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

Project/Site: <u>ACP</u>	City/County: Greensville Sampling Date: 4/9/15
Applicant/Owner: Dominion	State: VH Sampling Point: WAT O DD K
Investigator(s): ESI (Roper, Turnbull)	Section, Township, Range: NONE
Subregion (LRR or MLRA): LRRP Lat: 36.	Local relief (concave, convex, none):         Lon(ave, slope (%):         2-5           54481         Long:         77.30357         Datum:         W6584
Soil Map Unit Name: Pownoke, Joanne, 0-2'/ Slove	frequently flooded NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	reard Ves Ma //f no ovolain in Pomorke )
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology significantly	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled Area
Hydric Soil Present? Yes <u>Vo</u>	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	NU NU
Remarks:	
HYDROLOGY	· · · · · · · · · · · · · · · · · · ·
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	
Surface Water (A1)	
High Water Table (A2) Marl Deposits (B1	
	bheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	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 (inche Water Table Present?     Yes No Depth (inche	es): <u>10 17</u>
Saturation Present? Yes <u>No</u> Depth (inche	es): Ves No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Democher	
Remarks:	

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

# Sampling Point: Wgrp0014-W

Tree Stratum (Plot size: 30ft x30ft)		Dominant		Dominance Test worksheet:
		<u>Species?</u>		Number of Dominant Species
1. Taxodium distichum	20	$-\frac{1}{}$	<u>OBL</u>	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	20	<u> </u>	FAC	Total Number of Dominant
3. Carpinus caroliniana	10	<u> </u>	FAC	Species Across All Strata: (B)
4. Liquidambar styraciflua	<u>   10  </u>	<u>N</u>	<u>PAC</u>	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	60	= Total Cov	/er	OBL species x 1 =
50% of total cover: <u>30</u>				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: <u>30H x 30H )</u>	2070 01		· <u></u>	FAC species x 3 =
1. Alex rubrum	10	У	CAC.	FACU species x 4 =
			, ,	UPL species x 5 =
2				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				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	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 50%	20% o	f total cove	r: <u>2</u>	
Herb Stratum (Plot size: 30ff x 30ff )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Carpinus caroliniana	5	У	FAC	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
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		- <u></u>		
	_5	= Total Co	over	
50% of total cover: _ Z_3	20% 0	of total cove	er: \	
Woody Vine Stratum (Plot size: 304-x30ft)			,	
1. Smilax cottinditolia	10	Y	FAC.	
2.	-		سه مشیعه مشیعه می	
	-			
3				
4		<del>.</del>		,
5		-		Hydrophytic
	0	= Total C		Vegetation Present? Yes No
50% of total cover:	20%	of total cove	er:	. resentr res <u>v</u> No
Remarks: (If observed, list morphological adaptations be	ow).			

SOIL

# Sampling Point: Warpdolfw

Profile Description: (Describe to the depth needed to document the indicator 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
5-0	Z154 5/2	80	LOYR 5/6	20	_ <u>C</u> _	<u>M</u>		
12-20	2,5451	80	104R 5/6	20	C	M	CL	
			·*·				<u> </u>	
			<u>.</u>		······		<u></u>	······································
	· · ·			<u>.                                    </u>	<u></u>			
		·	· · · · · · · · · · · · · · · · · · ·					
								and the second
lype: C=C	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.		Pore Lining, M=Matrix.
	Indicators: (Applic	able to all L						Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be					(A9) (LRR O)
	pipedon (A2)		Thin Dark St					(A10) (LRR S)
	istic (A3)		Loamy Muck			0)		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		-2)			loodplain Solls (F19) (LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR P	· · · · · · · ·	Depleted Ma		e)			Bright Loamy Soils (F20)
	John John John John Jacky Mineral (A7) (L1							Material (TF2)
	resence (A8) (LRR L		Redox Depre					w Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Mari (F10) (I		~)			ain in Remarks)
	d Below Dark Surfac	e (A11)			(MLRA 1	51)		ant in remarks)
·	ark Surface (A12)		Iron-Mangar				T) <sup>3</sup> Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (I	MLRA 150A)					-	hydrology must be present,
	/lucky Mineral (S1) (		Delta Ochric					isturbed or problematic.
Sandy C	Gleyed Matrix (S4)		Reduced Ve			0A, 150B)		· · ·
	Redox (S5)		Piedmont Fl					
	l Matrix (S6)		Anomalous	Bright Loar	ny Soils (l	F20) (MLR/	A 149A, 153C, 153	D)
	irface (S7) (LRR P, S							
Restrictive	Layer (if observed)	:						
Туре:								/
Depth (in	ches):						Hydric Soil Pres	sent? Yes <u>No</u> No
Remarks:							I	
1								
1								

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Wetland data point wgrp001f\_w facing east.

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

Project/Site: <u>ACP</u>	City/County: Greensville Sampling Date: 4/9/15				
Applicant/Owner: Dominion	State: VA Sampling Point: War O ØM				
Investigator(s): ESI (Roper, Turnbull)	Section, Township, Range: MANR				
	Local relief (concave, convex, none): <u>LDNCAVE</u> Slope (%): <u>2-5</u>				
Subregion (LRR or MLRA): LRL P Lat: 36.	5 <u>4481</u> Long: <u>77.3037</u> Datum: <u>WUSE4</u>				
Soil Man Unit Name: P-PCA poke locupa (2-2) 45/2000	Requently flooded NWI classification: NA				
Are climatic / hydrologic conditions on the site typical for this time of ye					
Are Vegetation, Soil, or Hydrology significantly	· <u> </u>				
Are Vegetation, Soil, or Hydrology naturally pr					
	g sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area				
Hydric Soil Present? Yes No	within a Wetland? Yes No				
Wetland Hydrology Present? Yes No					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: check all that apply)					
Surface Water (A1)     Aquatic Fauna (B'       High Water Table (A2)     Marl Deposits (B1					
High Water Table (A2) Marl Deposits (B1					
	heres along Living Roots (C3) Dry-Season Water Table (C2)				
Sediment Deposits (B2)					
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)					
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)					
Water-Stained Leaves (B9)	☐ FAC-Neutral Test (D5) ☐ Sphagnum moss (D8) (LRR T, U)				
Field Observations:					
Surface Water Present? Yes No Depth (inche	s): <u>NA</u>				
Water Table Present? Yes No Depth (inche	s): <u>&gt;20</u>				
Saturation Present? Yes No Depth (inche (includes capillary fringe)	s): <u>&gt;Z()</u> Wetland Hydrology Present? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:				
Remarks:					

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

Sampling Point: Warp 001-4

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: <u>30ft X 30ft</u> )	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species
1. Acer rubrom	15	<u> </u>	<u>FAC</u>	That Are OBL, FACW, or FAC: (A)
2. Pinus taeda	10	<u> </u>	FAC.	Total Number of Deminant
3. Ilex opara	10	Ý	FAC	Total Number of Dominant Species Across All Strata: 7 (B)
4. Carpinus campliniana	10	Ý	FAC	
		•		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
8				
		= Total Cov		OBL species x 1 =
50% of total cover: 27.	5 20% of	total cover:	9	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)			<u> </u>	FAC species x 3 =
1. ALEY rubrum	15	N	FAC	FACU species x 4 =
- Caroland - Land			CAC	UPL species x 5 =
2. Carpinus caroliniana			THC	Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
				- Rapid Test for Hydrophytic Vegetation
7		•••••		2 - Dominance Test is >50%
8	·			3 - Prevalence Index is ≤3.0 <sup>1</sup>
	75	= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: _ 」 」	<u>5</u> 20% of	total cover	: 5	
Herb Stratum (Plot size: 30ft x 30ft )				
4 A				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				·
2				Definitions of Four Vegetation Strata:
3		<del> </del>		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	<u> </u>			of size, and woody plants less than 3.28 ft tall.
10				INtendu vine All usedu vines seeden them 0.00 ft is
11				Woody vine - All woody vines greater than 3.28 ft in height.
12.		-		noight.
			·	
	·	= Total Co		
50% of total cover:	20% o	f total cove	r:	
<u>Woody Vine Stratum</u> (Plot size: <u>30年本30</u> 年)				
1. Smilax rotunditolta	15	Ý	FAC	
3		·		
4				
5				Hydrophytic
	15	= Total Co	over	Vogatation
50% of total cover: 71	5 20%	-		Present? Yes <u>No</u>
			····	•
Remarks: (If observed, list morphological adaptations be	low).			
1				

#### SOIL

# Sampling Point: wgrp001\_u

Profile Description: (Describe to the de	pth needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
$\frac{\text{(inches)}}{0-5} \frac{\text{Color (moist)}}{2,594/3} \frac{\%}{100}$	<u>Color (moist) % Type<sup>4</sup> Loc<sup>2</sup></u>	Remarks
<u>5-18 104R 5/4 100</u>		
18-20 2.54 b/3 90	2.54 5/2 10 D M	<u>C, L</u>
·		
	· · · · · · · · · · · · · · · · · · ·	
	· · · · · · · · · · · · · · · · · · ·	······································
		2
Hydric Soil Indicators: (Applicable to al	I=Reduced Matrix, MS=Masked Sand Grains.	<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)	Thin Dark Surface (S9) (LRR S, T, U)	リ 山 1 cm Muck (A9) (LRR O) 山 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, L Muck Presence (A8) (LRR U)	<ul> <li>Depleted Dark Surface (F7)</li> <li>Redox Depressions (F8)</li> </ul>	Red Parent Material (TF2)
1 cm Muck (A9) (LRR D)	Mari (F10) (LRR U)	Ury Shallow Dark Surface (TF12)
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 150		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, 150B) Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA 14	
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):	, , , , , , , , , , , , , , , , , , ,	
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
-		
1		

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Upland data point wgrp001\_u facing west.