL encoded} \\ 5 \\ \hline \text{v 1} \\ \hline 5 \\ \hline \end{array}$
	65	= Total Cov		
50% of total cover:32.5	20% of	total cover:	13	FACW species $x^2 = \frac{300}{150}$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $30$ $x_3 = 150$
1. <u>Acer rubrum</u>	10	Yes	FAC	FACU species $0   x 4 = 0$
2. <u>Magnolia virginiana</u>	5	Yes	FACW	UPL species $0$ $x = 0$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =2.45
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 7.5	20% of	total cover:	3	
Herb Stratum (Plot size: 5 )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Smilax rotundifolia	10	Yes	FAC	be present, unless disturbed or problematic.
2. Carex lupulina	5	Yes	OBL	Definitions of Four Vegetation Strata:
3. Arundinaria gigantea	5	Yes	FACW	<b>Tree</b> – 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				
10		= Total Cov		
50% of total cover:10	20% of	total cover:	4	
Woody Vine Stratum (Plot size: 30 )				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes Vo
50% of total cover:0	20% of	total cover:	0	
Remarks: (If observed, list morphological adaptations below	w).			

Profile Desc	cription: (Describe t	o the depth	needed to docun	nent the in	dicator	or confirm	the absence of indicators.)	
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	
0-5	10 YR 3/2	100					SL	
5-16	10 YR 5/1	100		·		·	SL	
				·		·		
	·			·				
				·		·		
<sup>1</sup> Type: C=Ce	oncentration, D=Deple	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applica	ble to all LR	Rs, unless other	wise note	d.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) <b>(L</b>	RR S, T, U)	1 cm Muck (A9) <b>(LRR O)</b>	
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm Muck (A10) (LRR S)	
Black Hi	stic (A3)		Loamy Muck	y Mineral (I	F1) <b>(LRR</b>	0)	Reduced Vertic (F18) (outside MLRA 1	50A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	2)		Piedmont Floodplain Soils (F19) (LRR I	P, S, T)
Stratified	d Layers (A5)		✓ Depleted Mat	trix (F3)			Anomalous Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark \$	Surface (F6	6)		(MLRA 153B)	
5 cm Mu	ucky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface	(F7)		Red Parent Material (TF2)	
Muck Pr	esence (A8) (LRR U)		Redox Depre	ssions (F8	)		Very Shallow Dark Surface (TF12)	
1 cm Mu	uck (A9) <b>(LRR P, T)</b>		Marl (F10) (L	RR U)			Other (Explain in Remarks)	
Depleted	d Below Dark Surface	(A11)	Depleted Och	nric (F11) <b>(</b>	MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masse	s (F12) <b>(</b> I	LRR O, P, 1	F) <sup>3</sup> Indicators of hydrophytic vegetation a	nd
Coast P	rairie Redox (A16) <b>(M</b>	LRA 150A)	Umbric Surfa	ce (F13) <b>(L</b>	RR P, T	, U)	wetland hydrology must be present,	
Sandy M	/lucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) <b>(MLF</b>	RA 151)		unless disturbed or problematic.	
Sandy G	Bleyed Matrix (S4)		Reduced Ver	tic (F18) <b>(N</b>	ILRA 15	0A, 150B)		
Sandy R	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 149	)A)	
Stripped	l Matrix (S6)		Anomalous B	right Loam	ny Soils (I	-20) (MLRA	A 149A, 153C, 153D)	
Dark Su	rface (S7) (LRR P, S,	T, U)						
Restrictive I	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil Present? Yes No _	
Remarks:								
Hydric soil pre	acont							
	Joont							



Photo 1 Wetland data point wnac001f\_w facing east



Photo 2 Wetland data point wnac001f\_w facing north



Photo 3 Wetland data point wnac001f\_w facing west

Project/Site: Atlantic Coast Pipeline		City/County: N	ash		Sampling Date	e: <u>3/9/2015</u>
Applicant/Owner: DOMINION			Sta	te: NC	_ Sampling Poir	nt: wnac001_u
Investigator(s): Team C		_ Section, Town	ship, Range: <u>No P</u>	LSS in this a	rea	
Landform (hillslope, terrace, etc.): Slight slop						lope (%): <u>3</u>
Subregion (LRR or MLRA): P	Lat: <u>36.04</u> 2	268873	Long: <u>-77</u> .	88453519	[	Datum: WGS 1984
Soil Map Unit Name: Rains fine sandy loam					fication: None	
Are climatic / hydrologic conditions on the site Are Vegetation, Soil, or Hydro Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attack	ology significantl	y disturbed? roblematic?	Are "Normal Ci (If needed, exp	rcumstances' lain any answ	" present? Yes _ vers in Remarks.)	
	es <u> </u>	within	Sampled Area a Wetland?	Yes	No	
Remarks: Upland data point within a twenty-year-old lo	blolly 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)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LRR U)         Saturation (A3)       Hydrogen Sulfide Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres along Living F         Sediment Deposits (B2)       Presence of Reduced Iron (C4)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C7)         Iron Deposits (B5)       Other (Explain in Remarks)         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)	Crayfish Burrows (C8)
Field Observations:	
Surface Water Present? Yes No V Depth (inches):	
Water Table Present? Yes No <u>V</u> Depth (inches):	
Saturation Present? Yes No Yes Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
No hydrology indicators were found around the data point.	

Sampling Point: <u>wnac001\_u</u>

Trop Stratum (Plot aiza: 30)	Absolute			Dominance Test worksheet:
	-	Species?		Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
···	50	= Total Cov	or	OBL species x 1 =0
50% of total cover: 25		total cover:	10	FACW species $x = 30$
	20% 0	lotal cover.		FAC species x 3 =240
Sapling/Shrub Stratum (Plot size:15)	10	Yes	FAC	FACU species 0 x 4 = 0
	10			UPL species $0 \times 5 = 0$
2. Magnolia virginiana		Yes	FACW	Column Totals: $95$ (A) $270$ (B)
3. Liquidambar styraciflua	5	Yes	FAC	
4				Prevalence Index = $B/A = 2.84$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{1}$
	25	= Total Cov	er	
50% of total cover:12.5				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
F	2078.01		·	
Arundinaria gigantea	5	Yes	FACW	<sup>1</sup> 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				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				
	5	= Total Cov	er	
50% of total cover:2.5	20% of	total cover:	1	
Woody Vine Stratum (Plot size: 30 )				
, Smilax rotundifolia	15	Yes	FAC	
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes <u>Ves</u> No
50% of total cover: 7.5	20% of	total cover:	3	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations belo				1
	,			

SOIL

Depth	Matrix		Redo	x Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10 YR 3/2	100					SL		
5-16	2.5 Y 5/3	95	10 YR 5/8	5	С	М	SL		
	Concentration, D=Depl					ains.		Pore Lining, M=Matr Problematic Hydric	
Histoso	· · /		Polyvalue Be		· / ·		·		
Histic E	Epipedon (A2)		Thin Dark Su	rface (S9	) <b>(LRR S,</b>	T, U)	2 cm Muck	(A10) <b>(LRR S)</b>	
	listic (A3)		Loamy Muck	/ Mineral	(F1) <b>(LRR</b>	0)	Reduced V	ertic (F18) (outside	MLRA 150A,I
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Piedmont F	Floodplain Soils (F19)	) <b>(LRR P, S,</b> 1
Stratifie	ed Layers (A5)		Depleted Mat	rix (F3)			Anomalous	Bright Loamy Soils	(F20)
Organi	c Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	F6)		(MLRA 1	53B)	
5 cm M	lucky Mineral (A7) (LR	R P, T, U	) Depleted Dar	k Surface	e (F7)		Red Paren	t Material (TF2)	
Muck F	Presence (A8) (LRR U	)	Redox Depre	ssions (F	8)		Very Shallo	w Dark Surface (TF1	12)
1 cm M	luck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	RR U)	,		·	lain in Remarks)	,
Deplete	ed Below Dark Surface	e (A11)	Depleted Och	nric (F11)	(MLRA 1	51)		,	
	Dark Surface (A12)	( )	Iron-Mangan	,	•		T) <sup>3</sup> Indicator	s of hydrophytic vege	tation and
	Prairie Redox (A16) (N	ILRA 150			• • •		•	hydrology must be p	
	Mucky Mineral (S1) (L					, -,		listurbed or problema	
-	Gleyed Matrix (S4)		Reduced Ver			0A. 150B)			
-	Redox (S5)		Piedmont Flo	. ,	•	•			
-	d Matrix (S6)						A 149A, 153C, 153	(סג	
	urface (S7) <b>(LRR P, S</b>	тш		ingin Loa		20) (2.1		(2)	
	Layer (if observed):	-							
Type:									
	nches):						Hydric Soil Pres	sent? Yes	No 🖌

No hydric soils were present at the data point



Photo 1 Upland data point wnac001\_u facing south



**Photo 2** Upland data point wnac001\_u facing west

Project/Site: Atlantic Coast Pipeline		City/County: N	ash		Sampling	Date: 3/10	/2015
Applicant/Owner: DOMINION			S	tate: NC	Sampling	Point: wnac	:003f_w
Investigator(s):		Section, Town	ship, Range: <u>No</u>	PLSS in this	area		
Landform (hillslope, terrace, etc.): Drainage system		Local relief (co	ncave, convex, n	ione): <u>convex</u>		Slope (%	6): <u>3</u>
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Nankin sandy loam, 2 to 10 perce							
Are climatic / hydrologic conditions on the site typical fo Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site ma	significantly naturally pro	disturbed? oblematic?	Are "Normal ( (If needed, e)	Circumstance cplain any ans	s" present?	arks.)	
Hydric Soil Present? Yes 🖌	No No No		ampled Area a Wetland?	Yes _	V No		
Remarks: Wetland is a braided system of drainage patterns. The continuous bed and bank found in the drainage channe		ed on the USGS	maps as the pe	rennial strean	n Flat Rock Bi	ranch. Ther	e is no
HYDROLOGY							

Wetland Hydrology Indicato	ors:		Se	condary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required;	check all that apply)		_ Surface Soil Cracks (B6)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aer</li> <li>Water-Stained Leaves (B</li> </ul>	ial Imagery (B7)	Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks)	Roots (C3) (C6)	Sparsely Vegetated Concave Surface (B8) 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) <b>(LRR T, U)</b>
Field Observations:				
Surface Water Present?	Yes No _	Depth (inches):		
Water Table Present?	Yes 🖌 No _	Depth (inches): 3		
Saturation Present? (includes capillary fringe)	Yes 🖌 No _	Depth (inches):	Wetland Hyd	rology Present? Yes 🖌 No
· · · · · · · · · · · · · · · · · · ·	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	le:
Describe Recorded Data (stre	eam gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	sle:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspe	tions), if availat	sle:
Describe Recorded Data (stre	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	ole:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	le:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspe	tions), if availat	le:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	ole:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	sle:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	le:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	ole:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	ole:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	ole:
Describe Recorded Data (stre Remarks:	am gauge, monito	ring well, aerial photos, previous inspec	tions), if availat	ole:

Sampling Point: <u>wnac003f\_w</u>

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )		Species?		Number of Dominant Species
1. <u>Acer rubrum</u>	25	Yes	FAC	That Are OBL, FACW, or FAC:7 (A)
2. Quercus phellos		Yes	FACW	Total Number of Dominant
3. <u>Fraxinus pennsylvanica</u>	10	No	FACW	Species Across All Strata: 7 (B)
4. Nyssa aquatica	7	No	OBL	Demonst of Dominant Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
0	62	= Total Co		OBL species x 1 = 12
50% of total accurate 31			12 /	FACW species $33$ x 2 = $66$
50% of total cover: <u>31</u>	20% 01	total cover	: <u> </u>	FAC species 55 x 3 = 165
Sapling/Shrub Stratum (Plot size: 15 )	20	Vaa	FAC	FACU species x 4 =0
1. <u>Acer rubrum</u>	20	Yes		UPL species $0 \times 5 = 0$
2. <u>Ilex opaca</u>	5	Yes	FAC	100 243
3				Column Totals: (A) (B)
4				Prevalence Index = $B/A = 2.43$
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	25			$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
12		= Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 12.	<sup>5</sup> 20% of	total cover	. 5	
Herb Stratum (Plot size: 5)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Carex lupulina	5	Yes	OBL	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				
				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				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.				Weady vine All weady vince greater than 2.29 ft in
11				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
12.				
	5	= Total Co		
50% of total cover:2.				
	20% 01	total cover		
Woody Vine Stratum (Plot size: 30)	-	N	540	
1. Smilax rotundifolia	5	Yes	FAC	
2. Smilax laurifolia	3	Yes	FACW	
3				
4				
5				Underschutig
· · · · · · · · · · · · · · · · · · ·		= Total Co	vor	Hydrophytic Vegetation
50% of total cover: 4				Present? Yes <u>No</u>
		total cover	·	
Remarks: (If observed, list morphological adaptations bel	ow).			

SOIL

Depth	Matrix		Redo	x Features	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	2.5 Y 3/2	100					SL	
3-16	2.5 Y 3/2	95	10 YR 3/4	5	С	PL/M	SL	
	Concentration, D=De					ains.		=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applie	cable to all	LRRs, unless othe Polyvalue Be					Problematic Hydric Soils <sup>3</sup> :
Black H Hydrog Stratifie Organii 5 cm M Muck F 1 cm M Deplete Coast I Sandy Sandy Sandy Sandy Dark S	Epipedon (A2) distic (A3) den Sulfide (A4) ed Layers (A5) c Bodies (A6) <b>(LRR F</b> lucky Mineral (A7) <b>(L</b> Presence (A8) <b>(LRR P, T)</b> ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) <b>(</b> Mucky Mineral (S1) <b>(</b> Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR P, </b>	RR P, T, U) J) Ce (A11) MLRA 150 (LRR O, S) S, T, U)	<ul> <li>Redox Depression</li> <li>Marl (F10) (I</li> <li>Depleted Oc</li> <li>Iron-Mangar</li> <li>Umbric Surfa</li> <li>Delta Ochric</li> <li>Reduced Ve</li> <li>Piedmont Flor</li> </ul>	y Mineral ed Matrix ( ttrix (F3) Surface (F rk Surface essions (Fi <b>LRR U)</b> hric (F11) esse Masse ace (F13) ( (F17) (ML rtic (F18) ( podplain S	(F1) (LRR F2) (6) (F7) 8) (MLRA 1 (12) (1 (LRR P, T .RA 151) MLRA 15 oils (F19)	0) 51) LRR O, P, 7 , U) 0A, 150B) (MLRA 149	Reduced N Piedmont Anomalou (MLRA ' Red Parer Very Shall Other (Exp T) <sup>3</sup> Indicator wetlance unless	nt Material (TF2) ow Dark Surface (TF12) olain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
	Layer (if observed)	):						
Type:								
	nches):						Hydric Soil Pre	esent? Yes 🔽 No
Remarks: vdric soil p	resent							



Photo 1 Wetland data point wnac003f\_w facing north



Photo 2 Wetland data point wnac003f\_w facing south



Photo 3 Wetland data point wnac003f\_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: N	lash	Sampling Date: <u>3/10/2015</u>
Applicant/Owner: DOMINION		State: NC	_ Sampling Point: <u>wnac003_u</u>
Investigator(s):	Section, Town	ship, Range: <u>No PLSS in this a</u>	
Landform (hillslope, terrace, etc.): Hill Slope		ncave, convex, none): <u>none</u>	_
Subregion (LRR or MLRA): PL	at: <u>36.03957585</u>	Long: <u>-77.87373806</u>	Datum: WGS 1984
Soil Map Unit Name: Nankin sandy loam, 2 to 10 percent slo	opes	NWI classi	fication: 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 Hydrologysi	gnificantly disturbed?	Are "Normal Circumstances"	" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology na	aturally problematic?	(If needed, explain any ansv	vers 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?	Yes <u>v</u> No <u>v</u> Yes <u>No v</u> Yes <u>No v</u>	Is the Sampled Area 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) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living R	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):	
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tiona) if available.
Describe Recorded Data (stream gauge, monitoring weil, aerial photos, previous inspec	tions), il available.
-	
Remarks:	
No wetland hydrology indicators present	

Sampling Point: <u>wnac003\_u</u>

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)		Species?		Number of Dominant Species
1. Quercus alba	20	Yes	FACU	That Are OBL, FACW, or FAC:4 (A)
2. Acer rubrum	10	Yes	FAC	Total Number of Dominant
3				Species Across All Strata: 7 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 57.14285714 (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0	30	= Total Cov		OBL species x 1 =0
50% of total cover:15			6	FACW species20 x 2 =40
	20% 01	total cover:		FAC species $45$ x 3 = $135$
Sapling/Shrub Stratum (Plot size: 15 )	40	Voo	EACU	FACU species 75 x 4 = 300
1. Quercus alba	40	Yes	FACU	UPL species $0 \times 5 = 0$
2. <u>Acer rubrum</u>	15	Yes	FAC	140 475
3. <u>Ilex opaca</u>	15	Yes	FAC	Column Totals: (A) (B)
4. Oxydendrum arboreum	10	No	FACU	Prevalence Index = B/A =3.39
5. Liquidambar styraciflua	5	No	FAC	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8.				
0	05	= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:42.5				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	20% 0	total cover.		
<u>Herb Stratum</u> (Plot size: <u>5</u> ) 1. <i>Arundinaria gigantea</i>	20	Vaa	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		Yes		be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				<b>Tree</b> – 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				
				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Cov	-	
50% of total cover:10	20% of	total cover:	4	
Woody Vine Stratum (Plot size:30)				
<sub>1.</sub> Lonicera japonica	5	Yes	FACU	
2				
3				
4				
5				Hydrophytic
25		= Total Cov		Vegetation Present? Yes <u>V</u> No
50% of total cover:25	20% of	total cover:	·	
Remarks: (If observed, list morphological adaptations belo	ow).			

Profile Desc	cription: (Describe to	the depth	needed to docun	nent the indi	cator or conf	irm the abse	nce of indicato	ors.)	
Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	%	Color (moist)	<u>    %                                </u>	<u>ype<sup>1</sup> Loc<sup>2</sup></u>			Remarks	
0-3	10 YR 3/2	100				SCL			
3-16	10 YR 6/6	100				SICL			
				· ·					
				<u> </u>					
				<u> </u>					
<sup>1</sup> Type: C=C	oncentration, D=Deple	tion. RM=F	Reduced Matrix. MS	S=Masked Sa	nd Grains.	<sup>2</sup> Loca	tion: PL=Pore L	ining, M=Matri	x.
	Indicators: (Applical						tors for Proble		
Histosol			Polyvalue Be				cm Muck (A9) <b>(L</b>	-	
	oipedon (A2)		Thin Dark Su	,	, <b>.</b>		cm Muck (A10)		
	istic (A3)		Loamy Mucky	· / ·			educed Vertic (F		/LRA 150A.B)
	en Sulfide (A4)		Loamy Gleye		()		edmont Floodpla		
	d Layers (A5)		Depleted Mat				nomalous Bright		
	Bodies (A6) (LRR P,	T. U)	Redox Dark S	. ,			(MLRA 153B)		,
	ucky Mineral (A7) (LRI		Depleted Dar	( )	7)		ed Parent Materi	ial (TF2)	
	resence (A8) (LRR U)	,., <b>.</b> ,	Redox Depre		/		ery Shallow Dark	. ,	2)
	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	( )			ther (Explain in F		-,
	d Below Dark Surface	(A11)	Depleted Och		.RA 151)			,	
·	ark Surface (A12)	( )	Iron-Mangane	. , .		P. T) <sup>3</sup>	Indicators of hyd	drophytic veaet	ation and
	rairie Redox (A16) (MI	_RA 150A)			, ,		wetland hydrol	, , ,	
	lucky Mineral (S1) (LF		Delta Ochric	· / ·			unless disturbe	•••••••••••••••••••••••••••••••••••••••	
	Bleyed Matrix (S4)		Reduced Ver	. , .		)B)			
	Redox (S5)			· / ·	(F19) (MLRA				
	Matrix (S6)		Anomalous B	right Loamy S	Soils (F20) (M	LRA 149A, 1	53C, 153D)		
Dark Su	rface (S7) (LRR P, S,	T, U)		0 1					
Restrictive	Layer (if observed):								
Type:									
Depth (in	ches):					Hydric	Soil Present?	Yes	No 🖌
Remarks:									
	indicators prosent								
IND HYUNC SOIL	indicators present								



**Photo 1** Upland data point wnac003\_u facing east



Photo 2 Upland data point wnac003\_u facing north

Project/Site: Atlantic Coast Pipeline		City/County: Nash		_ Sampling Date: <u>3/10/2015</u>	
Applicant/Owner: DOMINION				_ Sampling Point: <u>wnac004f_</u> w	
Investigator(s): Team C		Section, Township, Range:			
Landform (hillslope, terrace, etc.): D					
				Datum: WGS 1984	
Soil Map Unit Name: Nankin sandy I		0			
Are climatic / hydrologic conditions o					
Are Vegetation, Soil,		-			
Are Vegetation, Soil,			, explain any answ		
SUMMARY OF FINDINGS -	Attach site map show	ling sampling point locat	ions, transect	s, Important features, etc.	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes <u>✓</u> No Yes <u>✓</u> No Yes <u>✓</u> No	within a Wetland?		✓ No	
Depressional wetland associated wi	th an intermittent stream				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indi	cators (minimum of two required)	
Primary Indicators (minimum of one	e is required; check all that ap	ply)	Surface So	il Cracks (B6)	
✓ Surface Water (A1)	Aquatic Fauna	(B13)	Sparsely V	egetated Concave Surface (B8)	
<ul> <li>High Water Table (A2)</li> </ul>	Marl Deposits	(B15) <b>(LRR U)</b>	🖌 Drainage P	atterns (B10)	
Saturation (A3)	Hydrogen Sulf	ide Odor (C1)	Moss Trim Lines (B16)		
Water Marks (B1)	Oxidized Rhize	ospheres along Living Roots (C3)	Dry-Seasor	n Water Table (C2)	
Sediment Deposits (B2)	Presence of R	educed Iron (C4)	Crayfish Bu	urrows (C8)	
Drift Deposits (B3)	Recent Iron Re	eduction in Tilled Soils (C6)	<u>Saturation</u>	Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Thin Muck Sur	face (C7)	Geomorphi	c Position (D2)	
<ul> <li>Iron Deposits (B5)</li> </ul>	Other (Explain	in Remarks)	Shallow Aq	uitard (D3)	

 Yes

 No
 Depth (inches):
 0
 Depth (inches):
 0

 Yes
 No
 Depth (inches):
 0
 Depth (inches):

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

#### Remarks:

Wetland hydrology indicators present

Field Observations:

Saturation Present? (includes capillary fringe)

Surface Water Present? Water Table Present?

✓ Water-Stained Leaves (B9)

\_ Inundation Visible on Aerial Imagery (B7)

✓ FAC-Neutral Test (D5)

Wetland Hydrology Present? Yes <u>V</u> No

Sphagnum moss (D8) (LRR T, U)

Sampling Point: <u>wnac004f\_w</u>

20	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> )		<u>Species?</u>		Number of Dominant Species
1. Acer rubrum		Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Salix nigra	7	No	OBL	Total Number of Dominant
3. Pinus taeda	5	No	FAC	Species Across All Strata:6 (B)
4. Platanus occidentalis	5	No	FACW	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33333333 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				$\begin{array}{c} \hline \hline \\ OBL species \\ \hline \\ \hline \\ \end{array} \begin{array}{c} 7 \\ x 1 = \\ \hline \\ \end{array} \begin{array}{c} \hline \\ x 1 = \\ \hline \\ \end{array} \end{array}$
19.5	37	= Total Cov	ver 7.4	FACW species $40   x^2 = 80$
50% of total cover:18.5	20% of	total cover	:	FAC species $75 \times 3 = 225$
Sapling/Shrub Stratum (Plot size: 15 )				
1. Acer rubrum	30	Yes	FAC	FACU species $x 4 = $
2. Ilex opaca	10	Yes	FAC	UPL species $x = 320$
3. Pinus taeda	10	Yes	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =2.58
5			·	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	50	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <sup>25</sup>	20% of	total cover	10	
Herb Stratum (Plot size: 5 )				
1. Arundinaria gigantea	35	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			·	Definitions of Four Vegetation Strata:
2				Demitions 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 height.
5				neight.
6			·	Sapling/Shrub – Woody plants, excluding vines, less
7		. <u> </u>		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9 10				
11				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
			·	neight.
12	35	= Total Cov		
17.5			_	
50% of total cover: 17.5	20% of	total cover	: <u> </u>	
Woody Vine Stratum (Plot size: <u>30</u> )				
1. Lonicera japonica	2	Yes	FACU	
2				
3				
4				
5				Hydrophytic
		= Total Cov	/er	Vegetation
50% of total cover:1				Present? Yes V No
			·	
Remarks: (If observed, list morphological adaptations belo	W).			

SOIL

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the in	dicator	or confirm	the absence	of indicators.	.)
Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-16	10 YR 2/1	100					SL		
				· ·					
		·				·			
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, M	S=Masked S	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Linir	ng, M=Matrix.
Hydric Soil	Indicators: (Applica	ble to all L	RRs, unless othe	rwise noted	d.)		Indicators	for Problema	tic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surface	e (S8) <b>(L</b>	RR S. T. U)	) 1 cm M	Muck (A9) <b>(LRF</b>	R O)
	pipedon (A2)		Thin Dark Su		· · ·			Muck (A10) (LR	
	stic (A3)		Loamy Muck						) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			-,			Soils (F19) <b>(LRR P, S, T)</b>
	d Layers (A5)		Depleted Ma		_,				amy Soils (F20)
	Bodies (A6) (LRR P,	τ.υ)	Redox Dark	. ,	;)			RA 153B)	
	icky Mineral (A7) (LR		Depleted Da	•	<i>'</i>		•	arent Material	(TF2)
	esence (A8) (LRR U)		Redox Depre	,	, ,			Shallow Dark S	. ,
	ick (A9) (LRR P, T)		Marl (F10) (L	. ,	,			(Explain in Rer	. ,
	d Below Dark Surface	(Δ11)	Depleted Oc			51)			harks)
·	ark Surface (A12)	(411)	Iron-Mangan				T) <sup>3</sup> India	cators of hydro	phytic vegetation and
	rairie Redox (A16) <b>(M</b>	I PA 150A)							/ must be present,
	lucky Mineral (S1) <b>(L</b>		Delta Ochric			, 0)		ess disturbed o	
	Bleyed Matrix (S4)	KK 0, 3j	Reduced Ver			04 1500)	un		n problematic.
-	Redox (S5)		Piedmont Flo				242		
	Matrix (S6)						A 149A, 153C	1520)	
		<b>T</b> 1N		Singhi Luani	y 30lis (i	F20) <b>(IVILK</b> #	A 149A, 155C	, 155D)	
	rface (S7) (LRR P, S,	1, 0)							
	Layer (if observed):								
Туре:									
Depth (ind	ches):						Hydric Soil	Present? Y	/es 🥙 No 🔜
Remarks:									
Hydric soil pre	esent								



Photo 1 Wetland data point wnac004f\_w facing east



Photo 2 Wetland data point wnac004f\_w facing south



Photo 3 Wetland data point wnac004f\_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: N	lash	Sampling Date: <u>3/11/2015</u>
Applicant/Owner: DOMINION		State: NC	Sampling Point: <u>wnac004_u</u>
Investigator(s):	Section, Town	ship, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): Hill Slope		ncave, convex, none): <u>none</u>	Slope (%): <u>5</u>
Subregion (LRR or MLRA): P La	t: <u>36.03576731</u>	Long: <u>-77.87388608</u>	Datum: WGS 1984
Soil Map Unit Name: Nankin sandy loam, 2 to 10 percent slo	pes	NWI classi	fication: 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 sig	nificantly disturbed?	Are "Normal Circumstances	" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any answ	vers 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?	Yes <u>v</u> No <u>v</u> Yes <u>No v</u> Yes <u>No v</u>	Is the Sampled Area 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) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	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):	
Saturation Present? Yes No <u>/</u> Depth (inches):	Wetland Hydrology Present? Yes No
	wettalld Hydrology Present? res No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe)	
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	

Sampling Point: <u>wnac004\_u</u>

Trop Stratum (Plot aize: 30)	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:) Platanus occidentalis	<u>% Cover</u> 20	<u>Species?</u> Yes	Status FACW	Number of Dominant Species
·	10			That Are OBL, FACW, or FAC: (A)
2. Quercus alba		Yes	FACU	Total Number of Dominant
3. Pinus taeda	10	Yes	FAC	Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:66.66666666 (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	40	= Total Cov	er	OBL species x 1 =0
50% of total cover: 20		total cover:	0	FACW species20 x 2 =40
	2078.01			FAC species $90 \times 3 = 270$
Sapling/Shrub Stratum (Plot size:15) 1. Liquidambar styraciflua	50	Yes	FAC	FACU species 20 x 4 = 80
	20	Yes	<u> </u>	UPL species 0 x 5 = 0
2. <u>Acer rubrum</u>			FAC	Column Totals: $130$ (A) $390$ (B)
3. <u>Ilex opaca</u>	10	No	FAC	
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{1}$
	00	= Total Cov		
50% of total cover:40		total cover:	40	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	20% 0	total cover.		
Herb Stratum (Plot size:5) 1 Lonicera japonica	10	Vaa	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		Yes		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				
	10	= Total Cov	er	
50% of total cover: 5		total cover:	•	
Woody Vine Stratum (Plot size: 30 )				
· · · · · · · · · · · · · · · · · · ·				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes <u>V</u> No
Remarks: (If observed, list morphological adaptations belo	w).			
······································				

Profile Desc	ription: (Describe f	o the depth	needed to docur	nent the i	ndicator	or confirm	the absence of indi	cators.)	
Depth	Matrix		Redo	x Features	6				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10 YR 3/2	100					S		
5-16	10 YR 5/4	100					S		
				·					
		<u> </u>							
				·		·			
				·					<u> </u>
	oncentration, D=Depl					ains.		ore Lining, M=Matrix	
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless othe	wise note	ed.)		Indicators for Pro	oblematic Hydric S	soils³:
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) <b>(L</b>	RR S, T, U)	1 cm Muck (A	9) <b>(LRR O)</b>	
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm Muck (A	10) <b>(LRR S)</b>	
	stic (A3)		Loamy Muck	-		0)		ic (F18) <b>(outside N</b>	
	en Sulfide (A4)		Loamy Gleye		F2)			odplain Soils (F19)	
	d Layers (A5)		Depleted Ma	· ,				right Loamy Soils (F	-20)
	Bodies (A6) (LRR P,		Redox Dark		,		(MLRA 153	,	
	icky Mineral (A7) <b>(LR</b>		Depleted Date		· · /		Red Parent M	. ,	
	esence (A8) (LRR U)		Redox Depre	•	3)		·	Dark Surface (TF12	2)
	ick (A9) <b>(LRR P, T)</b>		Marl (F10) (L	•			Other (Explain	i in Remarks)	
-	d Below Dark Surface	e (A11)	Depleted Oc				- 31		
	ark Surface (A12)		Iron-Mangan		· / ·			f hydrophytic veget	
	rairie Redox (A16) <b>(N</b>			. , .		U)		drology must be pr	-
	lucky Mineral (S1) <b>(L</b>	RR 0, 5)	Delta Ochric				uniess dist	urbed or problemat	IC.
	Bleyed Matrix (S4) Redox (S5)		Reduced Ver	· , ·			<b>A</b> )		
	Matrix (S6)		Piedmont Flo				A 149A, 153C, 153D)		
	rface (S7) <b>(LRR P, S</b>	т н)		Signi Luar			(149A, 155C, 155D)		
	Layer (if observed):	, 1, 0)							
	Layer (il observeu).								
Type:									
Depth (in	ches):						Hydric Soil Preser	nt? Yes	No
Remarks:									
No hydric soil	present								



Photo 1 Upland data point wnac004\_u facing east



Photo 2 Upland data point wnac004\_u facing north

Project/Site: Atlantic Coast Pipeline	City/County: Nash		Sampling Date: <u>3/11/2015</u>
Applicant/Owner: DOMINION		State: NC	Sampling Point: <u>wnac005f_w</u>
Investigator(s):	Section, Township	, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): Floodplain			Slope (%): 2
Subregion (LRR or MLRA): P Lat: 36.03	3017516	Long: <u>-77.8779865</u>	Datum: WGS 1984
Soil Map Unit Name: Wehadkee loam, frequently flooded		NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation, Soil, or Hydrology significan			Remarks.) " present? Yes <u> </u>
Are Vegetation, Soil, or Hydrology naturally	problematic? (	If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling poir	nt locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No	within a We		۷ No

#### Remarks:

Hardwood floodplain forest associated with Flat Rock Branch. Recent clear-cut activities have taken place in the southeastern section outside of the 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)
<ul> <li>Surface Water (A1)</li> <li>Aquatic Fauna (B13)</li> <li>High Water Table (A2)</li> <li>Marl Deposits (B15) (LRR U)</li> <li>Saturation (A3)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Water Marks (B1)</li> <li>Oxidized Rhizospheres along Living F</li> <li>Sediment Deposits (B2)</li> <li>Presence of Reduced Iron (C4)</li> <li>Drift Deposits (B3)</li> <li>Recent Iron Reduction in Tilled Soils F</li> <li>Algal Mat or Crust (B4)</li> <li>Thin Muck Surface (C7)</li> <li>Iron Deposits (B5)</li> <li>Other (Explain in Remarks)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Water-Stained Leaves (B9)</li> </ul>	Crayfish Burrows (C8)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes <u> Ves No Depth (inches): 2 </u>	
Saturation Present? Yes <u>/</u> No Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks: Wetland hydrology present	tions), if available: