		Do	ecies? .		Sampling Point: Up - 37
(Diet -i Do	Absolute	e Re	l.Strat.	Indicator	Dominance Test worksheet:
ree Stratum (Plot size: 30 m)	% Cove		Cover	Status	Number of Dominant Species
Pinus elliottii	10	₹.	76.9%	FACW	That are OBL, FACW, or FAC: 3 (A)
Quercus nigra	2		15.4%	FAC	Total Number of Dominant
Quercus faicata	1	\bigsqcup_{i}	7.7%	FACU	Species Across All Strata: 3 (B)
	0		0.0%		
	0		0.0%	of manager be	Percent of dominant Species That Are OBL_FACW_or_FAC: 100.0% (A/B)
· p·			0.0%	a. v	That Are OBL, FACW, or FAC: 100.0% (A/B)
ALCO TANAN MATERIAL M	0		0.0%	· · · · · · · · · · · · · · · · · · ·	Prevalence Index worksheet:
	0		0.0%		Total % Cover of: Multiply by:
60% of Total Cover: 6.5 20% of Total Cover: 2.6	13	= To	tal Cove		OBL species 1 x 1 = 1
apling or Sapling/Shrub Stratum (Plot size: 30 m					FACW species 91 x 2 = 182
Pinus elliottii		V	83.3%	FACW	FAC species 4 x 3 = 12
Nyssa sylvatica			16.7%	FAC	FACU species 1 x 4 = 4
			0.0%	. 1730	
			0.0%		UPL species $0 \times 5 = 0$
	0	Η.			Column Totals: 97 (A) 199 (B)
			0.0%		Prevalence Index = B/A = 2.052
	0	Η-	0.0%		Hydrophytic Vegetation Indicators:
	. 0	Η.	0.0%		inyurophyuc vegetation midicators:
4	. 0	Ш_	0.0%		✓ 1 - Rapid Test for Hydrophytic Vegetation
0% of Total Cover: 6 20% of To tal Cover: 2.4	12	= Tol	tal Cover		✓ 2 - Dominance Test is > 50%
hrub Stratum (Plot size: 30 m					✓ 3 - Prevalence Index is ≤3.0 ¹
Ilex corfacea	70	~	100.0%	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	•		0.0%		
	_	\Box	0.0%		¹ Indicators of hydric soil and wetland hydrology must
	0	$\overline{\Box}$	0.0%		be present, unless disturbed or problematic.
		Η.			Definition of Vegetation Strata:
	0		0.0%	·	_
	0	Ч.	0.0%		Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
50% of Total Cover: 35 20% of Total Cover: 14	70	= Tot	ai Cover		(7.6 cm) or larger in diameter at breast height (DBH).
erb Stratum (Plot size: 30 m)					
, Lycopodiella alopecuroides	1		50,0%	OBL	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Arundinaria tecta	1		50.0%	FACW	than 3 in. (7.6 cm) DBH.
	0		0.0%		,
	0		0.0%		Sapling/Shrub - Woody plants, excluding vines, less
	0		0.0%	-	than 3 in. DBH and greater than 3.28 ft (1m) tall.
			0.0%		
	0	\Box	0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
	0		0.0%	r	approximatory o to zo it (1 to o inj in neight.
C. R. M			0.0%		Herb - All herbaceous (non-woody) plants, including
	0	=	0.0%		herbaceous vines, regardless of size, and woody
· · · · · · · · · · · · · · · · · · ·		H-			plants, except woody vines, less than approximately
	-	<u>,</u> ,	0.0%	-	3 ft (1 m) in height.
		Ц_	0.0%		Woody sing - All woody since recordings of height
0% of Total Cover: 1 20% of Total Cover: 0.4	2 =	= Tot	al Cover		Woody vine - All woody vines, regardless of height.
oody Vine Stratum (Plot size: 30 m				L	
	0		0.0%		
	0		0.0%		
	0		0.0%		
	-		0.0%		
	0	\Box	0.0%		Hydrophytic
		— dele	212.40		Vegetation Present? Yes No
50% of Total Cover: 0 20% of Total Cover: 0	0 =		al Cover		

Profile Descri	iption: (De		the depth i	needed to document the indicator o	r confirm the	absence of indicators.)	
Depth		Matrix		Redox Features	1		
(inches)		(moist)	100	Color (moist) % Type	e Loc²	Texture	Remarks
0-6	10YR	4/2	100			Loamy Sand	-
6-16	10YR	5/4	100		-	Loamy Sand	· •••
						K	
**		=Depletio	n. RM≃Redu	ced Matrix, CS=Covered or Coated Sand	Grains ² Loca	tion: PL=Pore Lining, M=	Matrix
Hydric Soil II						Indicators for Prob	olematic Hydric Solls ³ :
Histosol (A	•			Polyvalue Below Surface (S8) (L		1 cm Muck (A9)	(LRR O)
Histic Epip				☐ Thin Dark Surface (S9) (LRR S,	T, U)	2 cm Muck (A10) (LRR S)
Black Histi	c (A3)			Loamy Mucky Mineral (F1) (LRF	l O)	Reduced Vertic ((F18) (outside MLRA 150A,B)
Hydrogen	Sulfide (A4)			Loamy Gleyed Matrix (F2)			olain Soils (F19) (LRR P, S, T)
Stratified L	ayers (A5)			Depleted Matrix (F3)		Anomalous Brigh	nt Loamy Soils (F20) (MLRA 153B)
Organic Bo	dies (A6) (L	RR P, T, L	J)	Redox Dark Surface (F6)		Red Parent Mate	
_ 5 cm Muck	y Mineral (A	17) (LRR P	, T, U)	Depleted Dark Surface (F7)			rk Surface (TF12)
Muck Pres	ence (A8) (L	.RR U)		Redox Depressions (F8)		Other (Explain in	
1 cm Muck	(A9) (LRR I	P, T)		☐ Marl (F10) (LRR U)			r Kellidi KS/
Depleted E	Below Dark S	Surface (A:	l1)	Depleted Ochric (F11) (MLRA 1	51)		
Thick Dark	Surface (A1	12)		☐ Iron-Manganese Masses (F12) (•		
_	ie Redox (A	-	15CA)	Umbric Surface (F13) (LRR P, T			
_	k Mineral (S		•	Delta Ochric (F17) (MLRA 151)	, 0,		
_ `	ed Matrix (S		, 0,		04 4505)	³ Indicators	of hydrophytic vegetation and
Sandy Red	-	J-1)		Reduced Vertic (F18) (MLRA 15	•		hydrology must be present,
_				Piedmont Floodplain Soils (F19)			s disturbed or problematic.
Stripped M Dark Surfa	ce (S7) (LRF	R P, S, T, U	I)	Anomalous Bright Loamy Soils (F20) (MLRA 149	9 A, 153C, 153D)	
estrictive La	yer (IT ODS	ervea):					
Type:						Hydric Soil Present?	Yes O No 💿
Depth (inch	es):			The last of the last of		Tryario Son Tresent.	169 C NO C
temarks:							

Project/Site: NASA - Stennis; 1,100 Acre Wetland Delineation	City/County: Waveland - Hancock Sampling Date: 24-Oct-16
Applicant/Owner: NASA	State: MS Sampling Point: Up - 38
Investigator(s): Lars Larson, Randy Ellis	Section, Township, Range: S 32 T 7 s R 16 W
Landform (hillslope, terrace, etc.): Hillside	Local relief (concave, convex, none): undulating Slope: 1.0 % / 0.6°
A TOTAL OF THE PARTY OF THE PAR	30° 23' 52.876" N Long.: 89° 37' 1.236" W Datum: NAD83
Soil Map Unit Name: EsB, Escambia loam, 2 to 5 percent slopes	NWI dassification: N/A
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 . significant	tly disturbed? Are "Normal Circumstances" present? Yes No
	problematic? (If needed, explain any answers in Remarks.)
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No O	
Hydric Soil Present? Yes O No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes O No 🏵
Remarks: Terrace (slight slope) approximately 130 feet up from main drainage	e way near Wet 37.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Mari Deposits (B1)	(5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	heres along Living Roots (C3) Dry Season Water Table (C2)
Sediment Deposits (B2)	= ····, ····
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algai Mat or Crust (B4)	e (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in F	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 ⑤ Depth (Inches):	
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes ○ No •
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	

	Absolute	_ Specie Rel.Sti		Dominance Test worksheet:
Tree Stratum (Plot size: 30 m)	% Cover	Cove	er Status	Number of Dominant Species
1 Pinus elliottii	15	✓ 60.	.0% FACW	That are OBL, FACW, or FAC: 5 (A)
2. Nyssa sylvatica	3	12.	.0% FAC	
3. Quercus virginiana		✓ 20.	.0% FACU	Total Number of Dominant Species Across All Strata: 6 (B)
4. Quercus falcata		4.0	0% FACU	Species Actions All Stitutes
5 Quercus nigra		4.0	D% FAC	Percent of dominant Species
6.		0.0	0%	That Are OBL, FACW, or FAC: 83.3% (A/B)
7.			0%	Prevalence Index worksheet:
8.	0		0%	Total % Cover ofMultiply by:
50% of Total Cover: 12.5 20% of Total Cover: 5		= Total C		OBL species 3 x 1 = 3
		– Iotai C	SOVEI	
Sapling or Sapling/Shrub Stratum (Plot size: 30 m				FACW species 61 x 2 = 122
1. Pinus elliottii		_	.3% FACW	FAC species 19 x 3 = 57
2. Nyssa sylvatica			.8%FAC	FACU species 9 x 4 =36
3. Liquidambar styracifiua	5.	31.	.3% FAC	UPL species $0 \times 5 = 0$
4 Quercus virginiana		12.	.5% FACU	Column Totals: 92 (A) 218 (B)
5. Quercus falcata	_ 1		3% FACU	Prevalence Index = B/A = 2.370
6	0	0.0	0%	
7	0	0.0	0%	Hydrophytic Vegetation Indicators:
8	_ 0	0.0	0%	1 - Rapid Test for Hydrophytic Vegetation
50% of Total Cover: 8 20% of Total Cover: 3.2	16 :	= Total C	Cover	✓ 2 - Dominance Test is > 50%
Shrub Stratum (Plot size: 30 m				✓ 3 - Prevalence Index is ≤3.0 ¹
	30	✓ 68.	30/ EACW	
1. Ilex corlacea	30		2% FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ilex glabra			7% FACW	² Indicators of hydric soil and wetland hydrology must
3. Quercus nigra	3		B% FAC	be present, unless disturbed or problematic.
4. Magnolla virginiana			3% FACW	D. C.
5	0	=	0%	Definition of Vegetation Strata:
6	0	☐ _ 0.0	0%	Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
50% of Total Cover: 22 20% of Total Cover: 8.8	44 =	= Total C	Cover	(7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 m)				
1, Lycopodiella alopecuroides	3	100.	.0% OBL	Sapling - Woody plants, excluding woody vines,
2.		0.0		approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3.	0)%	dian o in. (7.0 oin) DDN.
4.	0		0%	Sapling/Shrub - Woody plants, excluding vines, less
5.	0	0.0		than 3 in. DBH and greater than 3.28 ft (1m) tall.
6				
V ₁ ,	- 0	0.0		Shrub - Woody plants, excluding woody vines,
7	- 0 -	0.0		approximately 3 to 20 ft (1 to 6 m) in height.
8	0	0.0		Herb - All herbaceous (non-woody) plants, including
9		0.0		herbaceous vines, regardless of size, and woody
10	_ 0_	0.0		plants, except woody vines, less than approximately
11	0	0.0)%	3 ft (1 m) in height.
12.	0	0.0)%	Manda de la companya della companya della companya della companya de la companya della companya
50% of Total Cover: 1.5 20% of Total Cover: 0.6	3 =	= Total C	over	Woody vine - All woody vines, regardless of height.
Woody Vine Stratum (Plot size: 30 m				
1 Vitts rotundifolia	3	75.0	0% FAC	
2. Smilax rotundifolia		25.0	- r 3	
3.	_	0.0		
	-	0.0		
4 5	0	□ 0.0 □ 0.0	¥ · · · · · · · · · · · · · · · · · · ·	 Hydrophytic
		,		Vegetation V (a) W (b)
50% of Total Cover: 2 20% of Total Cover: 0.8	4 =	: Total C	over	Present? Yes S NO C
Remarks: (If observed, list morphological adaptations below).				
*Indicator ruffix — National ctabus or reofaccional decision accioned because De	حجاساه الممام	ant dafinad	har EMC	

SOIL							Samplin	g Point: Up - 38	
Profile Descri	iption: (Des	cribe to	the depth	needed to document the	indicator or cor	nfirm the a	bsence of Indicators.)		
Depth Matrix			Redox	Features					
(inches)	Color (ı	moist)	. %	Color (moist)	% Type 1	Loc2	Texture	Remarks	
0-4	10YR	4/2	100	and the second second second					
4-16	10YR	5/6	100						
							4-		
									_
ç					a se			H - 11-	
v									-
400						(c)			
								,	
1Type: C=Conc	entration. D=	=Depletio	n. RM ≂R edi	iced Matrix, CS=Covered or	Coated Sand Grai	ns ² Locatio	on: PL=Pore Lining, M=Ma	atrix	
Hydric Soil Ir							Indicators for Proble		
Histosol (A				Polyvalue Below Su	urface (SR) (LRR 9	S. T. 11)		<u>-</u>	
Histic Epip	•			☐ Thin Dark Surface			☐ 1 cm Muck (A9) (LI☐ 2 cm Muck (A10) (I		
Black Histic				Loamy Mucky Mine		,		.8) (outside MLRA 150A,B)	
Hydrogen :	Sulfide (A4)			Loamy Gleyed Mat				in Soils (F19) (LRR P, S, T)	
Stratified L	ayers (A5)			Depleted Matrix (F.	` .			Loamy Soils (F20) (MLRA 153B)	
Organic Bo	odies (A6) (LF	RR P, T, L	J)	Redox Dark Surface			Red Parent Materia	, , , , , ,	
5 cm Muck	y Mineral (A	7) (LRR P	, T, U)	Depleted Dark Surl			Very Shallow Dark	• •	
Muck Prese	ence (A8) (LF	RR U)		Redox Depressions			Other (Explain in R		
1 cm Muck	(A9) (LRR P	, T)		Marl (F10) (LRR U)	•		Other (Explain in it	emarka)	
Depleted B	Below Dark St	urface (At	l1)	Depleted Ochric (F	11) (MLRA 151)				
Thick Dark	Surface (A12	2)		☐ Iron-Manganese M	asses (F12) (LRR	O, P, T)			
Coast Prair	ie Redox (A1	.6) (MLRA	150A)	Umbric Surface (F1	13) (LRR P, T, U)				
Sandy Muc	k Mineral (S1	E) (LRR O	, S)	Delta Ochric (F17)	(MLRA 151)		.		
Sandy Gley	ed Matrix (S	4)		Reduced Vertic (F1	.8) (MLRA 150A, 1	L50B)		f hydrophytic vegetation and drology must be present,	
Sandy Red	ox (S5)			Piedmont Floodpla	in Soils (F19) (MLI	RA 149A)		disturbed or problematic.	
Stripped M	atrix (S6)			Anomalous Bright L	Loamy Soils (F20)	(MLRA 149A	A, 153C, 153D)		
Dark Surface	ce (S7) (LRR	P, S, T, U	J)						
Restrictive La	ver (if obse	med).							
Type:	yei (ii obse	i vooj.							
Depth (inche	ac).						Hydric Soil Present?	Yes 🔾 No 💿	
									_
Remarks:									

Project/Site: NASA - Stennis; 1,100 Acre Wetland Delineatiion	City/County: Waveland - Hancock Sampling Da	ate: 24-Oct-16
Applicant/Owner: NASA	State: MS Sampling Point: Up - 39	9
Investigator(s): Lars Larson, Randy Ellis	Section, Township, Range: S 32 T 7 s	R 16 W
Landform (hillslope, terrace, etc.): Hillside	.ocal relief (concave, convex, none): undulating Slope:	2.0 % / 1.1°
Subregion (LRR or MLRA): LRR T Lat.:	30° 23' 48.113" N Long.: 89° 37' 7.209" W	Datum: NAD83
Soil Map Unit Name: PoB, Poarch fine sandy loam, 2 to 5% slopes	NWI classification: N/A	1
Are climatic/hydrologic conditions on the site typical for this time of yea		_
Are Vegetation . , Soil . , or Hydrology . significantl	disturbed? Are "Normal Circumstances" present?	res ● No ○
Are Vegetation , Soil , or Hydrology naturally p	oblematic? (If needed, explain any answers in Remark	(s.)
SUMMARY OF FINDINGS - Attach site map showing sar	ppling point locations, transects, important feat	ures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area	
Hydric Soil Present? Yes ○ No ⑥	Van O Na 📵	
Wetland Hydrology Present? Yes ○ No ●	within a Wetland?	
Remarks:		- -
Plot is 100 feet east - NE of plot Wet - 19 on slight ridge above wetland	nd drainage way	
FIGURE 100 real case. The or place real as on origin rings above from	no dramage way.	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum o	of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1) Aquatic Fauna (B1:	_	Surface (B8)
☐ High Water Table (A2) ☐ Marl Deposits (B15	<u> </u>	
Saturation (A3) Hydrogen Sulfide C	<u> </u>	
Water Marks (B1) Oxidized Rhizosphe	res along Living Roots (C3) Dry Season Water Table (C2)	ı
Sediment Deposits (B2)	d Iron (C4) Crayfish Burrows (C8)	
☐ Drift Deposits (B3) ☐ Recent Iron Reduc	on in Tilled Soils (C6) Saturation Visible on Aerial In	nagery (C9)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface	(C7) Geomorphic Position (D2)	
☐ Iron Deposits (B5) ☐ Other (Explain in R	marks) Shallow Aquitard (D3)	
☐ Inundation Visible on Aerial Imagery (B7)	✓ FAC-Neutral Test (D5)	
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T	, υ)
Field Observations:		
Surface Water Present? Yes O No O Depth (inches):	TW.	
Water Table Present? Yes No Depth (inches):		<u> </u>
Saturation Procent?	Wetland Hydrology Present? Yes	No 💿
(moreov supmer) imiguy		
Describe Recorded Data (stream gauge, monitoring well, aerial photo	, previous inspections), if available:	
Remarks:		
		i

Tree Stratum (Plot size: 30 m	Absolute % Cover			icator atus	Dominance Test worksheet:	
Pinus elliottii					Number of Dominant Species	
r detroide in the revolutioner	5	_			That are OBL, FACW, or FAC: 11 (A)	
Pinus taeda	5	31.			Total Number of Dominant	
Nyssa sylvatica		☐ 18.			Species Across All Strata:11(B)	
Quercus nigra	2	12.	5% FAC	-		
Quercus falcata	1_	6.3	% FAC	CU	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
:P. #	0	0.0)%		That are OBL, FACW, OF FAC.	
	0	0.0)%		Prevalence Index worksheet:	
	0	0.0)%		Total % Cover of: Multiply by:	
50% of Total Cover: 8 20% of Total Cover: 3.2	16 :	= Total C	over		OBL species $0 \times 1 = 0$	
apling or Sapling/Shrub Stratum (Plot size: 30 m	1				FACW species 65 x 2 = 130_	
Pinus taeda		▼ 50,	D% FAC	.	FAC species 43 x 3 = 129	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5			-		
		30.			FACU species $1 \times 4 = 4$	
Magnolla virginiana		20.		W	UPL species 0 x 5 = 0	
		U_0.0			Column Totals: 109 (A) 263 (B)	
-		0.0	1%		Prevalence Index = B/A = 2.413	
	. 0	0.0	1%			
	Ó	0.0	%		Hydrophytic Vegetation Indicators:	
and the second s	0	0.0	9%		1 - Rapid Test for Hydrophytic Vegetation	
50% of Total Cover: 5 20% of Tot al Cover: 2		= Total C	over			
					✓ 2 - Dominance Test is > 50%	
hrub Stratum (Plot size: 30 m					3 - Prevalence Index is ≤3.0 ¹	
Ilex coriacea		4.4	% FAC	.w	Problematic Hydrophytic Vegetation 1 (Explain)	
Ilex glabra	40	58.	B% FAC	W_		
Ilex vomitoria	20	29.	4% FAC	:	Indicators of hydric soil and wetland hydrology must	
Vaccinium elliottii	5	7.4	% FAC	w	be present, unless disturbed or problematic.	
	^	0.0	%		Definition of Vegetation Strata:	
	0	0.0		-	Tree - Woody plants, excluding woody vines,	
50% of Total Cover: 34 20% of Total Cover: 13.6	68 =	8 = Total Cover		*2 2*	approximately 20 ft (6 m) or more in height and 3 in.	
		- Ioui c	OTC:		(7.6 cm) or larger in diameter at breast height (DBH).	
lerb Stratum (Plot size: 30 m)						
1. Ilex glabra	5	✓ 50.0	% FAC	w	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less	
2 Ilex corlacea		✓ 50.0	% FAC	w	than 3 in. (7.6 cm) DBH.	
	0	0,0	%		,	
·	0	0.0		-	Sapling/Shrub - Woody plants, excluding vines, less	
······································	0	0.0		_	than 3 in. DBH and greater than 3.28 ft (1m) tall.	
	0	0.0		- way 2>	Shrub - Woody plants, excluding woody vines,	
7		∐. 0.0		-	approximately 3 to 20 ft (1 to 6 m) in height.	
3	_ 0	0.0		, Tues	Horb All horhopopy (see week) plants including	
)	0		%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody	
),	0	0,0	%		plants, except woody vines, less than approximately	
:	0	0.0	%		3 ft (1 m) in height.	
	0	0.0	%			
60% of Total Cover: 5 20% of Total Cover: 2		= Total C			Woody vine - All woody vines, regardless of height.	
	10	. Juli C			-	
Voody Vine Stratum (Plot size: 30 m				ŀ		
Smilax rotundifolia	3	60.0	% FAC			
Vitis rotundifolia	2	40.0	% _ FAC			
	Q	0.0	%			
	-	0.0	%	200		
	0	0.0			Hydrophytic	
		: Total C			Vegetation Present? Yes No ○	
50% of Total Cover: 2.5 20% of Total Cover: 1	5 =	Total C			FIGNELLY 100 - NV -	

SOIL					Sampling Point: Up - 39
Profile Desc	ription: (Des	cribe to	the depth	needed to document the indicator or confirm the	e absence of indicators.)
Depth	., , ,	Matrix		Redox Features	
(inches)	Color (moist)	%	Color (moist) , , % , Type 1 Loc2	Texture Remarks
0-5	10YR	3/2	100		
5-16	10YR	5/6	100		
			1 14		
					·
-		_			
			-		
					· · · · · · · · · · · · · · · · · · ·
¹Tyne: C=Con	ncentration. De	=Depletic	n. RM=Redi	ced Matrix, CS=Covered or Coated Sand Grains ² Loc	ration: PI =Pore Lining, M=Matrix
Hydric Soil		Боргоск		Section of Country Country (1997)	Indicators for Problematic Hydric Soils ³ :
Histosol ((A1)			Polyvalue Below Surface (S8) (LRR S, T, U)	
	pedon (A2)			☐ Thin Dark Surface (S9) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
Black Hist				Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S)
	1 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) (LF	RR P, T, I	U)	Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	cky Mineral (A		•	Depleted Dark Surface (F7)	Red Parent Material (TF2)
	sence (A8) (LF		, , ,	Redox Depressions (F8)	
1 cm Muc	ck (A9) (LRR P	, T)		Mari (F10) (LRR U)	Uther (Explain in Remarks)
	Below Dark Si		11)	Depleted Ochric (F11) (MLRA 151)	
☐ Thick Dar	k Surface (A1	2)		Iron-Manganese Masses (F12) (LRR O, P, T)	
Coast Pra	irie Redox (A1	.6) (MLR/	4 150A)	Umbric Surface (F13) (LRR P, T, U)	
Sandy Mu	ıck Mineral (S1	L) (LRR C), S)	Deita Ochric (F17) (MLRA 151)	
	eyed Matrix (S			Reduced Vertic (F18) (MLRA 150A, 150B)	³ Indicators of hydrophytic vegetation and
Sandy Re	dox (S5)			Piedmont Floodplain Soils (F19) (MLRA 149A)	wetland hydrology must be present, unless disturbed or problematic.
Stripped I	Matrix (S6)			Anomalous Bright Loamy Soils (F20) (MLRA 14	-
☐ Dark Surf	ace (S7) (LRR	P, S, T,	U)		,,
Restrictive L	aver (if obse	rvad):			
Type:	ayer (III obse	iveu).			
Depth (incl	hes).	_ ~	-, -, -, -		Hydric Soil Present? Yes No 💿
	1103).		4	,	
Remarks:					
No hydric ind	icators obse	rvea.			
				*:	

Project/Site: NASA - Stennis; 1,100 Acre Wetland Delineation	City/County: Waveland - Hancock Sampling Date: 25-Oct-16
Applicant/Owner: NASA	State: MS Sampling Point: Up - 40
Investigator(s): Lars Larson, Randy Ellis	Section, Township, Range: S 32 T 7s R 16 W
	Local relief (concave, convex, none): none Slope: 2.0 % / 1.1°
	30° 23′ 42.761" N Long.: 89° 36′ 50.066" W Datum: NAD83
Soil Map Unit Name: HIB, Harleston fine sandy loam, 2 to 5 percent slo	
Are climatic/hydrologic conditions on the site typical for this time of year	
Are Vegetation . , Soil . , or Hydrology . significantl	ly disturbed? Are "Normal Circumstances" present? Yes No No
Are Vegetation, Soil, or Hydrology naturally p.	roblematic? (If needed, explain any answers in Remarks.)
	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No O	
Hydric Soil Present? Yes ○ No ●	Is the Sampled Area
1 1 2 - 1 1 1 1 - 1 1 1 1 1 1 1 1 1 1 1	within a Wetland? Yes ○ No
Wetland Hydrology Present? Yes ○ No ●	
Remarks: Side slope - step up edge approximtely 25-30 feet of wet drainage a	rea - ephemeral drain.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15)	
High Water Table (A2) Saturation (A3) Hydrogen Sulfide C	
Sediment Deposits (B2) Presence of Reduct	
Iron Deposits (B5) Uther (Explain in R	<u> </u>
Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
	☐ Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth (inches):	
Carrace visite Flacing	
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes ○ No ⊙
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	wedand hydrology Present? Tes C No C
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
Remarks:	

			ominant pecies? .		Sampling Point: Up - 40
	Absolute	e R	el.Strat.	Indicator	Dominance Test worksheet:
ree Stratum (Plot size: 30 m_)	% Cove		Cover	Status	Number of Dominant Species
Quercus nigra	25	V	67.6%	FAC	That are OBL, FACW, or FAC: 8 (A)
Acer rubrum	2	Ш	5,4%	FAC	Total Number of Dominant
Nyssa sylvatica	10	✓	27.0%	FAC	Species Across All Strata: 8 (B)
	0		0.0%		
P Taka 1	0		0.0%		Percent of dominant Species That Are OBL FACW or FAC: 100.0% (A/B)
	0		0.0%		That Are OBL, FACW, or FAC: 100.0% (A/B)
W	0		0.0%		Prevalence Index worksheet:
	0		0.0%		Total % Cover of: Multiply by:
60% of Total Cover: 18.5 20% of Total Cover: 7.4	37	= T	otal Cove	•	OBL species 0 x 1 = 0
apling or Sapling/Shrub Stratum (Plot size: 30 m)				FACW species 8 x 2 = 16
Quercus nigra	20	V	54.1%	FAC	FAC species 95 x 3 = 285
Uquidambar styraciflua	40	V	27.0%	FAC	FACU species $0 \times 4 = 0$
Acer rubrum	5		13.5%	FAC	UPL species $0 \times 5 = 0$
Nyssa sylvatica	2	\Box	5.4%	FAC	
	0		0.0%		Column Totals: 103 (A) 301 (B)
	_		0,0%		Prevalence Index = B/A = 2.922
		H	0,0%		Hydrophytic Vegetation Indicators:
				-	
	_	Ш	0.0%	-	1 - Rapid Test for Hydrophytic Vegetation
0% of Total Cover: 18.5 20% of Total Cover: 7.4	37	= To	otal Cove		✓ 2 - Dominance Test is > 50%
hrub Stratum (Plot size: 30 m					✓ 3 - Prevalence Index is ≤3.0 ¹
Quercus nigra	5	V	25.0%	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
Ilex vomitoria	10	V	50.0%	FAC	
Ilex opaca	2		10.0%	FAC	¹ Indicators of hydric soil and wetland hydrology mus
Vaccinium elliottil	3	$\overline{\Box}$	15,0%	FACW	be present, unless disturbed or problematic.
			0.0%		Definition of Vegetation Strata:
	0	H			Tree - Woody plants, excluding woody vines,
00 (T.1.10)		_	0.0%	-	approximately 20 ft (6 m) or more in height and 3 in.
60% of Total Cover: 10 20% of Total Cover: 4	20	= 10	otal Cover		(7.6 cm) or larger in diameter at breast height (DBH).
erb Stratum (Plot size: 30 m					
_ Arundinaria tecta	. 5	V	71.4%	FACW	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Rubus argutus	_	V	28.6%	FAC	than 3 in. (7.6 cm) DBH.
,	0		0.0%		,
	0		0.0%		Sapling/Shrub - Woody plants, excluding vines, less
- · · · · · · · · · · · · · · · · · · ·	0		0.0%	A STATE OF THE STA	than 3 in. DBH and greater than 3.28 ft (1m) tall.
		$\overline{\Box}$	0.0%	1.4	
		H	0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
		\Box		W . IN 12 1880 1 W	approximately 3 to 20 it (1 to 0 iii) iii height.
		H.	0.0%		Herb - All herbaceous (non-woody) plants, including
To the same of the		믐	0.0%		herbaceous vines, regardless of size, and woody
		님	0.0%		plants, except woody vines, less than approximately
	<u>0</u>	\sqsubseteq	0.0%	• 1	3 ft (1 m) in height.
	0_	Ц,	0.0%		
0% of Total Cover: 3.5 20% of Total Cover: 1.4	7=	= To	tal Cover		Woody vine - All woody vines, regardless of height.
/oody Vine Stratum (Plot size: 30 m				Ĺ	
Vitis rotundifolia	2		100.0%	FAC	
			0.0%		
4	0	\Box	0.0%		
	0	\Box	0.0%		
	0	\Box		me v	Hydrophytic
			0.0%		Vegetation
io% of Total Cover: 1 20% of Total Cover: 0.4		100	tal Cover		Present? Yes No

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 ¹ Loc ²	Texture Remarks
0-6 10YR 4/2 100		Loamy Sand
6-16 10YR 5/3 100		Loamy Sand
	,	, , , , , , , , , , , , , , , , , , , ,
		**
		The state of the s
	· w.	, Ar
	ced Matrix, CS=Covered or Coated Sand Grains 2Loca	ation: PL=Pore Lining. M=Matrix
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
L 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) (MLRA 153B)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (TF12)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)	
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12)	☐ Iron-Manganese Masses (F12) (LRR O, P, T)	
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	
Sandy Muck Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	³ Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	wetland hydrology must be present.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149A)	unless disturbed or problematic.
Stripped Matrix (S6)	Anomalous Bright Loamy Solls (F20) (MLRA 14	9A, 153C, 153D)
Dark Surface (S7) (LRR P. S, T, U)		
Restrictive Layer (if observed):		
Type:		
Depth (inches):		Hydric Soil Present? Yes O No 🖲
Remarks:		

Soil Map Unit Name: EsB, Escambia loam, 2 to 5 percent slopes Are climatic/hydrologic conditions on the site typical for this time of years. Are Vegetation , Soil , or Hydrology , significant.	tly disturbed? Are "Normal Circumstances" present? Yes No
· - · - · · · · · · · · · · · · · · · ·	problematic? (If needed, explain any answers in Remarks.) ampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? Yes No No No
Sediment Deposits (B2)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Odor (C1) Moss Trim Lines (B16) heres along Living Roots (C3) Dry Season Water Table (C2) Ided Iron (C4) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) e (C7) Geomorphic Position (D2)
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): Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes ○ No •

Tree Stratum (Plot size: 30 m)	Absolute % Cover		at. Indicator	Dominance Test worksheet:
		_	2. 8 7.2	Number of Dominant Species
1 Pinus elliottii	10	41.7		That are OBL, FACW, or FAC: 8 (A)
2 Magnolia virginiana		29.2		Total Number of Dominant
3. Nyssa sylvatica		20.8	388	Species Across All Strata: 8 (B)
4. Acer rubrum	2	8.3	. ,	
5	0	0.0	%	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6	_ 0 _	0.0	%	That Are Obl., TACW, of TAC.
7.	. 0	0.0	%	Prevalence Index worksheet:
8	0	0.0	%	Total % Cover of: Multiply by:
50% of Total Cover: 12 20% of Total Cover: 4.8	24 :	= Total Co	over	OBL species 1 x 1 = 1
Sapling or Sapling/Shrub Stratum (Plot size: 30 m	-			FACW species 74 x 2 = _ 148
		✓ 45.5	O/ FACIAL	
1 Pinus elliottii				
2. Magnolia virginiana		22.7		FACU species $0 \times 4 = 0$
3. Liquidambar styraciflua	3	13.6		UPL species $0 \times 5 = 0$
4. Acer rubrum	2	9.1	% FAC	Column Totals: 103 (A) 233 (B)
5. Nyssa sylvatica	2	9.1	% FAC	Prevalence Index = B/A = 2.262
6	_ 0	0.0	%	
7	0	0.0	%	Hydrophytic Vegetation Indicators:
8.	0	0.0	%	d Ba-id Task for Undership Vorestation
50% of Total Cover: 11 20% of Total Cover: 4.4	22 =	= Total Co		1 - Rapid Test for Hydrophytic Vegetation
20% of Total Cover. 11 20% of Total Cover. 4.4		- rorai ci	JVCI	✓ 2 - Dominance Test is > 50%
Shrub Stratum (Plot size: 30 m)		_		✓ 3 - Prevalence Index is ≤3.0 ¹
1 Ilex glabra		54.1	% FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ilex corlacea	. 5 _.	13.5	% FACW	
3. Ilex vomitoria	1.0	✓ 27.0	% FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Persea palustris	2	5.49	% FACW	be present, unless disturbed or problematic.
5.		0.0	%	Definition of Vegetation Strata:
6.	0	0.0		Tree - Woody plants, excluding woody vines,
		= Total Co		approximately 20 ft (6 m) or more in height and 3 in.
	_ 3/ -	= IOCAI CC	yer	(7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 m				
1 Arundinaria tecta	15	93.8	% FACW	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
2. Lycopodiella alopecuroides	1	6,39	% OBL	than 3 in. (7.6 cm) DBH.
3.	0	0.0	%	
	0	0.00		Sapling/Shrub - Woody plants, excluding vines, less
5.	0	0.0	* · · · · · · · · · · · · · · · · · · ·	than 3 in. DBH and greater than 3.28 ft (1m) tall.
6			THE REST OF SECTION AND ADDRESS.	
0	0	0.00		Shrub - Woody plants, excluding woody vines,
7	 0	0.09		approximately 3 to 20 ft (1 to 6 m) in height.
8	0		1 I PM	Herb - All herbaceous (non-woody) plants, including
9	C	0.09	,	herbaceous vines, regardless of size, and woody
10	0	0.09	%	plants, except woody vines, less than approximately
11,	0	0.09	%	3 ft (1 m) in height.
12.	0	0.09	%	
50% of Total Cover: 8 20% of Total Cover: 3.2	16 =	= Total Co	ver	Woody vine - All woody vines, regardless of height.
Woody Vine Stratum (Plot size: 30 m		<u> </u>		
1. Smilax rotundifolia	2	<u></u>		
2. Vitis rotundifolia	2	50.0	% FAC	
3.	0	0.09	/a	
4	0	0.09	%	
5	0	0.09	Vo	Hydrophytic
50% of Total Cover: 2 20% of Total Cover: 0.8		Total Co	ver	Vegetation Present? Yes No
20/8 OF TOTAL COVER. 2 20/8 OF TOTAL COVER. U.S		- ISTAI CU		
Remarks: (If observed, list morphological adaptations below). *Indicator suffix = National status or professional decision assigned because Re				

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SOIL					Sampling Point: Up - 41
Profile Desci	ription: (De	scribe to	the depth	needed to document the indicator or confi	îrm the absence of indicators.)
Depth		Matrix		Redox Features	
(inches)	Color (moist)	0/0	Color (moist) % Type 1	Loc ² Texture Remarks
0-5	10YR	3/2	100		
5-15	10YR	5/4	100		
				W	
	_		_		
1 1 4 4 4					
	-	· · · · · ·	N 100-1		
Super C. Com		. Danietta	- DM D-4	iced Matrix, CS=Covered or Coated Sand Grains	21 ambient Dit Dana Lining M. Mahris
Hydric Soil I		=Debieno	n. KM=Reut	Red Matrix, CS=Covered or Coated Saild Grains	
Histosol (Polyvalue Below Surface (S8) (LRR S, T	Indicators for Problematic Hydric Soils ³ :
_ `	pedon (A2)			☐ Thin Dark Surface (S9) (LRR S, T, U)	
Black Hist				Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S)
	Sulfide (A4)				Reduced Vertic (F18) (outside MLRA 150A,B)
	Layers (A5)			Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	odies (A6) (L	DD D T I	IX.	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
_	ky Mineral (A		-	Redox Dark Surface (F6)	Red Parent Material (TF2)
	sence (A8) (L		, 1, 0)	Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (TF12)
				Redox Depressions (F8)	Other (Explain in Remarks)
_	k (A9) (LRR F Below Dark S		111	☐ Marl (F10) (LRR U)	D)
_	k Surface (A1	-	11)	Depleted Ochric (F11) (MLRA 151)	
_	•	-	\ (E0A\	☐ Iron-Manganese Masses (F12) (LRR O,	, P, !)
_	rie Redox (A.			Umbric Surface (F13) (LRR P, T, U)	
_	ck Mineral (\$, 5)	☐ Delta Ochric (F17) (MLRA 151)	3Indicators of hydrophytic vegetation and
_	yed Matrix (S	14)		Reduced Vertic (F18) (MLRA 150A, 150A	wetland hydrology must be present,
Sandy Red				☐ Piedmont Floodplain Soils (F19) (MLRA	·
_	Matrix (S6)	DCTI	0	Anomalous Bright Loamy Soils (F20) (M	4LRA 149A, 153C, 153D)
	ace (S7) (LRR	(17, 5, 1, 0	J)		
estrictive La	yer (if obse	erved):			
Type:					Hydric Soil Present? Yes ○ No •
Depth (inch	nes):,				Hydric Soil Present? Yes No
emarks:					
hydric indi	cators				

ar. As	City/County: Waveland - Hancock Sampling Date: 25-Oct-16
Applicant/Owner: NASA	State: MS Sampling Point: Up - 42
Investigator(s): Lars Larson, Randy Ellis	Section, Township, Range: S 32 T 7 S R 16 W
Landform (hillslope, terrace, etc.): Hillside	Local relief (concave, convex, none): Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR T Lat:	30° 23' 44.711" N Long.: 89° 37' 11.723" W Datum: NAD83
Soil Map Unit Name: EsA, Escambia loam, 0 to 2 percent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of yea	
Are Vegetation \square , Soil \square , or Hydrology \square significant	ly disturbed? Are "Normal Circumstances" present? Yes 🍥 No 🔾
Are Vegetation . , Soil . , or Hydrology . naturally p	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing same	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	To the Complet Associate
Hydric Soil Present? Yes O No	Is the Sampled Area
Wetland Hydrology Present? Yes ○ No ●	within a Wedand?
Remarks: NO Wet 42	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13	
High Water Table (A2) Marl Deposits (B15	
Saturation (A3) Hydrogen Sulfide C	
	eres along Living Roots (C3) Dry Season Water Table (C2)
☐ Sediment Deposits (B2) ☐ Presence of Reduct ☐ Drift Deposits (B3) ☐ Recent Iron Reduct	
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface	
☐ Iron Deposits (B5) ☐ Other (Explain in R	
☐ Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	☐ Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	_
	Wetland Hydrology Present? Yes ○ No ④
(includes capillary fringe) Yes No Depth (inches):	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	sy previous inspections y in available.

/Plot size: 20		e Rel.Strat.		Dominance Test worksheet:
Tree Stratum (Plot size: _30 m) Pinus elliottii	% Cove		Status	Number of Dominant Species
	15	✓ 40.5% ✓ 27.0%	FACW	That are OBL, FACW, or FAC: 7 (A)
Nyssa sylvatica Quercus nigra	10		FAC	Total Number of Dominant
Quercus nigra	5	13.5%	FAC	Species Across All Strata: 7 (B)
Magnolia grandiflora		5.4%	FAC	Percent of dominant Species
Pinus taeda	5	13.5%	FAC	That Are OBL, FACW, or FAC: 100.0% (A/B)
ш		0.0%		
10 to	O	0.0%		Prevalence Index worksheet:
	. 0	0.0%_		Total % Cover of: Multiply by:
0% of Total Cover: 18.5 20% of Total Cover: 7.4	37	= Total Cove	•	OBL species 0 x 1 = 0
apling or Sapling/Shrub Stratum (Plot size: 30 m	}}			FACW species 92 x 2 = 184
Pinus elliottii	10	✓ 41.7%	FACW	FAC species 42 x 3 = 126
Nyssa sylvatica	7_	✓ 29.2%	FAC	FACU species $0 \times 4 = 0$
Magnolia virginiana	5	✓ 20.8%	FACW	UPL species 0 x 5 = 0
Acer rubrum		8.3%	FAC	Column Totals: 134 (A) 310 (B)
	0	0.0%		19.00
	0	0.0%		Prevalence Index = B/A = 2.313
	0	0.0%		Hydrophytic Vegetation Indicators:
	0	0.0%		
60% of Total Cover: 12 20% of Total Cover: 4.8		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
C a	24	- TOLAI COVE		2 - Dominance Test is > 50%
hrub Stratum (Plot size: 30 m.)				3 - Prevalence Index is ≤3.0 ¹
1(ex coriacea	50	83.3%	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
Ilex vomitoria	10	16.7%	FAC	
	0	0.0%		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	. 0	0.0%		be present, unless disturbed or problematic.
	0	0.0%		Definition of Vegetation Strata:
	0	0.0%		Tree - Woody plants, excluding woody vines,
0% of Total Cover: 30 20% of Total Cover: 12 erb Stratum (Plot size: 30 m) . Ilex corlacea . Arundinaria tecta	10	■ Total Cover 83.3% 16.7%	FACW FACW	(7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
	0	0.0%		
	0	0.0%		Sapling/Shrub - Woody plants, excluding vines, less
	0	0.0%		than 3 in. DBH and greater than 3.28 ft (1m) tall.
	0	0.0%		Oberto 18/2 advantante avaluation considerate
Marine and the second s	0	0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
The state of the s		0.0%		approximately a to 20 K (* to 0 K) in the grad
V		0.0%	De e Sel V	Herb - All herbaceous (non-woody) plants, including
· ·		0.0%		herbaceous vines, regardless of size, and woody
•		0.0%		plants, except woody vines, less than approximately 3 ft (1 m) in height.
				o it (1 m) it neight.
	0_	0.0%		Woody vine - All woody vines, regardless of height.
0% of Total Cover: 6 20% of Total Cover: 2.4	12	= Total Cover	ĺ	Troomy file All troomy files, regardless of height,
oody Vine Stratum (Plot size: 30 m				
Vitis rotundifolia	1	100.0%	FAC	
8,70 / W		0.0%		
		0.0%		
		0.0%		
		0.0%		Hydrophytic
	_			Vegetation
0% of Total Cover: 0.5 20% of Total Cover: 0.2		= Total Cover		Present? Yes No

_		_	_
•	n	т	

SOIL					Sampling Point: Up - 42
Profile Desc	ription: (De	scribe to	the depth	needed to document the Indicator or confirm the	e absence of indicators.)
Depth		Matrix		Redox Features	
(Inches)	Color (moist)	0/6	Color (moist) % Type 1 Loc2	Texture Remarks
0-5	10YR	3/2	100		
5-15	10YR	5/3	100		
	*	•			
		_		. *	
	-		-		TOTAL TOTAL OF EXPENSES AS 1 SANT 1,2
				21.5	
					- **
-	-	-	. •		
1 Timos C—Con	accetentina D	- Donlatio	a DM_Bad	and Matrix CC Covered by Control Sand Craims 21 on	who we have being his Mahin.
Hydric Soil		=Depletio	n. RM=Redu	ced Matrix, CS=Covered or Coated Sand Grains ² Loc	-
Histosol (Deliver by Deliver Guide or (CO) (LDD G. T. 10)	Indicators for Problematic Hydric Soils ³ :
	(A1) ipedoπ (A2)			Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
				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 Gieyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
_	Layers (A5)			Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Bodies (A6) (L		•	Redox Dark Surface (F6)	Red Parent Material (TF2)
$\overline{}$	cky Mineral (A		, T, U)	Depleted Dark Surface (F7)	Very Shallow Dark Surface (TF12)
_	sence (A8) (Li			Redox Depressions (F8)	Other (Explain in Remarks)
	ck (A9) (LRR F			Marl (F10) (LRR U)	
	Below Dark S	•	11)	Depleted Ochric (F11) (MLRA 151)	
	rk Surface (A1	•		☐ Iron-Manganese Masses (F12) (LRR O, P, T)	
	airie Redox (A			Umbric Surface (F13) (LRR P, T, U)	
_	uck Mineral (S		, S)	Delta Ochric (F17) (MLRA 151)	³ Indicators of hydrophytic vegetation and
	eyed Matrix (S	4)		Reduced Vertic (F18) (MLRA 150A, 150B)	wetland hydrology must be present,
Sandy Re	edox (S5)			Piedmont Floodplain Soils (F19) (MLRA 149A)	
	Matrix (S6)			Anomalous Bright Loamy Soils (F20) (MLRA 14)	49A, 153C, 153D)
Dark Surf	face (S7) (LRR	P, S, T, L	J)		
Restrictive L	ayer (if obse	:rved):			
Type:					
	:hes):				Hydric Soil Present? Yes O No 💿
Remarks:	- ,				
Soil chroma a	annoare to b	a hordari	lino 2 - 2		
SOII CHIOINA A	appears to b	e Doruei:	me 2 - 3.		

Project/Site: NASA - Stennis; 1.100 Acre Wetland Delineatiion	City/County: Waveland - Hancock Sampling Date: 25-Oct-16
Applicant/Owner: NASA	State: MS Sampling Point: Up - 43
Investigator(s): Lars Larson, Randy Ellis	Section, Township, Range: S 32 T 7s R 16 W
Landform (hillslope, terrace, etc.): Hillside Subregion (LRR or MLRA): LRR T Lat.:	Local relief (concave, convex, none): Slope: 1.0 % / 0.6° 30° 23' 51.321" N Long.: 89° 37' 18.476" W Datum: NAD83
Soil Map Unit Name: EsB, Escambia loam, 2 to 5 percent slopes	NWI classification: N/A
Are Vegetation , Soil , or Hydrology naturally p	ear? Yes No (If no, explain in Remarks.) tly disturbed? Are "Normal Circumstances" present? Yes No problematic? (If needed, explain any answers in Remarks.) ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Plot is about 75 feet south-southeast of Wet-43 on side slope just up	Is the Sampled Area within a Wetland? Yes No In from the drainage area
HYDROLOGY	p nom the trainings area.
Sediment Deposits (B2) Drift Deposits (B3) Algai Mat or Crust (B4) Trin Muck Surface Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Odor (C1) Moss Trim Lines (B16) heres along Living Roots (C3) Dry Season Water Table (C2) Crayfish Burrows (C8) Iction in Tilled Soils (C6) E (C7) Remarks) Saturation Visible on Aerial Imagery (C9) E (C7) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes No
Remarks:	