# Exhibit DD. Parks Geismar Site Wetlands Delineation Report

## WETLAND DELINEATION

Parks Property Lot 7 of Section 18; Lots 40, 41, and 42 of Sections 19, 20, 21, and 22; and Lot 43 of Section 23; Township 10 South, Range 2 East Ascension Parish, Louisiana



Prepared by Hunter B. Guidry Coastal Environments, Inc. 1260 Main Street Baton Rouge, LA 70802

Prepared for Baton Rouge Chamber of Commerce 564 Laurel Street Baton Rouge, LA 70801

> January 13, 2015 (CEI No. 214108)



## INTRODUCTION

Coastal Environments Inc. (CEI) was contracted by the Baton Rouge Chamber of Commerce and CSRS to conduct a wetland delineation survey on the property in Ascension Parish, Louisiana. Specifically, CEI was responsible for investigating the approximately 183.51 acre site encompassing areas within Lot 7 of Section 18, and portions of Lots 40, 41, and 42 located within Sections 19, 20, 21, and 22, and Lot 43 in Section 23; T-10-S, R-2-E.

A U.S. Army Corps of Engineers (USACOE) jurisdictional determination (MVN-2010-01947-SE) was issued by Mr. Brandon Gaspard of the USACOE on September 17, 2010 for these areas. Lot 43 of Section 23 is also part of the tract owned by Mr. Lew Parks, but this lot was delineated previously by Mr. Raymond Plauche of Plauche's Environmental, L.L.C. in December 2009, and the approved jurisdictional determination (MVN-2010-00159-SY) was issued by Mr. Brian Oberlies of the USACOE on March 11, 2010. A copy of both of the existing jurisdictional determinations are included in Appendix A. Both jurisdictional determinations will expire this year (2015). Since there has been no changes to the vegetation, hydrology, or soils on either of these jurisdictional determinations, this report serves as re-issuance for the original wetlands and waters of the U.S.

Because the layout of the original determination has changed and the wetland determination performed on Lot 43 by Mr. Plauche was included with this current determination, a complete wetland determination report was performed for the site. Appendix B has the location map for the subject property (Figure B.1). Figures B.2 and B.3 depict wetlands on the current project site during the field survey on January 7, 2015.

On January 7, 2015, two CEI biologist experienced conducting wetland delineations performed a field investigation of the project area to verify site conditions have not changed. This report summarizes the findings of the updated field investigations and wetland delineation of the project area.

## METHODOLOGY

Prior to the pedestrian survey of the project area, the previous jurisdictional determination maps were reviewed. Current information was obtained from the Natural Resources Conservation Services (NRCS) Soil Survey of Ascension Parish, LA, the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), the United States Geological Survey (USGS) Topographical Maps, Light Detection and Ranging (LIDAR) mapping (atlas.lsu.edu November 14, 2002), and Google Earth Imagery (March 17, 2014). These sources of information were used only to aid in the identification of any potential changes that may have occurred on the property to the wetlands and water bodies in the project area since the past jurisdictional determinations were issued.

The wetland investigation consisted of surveying across the project area and verifying potential wetlands according to the protocol outlined in the 1987 *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual* (U.S. Army Corps of Engineers [USACE] 2010).

The re-determination of wetlands is based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. These three criteria must be present if an area is to be considered jurisdictional by the USACE. Sites are considered to be non-jurisdictional by the USACE if under normal circumstances (area not altered in last 5 years) any of these three criteria are absent. For areas exhibiting signs of disturbed conditions, consideration must be given to what conditions would be present had the disturbance not occurred.

Each sampling site was mapped with the aid of a sub-meter accurate Global Positioning System (GPS) with real-time data capabilities and the representative vegetation and soil samples at sampling points were photographed (Appendix C). Soil samples were compared with Munsell Soil-Color Charts (2009). Sampling sites were classified as wetland or upland based on the results of the site investigation and the boundaries were mapped with a sub-meter accurate GPS.

## • VEGETATION

CEI verified that there were no changes to the original forested upland vegetative community since the issuance of the two jurisdictional determinations. The U.S. Department of Agriculture National Resources Conservation Service Plant Database (http://plants.usda.gov/) was consulted to determine the wetland indicator status for the Atlantic and Gulf Coastal Plain region.

The majority of the project is forested with a mature canopy which can be seen on the aerial photograph of the parcel (Figure B.2). The majority of the site is a well-drained, upland woodland area with thick canopy and medium emergent growth. All of the upland woodland areas are dominated by native hardwood trees such as sugar berry (*Celtis laevigata*), pecan trees (*Carya illienosis*), American elm (*Ulmus americana*), water oak (*Quercus nigra*) and scattered live oak (*Quercus virginiana*). A bald cypress (*Taxodium distictum*) bottom with open water habitat is located along the southwestern portion of the new site layout and bisects the tract to the south. Vegetated wetland habitat is present along the edges of this open water body and is mapped on Figures B.2 and B.3.

# • HYDROLOGY

The hydrology of the subject property has not changed since the original wetland determination was performed. The majority of the site is well-drained. The northeastern portion of the site has a slight slope to the east, and drains by sheet flow into a small drainage ditch along the eastern boundary of the property. The eastern/northeastern portion of the property is also affected by several small drainage features from the past cattle pasture use. These drainage features are small depressions that run west to east and drain into the ditch along the eastern property line. The western and southern portion of the property slope and drain into the large open water body that is former part of the Mississippi River channel. The relict waterbody is mostly open water

habitat that falls under USACOE "Waters of the U.S" as previously determined on the jurisdictional determinations. Small areas of vegetated wetlands were found along the edge of the open water area.

## • SOILS

The NRCS Web Soil Survey for Ascension Parish (http://websoilsurvey.nrcs.usda.gov/; Accessed January 2015) maps five soil types for the project area: Commerce silt loam, 0 to 1 percent slopes (Cm), Commerce silty clay loam (Co), Convent silt loam (Cs), Sharkey silty clay loam (Sa), and Sharkey clay, 0 to 1 percent slopes, rarely flooded, south (Sc) soils.

Commerce silt loam, 0 to 1 percent slopes, Commerce silty clay loam, and Convent silt loam are all almost identical in soil structure, chroma and texture. The amount of silt/clay and position of the soils adjacent to the natural levees in the alluvial plain characterize the difference in each of the soils. All of the soils are somewhat poorly drained, firm, mineral soils that are located next to natural levees along the Mississippi River and its distributaries. The slope is less than one percent, and the soils have high fertility. Water and air move through the soils at a moderately slow rate. Even though water runs off the surface at a slow rate, these soils do not flood or hold water for significant periods. The majority of the soils (62 percent) on the subject property were mapped as Commerce or Convent associations. These soils were verified at the southern, central, and northwestern portions of the property during the site inspection.

Sharkey silty clay loam and Sharkey clay were both very similar soils. The amount of silt/clay and position of the soils next to drainage features determine the difference in the two soils. Both soils are poorly drained, very slowly permeable, firm, mineral soil located on broad back swamp positions on the lower Mississippi River flood plain. Slopes range from 0 to 1 percent, and the soils have a high fertility. Water runs off the surface at a slow rate and stands in low places for short periods of time after heavy rains. Flooding can occur after heavy prolonged rains. Twenty-eight (28) percent of the soils mapped on the parcel were Sharkey associations. This soil type was mapped and identified at the western and northeastern portion of the subject property. There was no change to the soils on the subject property since the original jurisdictional determinations were issued on March 11 and September 17, 2010. All of the soils were currently well drained and found to be non-hydric.

During the field investigation, eight sampling plots were established to determine wetland or upland status and whether the previously determined status of the sites had changed since the original wetland determination was performed. Photographs of the current site conditions were taken and included in Appendix C. Present conditions of the site were recorded on wetland data forms and included in Appendix D.

#### CONCLUSION

Approximately 1.72 acres of wetlands and 2.75 acres of "Waters of the U.S." were delineated and mapped in the revised project area during the course of the January 7, 2014 field investigations. Because the two original jurisdictional determinations have not changed in the past five years, the locations and acreage of wetlands and "Waters of the U.S." remains the same. This report confirms that the location of the present wetlands and "Waters of the U.S." are consistent with the previously issued jurisdictional determinations (MVN-2010-01947-SE) and (MVN-2010-00159-SY) for the subject property. A portion of the wetlands and "Waters of the U.S." at the northwest corner of the subject property was removed from the MVN-2010-01947-SE jurisdictional determination. All of the area in MVN-2010-00159-SY jurisdictional determination is included in the current property layout on Figure B.2 (on aerial photo base) and on Figure B.3 (on USGS topo base map). The USACOE has final authority in the jurisdictional determination of wetlands within the project area.

#### **REFERENCES CITED**

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. La Roe. 1979.

Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of Interior, Fish and Wildlife Service Office of Biological Services, Washington, C.C. 34 pp. +append.

#### Environmental Laboratory. 1987.

Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.100pp.+append.

NRCS Web Soil Survey

U.S. Department of Agriculture, Natural Resource Conservation Service. http://websoilsurvey.nrcs.usda.gov Accessed September 2014.

- U.S. Army Corps of Engineers. 1991. Questions and Answers on the 1987 Manual, October 7, 1991.
- U.S. Army Corps of Engineers. 1992. Clarification and Interpretation of the 1987 Manual, March 6, 1992.
- U.S. Army Corps of Engineers, 2010.

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). U.S. Army Corps of Engineers, Vicksburg District, Wetlands Regulatory Assistance Program, ERDC/El TR-10-20, Nov. 2010. Prepared for U.S. Army Corps of Engineers, Washington, DC. 180 pp.

U.S. Fish and Wildlife Service (USFWS)

1992. 1:24,000 National Wetlands Inventory Map, interpreted from CIR NASA (Nov. 1988) photography. Atlanta, GA. Digital source: http://107.20.228.18/Wetlands/WetlandsMapper.html

# Appendix A

# Copy of USACOE Approved Jurisdictional Determinations #MVN-2010-01947-SE and #MVN-2010-00159-SY





# Appendix B

Maps of Project Location and Wetlands Depicted on Photobase Maps and USGS Topographic Maps



Figure B.1







Figure B.3

# Appendix C

# Photographs of Typical Vegetative Communities and Soil Profiles



Figure A.1 A photograph of soil sample from Site U1 (CEI 1-7-15).



Figure A.2 A photograph of typical vegetation found at Site U1 (CEI 1-7-15).



Figure A.3 A photograph of soil sample from Site U2 (CEI 1-7-15)



Figure A.4 A photograph of typical vegetation found at Site U2 (CEI 1-7-15).



Figure A.5 A photograph of soil sample from Site U3 (CEI 1-7-15).



Figure A.6 A photograph of typical vegetation found at Site U3 (CEI 1-7-15).



Figure A.7 A photograph of soil sample from Site U4 (CEI 1-7-15).



Figure A.8 A photograph of typical vegetation found at Site U4 (CEI 1-7-15).



Figure A.9 A photograph of soil sample from Site U5 (CEI 1-7-15).



Figure A.10 A photograph of typical vegetation found at Site U5 (CEI 1-7-15).



Figure A.11 A photograph of soil sample from Site U6 (CEI 1-7-15).



Figure A.12 A photograph of typical vegetation found at Site U6 (CEI 1-7-15).



Figure A.13 A photograph of soil sample from Site U7 (CEI 1-7-15).



Figure A.14 A photograph of typical vegetation found at Site U7 (CEI 1-7-15).



Figure A.15 A photograph of soil sample from Site U8 (CEI 1-7-15).



Figure A.16 A photograph of typical vegetation found at Site U8 (CEI 1-7-15).



Figure A.17 View to the south of large water body along southern portion of property (CEI 1-7-15).



Figure A.18 View to the north of large water body/cypress bottom along southern portion of property (CEI 1-7-15).



Figure A.19 A typical view of wetland vegetation located along edge of waterbody along the southern portion of property (CEI 1-7-15).



Figure A.20 View to the east of small ditch with waters of the US at the southeastern portion of property (CEI 1-7-15).

# Appendix D

# Field Inspection Data Forms

Project/Site: Parks Property- Lots 7, 40 through 43 City/County: Ge	ismar- Ascension Parish Sampling Date: 1-7-15
Applicant/Owner: Lew Parks	State: LA Sampling Point: Site U1
Investigator(s): Hunter Guidry, Dustin Johnson Section, Townshi	ρ, Range: Section 22, T-10-S, R-2-E
Landform (hillslope, terrace, etc.): Upland Forest Local relief (conca	ave, convex, none): <u>Convex</u> Slope (%): <u>0-1%</u>
Subregion (LRR or MLRA): LRR O Lat: <u>30.17803138790</u>	Long: 90.98558688480 Datum: NAD83
Soil Map Unit Name: Sharkey clay, 0 to 1 percent slopes, rarely flooded, south	NWI classification: <u>*NA</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes $X$	No (If no, explain in Remarks.)
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?	Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	int locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes X No within a W	Ipled Area
Wetland Hydrology Present?     Yes No X	
Remarks:	
pasture that has become overgrown over past 30 to 50 yea	ars.
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) In Mari Deposits (B15) (LKR U)	Drainage Patterns (B10)
Water Marks (B1)	Roots (C3) Drv-Season Water Table (C2)
Sediment Deposits (B2)	Crayfish Burrows (C8)
Drift Deposits (B3)	(C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)  Field Observations:	Sphagnum moss (D8) (LRR 1, 0)
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present?         Yes No X         Depth (inches):	Wetland Hydrology Present? Yes No $\frac{X}{X}$
(includes capillary fringe)	tions) if available:
Remarks:	
Area well drained by small drainage features spread out th	roughout property flowing north into large
drainage ditch along northern property line.	reagined property nothing north into large

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species		
1. Ulmus americana (Am. elm)	5	N	FAC	That Are OBL, FACW, or FAC: 6	(A)	
2. Celtis laevigata (Sugarberry)	25	Y	FACW	Total Number of Dominant		
3. Liquidambar styraciflua (Sweet gum)	10	Ν	FAC	Species Across All Strata: 9	(B)	
4. Quercus virginiana (Live oak)	10	Ν	FACU		( )	
5. Quercus nigra (Water oak)	20	N	FAC	Percent of Dominant Species	( / / P )	
6. Carya illinoensis (S. Pecan)	30	Y	FACU		(,,,,,,)	
7				Prevalence Index worksheet:		
8				Total % Cover of: Multiply by:	_	
0	100	- Total Cav		OBL species x 1 =	_	
50% of total according 50			20	FACW species x 2 =	_	
So% of total cover.	20% 01	total cover.		FAC species x 3 =		
Sapling/Snrub Stratum (Plot size: 30 n )	10	N	EAC	FACU species x 4 =		
	10			UPL species $x_5 =$	-	
2. Carya Illinoensis (S. Pecan)	20	Y	FACU		(P)	
3. Acer negunda (Box-elder)	20	Y	FAC		(D)	
4. Celtis laevigata (Sugarberry)	20	Y	FACW	Prevalence Index = B/A =	_	
5. Ilex vomitoria (Yaupon)	10	Ν	FAC	Hydrophytic Vegetation Indicators:	_	
6. Malus angustifolia (S. Crabapple)	15	Ν	NI	1 - Rapid Test for Hydrophytic Vegetation		
7				$\boxed{2}$ - Dominance Test is >50%		
8.				$\square$ 2 Provision of Index is <3.0 <sup>1</sup>		
	95	= Total Cov	er	$\square$ Decklemetic Ludenkutic Venetation <sup>1</sup> (Euclein	<b>`</b>	
50% of total cover: 47.5	20% of	total cover	19		)	
Horb Stratum (Blot aiza: 30 ft	2070.01					
Pluchea camphorata (Camphorweed)	15	N	FACW	Indicators of hydric soil and wetland hydrology m	ust	
Persicaria virginiana (lumpseed)	5	<u>N</u>	EAC	be present, unless disturbed of problematic.		
2. Tersicana virginiana (Sumpseeu)	<u> </u>			Definitions of Four Vegetation Strata:		
3. Rubus spp.	20	<u>ř</u>	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 c	m) or	
4. Gallum aparine (Bedstraw)	25	Y	FACU	more in diameter at breast height (DBH), regardle	ss of	
5. Solidago altissima (Tall goldenrod)	10	N	FACU	neight.		
6. Geranium maculatum (Wild geranium)	15	N	FACU	Sapling/Shrub – Woody plants, excluding vines,	less	
7. Toxicodendron radicans (Poison ivy)	15	Ν		than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
8				Herb – All herbaceous (non-woody) plants, regard	lless	
9				of size, and woody plants less than 3.28 ft tall.		
10.				Weedu vine All weedu vines greater than 2.29 f	4 10	
11.				height.	t in	
12						
	110	- Total Cov	or			
50% of total cover: 55	20% of		22			
Weeder Vice Strature (Plat size)	20 % 01	iolai cover.				
<u>vvoody vine Stratum</u> (Plot size:)	20	V	FAC			
1	15		EAC			
	15	<u> </u>	FAC			
3						
4						
5				Hydrophytic		
	35	= Total Cov	er	Vegetation		
50% of total cover: <u>17.5</u>	20% of	total cover:	7	Present? Yes <u>^ No</u>		
Remarks: (If observed, list morphological adaptations belo	w).					
FAC Neutral test - 4:5 (negative)	,					
Formor ovorgrown cottle posture	f = A + b + b + b + b + b + b + b + b + b +					
Former overgrown calle pasture.						

SOIL
------

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	n the absence of	f indicators.)
Depth	Matrix		Redox	k Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10 YR 4/2	100						
2-10	10 YR 4/2	95	10 YR 5/6	5	С	Μ	Clay loam	
10-14	10 YR 4/2	90	7.5 YR 4/6	10	С	Μ	Clay loam	
							·	
					·			
						·		
						·		
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Application)	able to all	LRRs, unless other	wise not	ed.)		Indicators fo	or Problematic Hydric Soils <sup>®</sup> :
Histosol	(A1)		Polyvalue Bel	low Surfa	ice (S8) <b>(L</b>	_RR S, T, I	U) <u> </u> 1 cm Mud	ck (A9) <b>(LRR O)</b>
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9	) <b>(LRR S,</b>	T, U)	2 cm Mu	ck (A10) <b>(LRR S)</b>
Black His	stic (A3)		Loamy Mucky	/ Mineral	(F1) <b>(LRF</b>	R O)	L Reduced	Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Piedmon	t Floodplain Soils (F19) <b>(LRR P, S, T)</b>
Stratified	Layers (A5)		Depleted Mat	rix (F3)			L Anomalo	ous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	, T, U)	Redox Dark S	Surface (F	=6)		(MLRA	(153B)
🔲 5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface	e (F7)		Red Pare	ent Material (TF2)
Muck Pre	esence (A8) (LRR U	)	Redox Depre	ssions (F	8)		L Very Sha	allow Dark Surface (TF12)
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		<u> </u>	RR U)			U Other (Ex	xplain in Remarks)
Depleted	Below Dark Surface	e (A11)	Depleted Och	nric (F11)	(MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12) (	LRR O, P	, T) <sup>3</sup> Indicate	ors of hydrophytic vegetation and
Coast Pr	airie Redox (A16) (N	ILRA 150	A) 📙 Umbric Surfa	ce (F13)	(LRR P, T	', U)	wetlar	nd hydrology must be present,
Sandy M	lucky Mineral (S1) <b>(L</b>	.RR O, S)	Delta Ochric (	(F17) <b>(MI</b>	_RA 151)		unless	s disturbed or problematic.
Sandy G	leyed Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 15	50A, 150B)	)	
Sandy R	edox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	49A)	
Stripped	Matrix (S6)		Anomalous B	right Loa	my Soils (	F20) <b>(MLF</b>	RA 149A, 153C, 1	53D)
Dark Sur	face (S7) <b>(LRR P, S</b>	, T, U)					_	
Restrictive L	ayer (if observed):							
Type:								×
Depth (inc	ches):						Hydric Soil Pr	resent? Yes <u>×</u> No
Remarks:	oile aro bydria	from	oplated matrix			ll drain	od but day	soils located in sample
30		nome	epieleu main	. Ale	a 15 we	ii urain	eu, but clay	solis located in sample
ar	ea.							

Project/Site: Parks Property- Lots 7, 40 through 43 City/County: Geismar- Ascension Parish Sampling Date: 1-7-15	
Applicant/Owner: Lew Parks State: LA Sampling Point: Site U2	
Investigator(s): Hunter Guidry, Dustin Johnson Section, Township, Range: Section 22, T-10-S, R-2-E	
Landform (hillslope, terrace, etc.): Upland Forest Local relief (concave, convex, none): Convex Slope (%): 0-19	, D
Subregion (LRR or MLRA); LRR O Lat: 30.17585069620 Long: 90.98810674070 Datum: NAV8	3
Soil Map Unit Name: Sharkey silty clay loam NWI classification: *NA	
Are climatic / hvdrologic conditions on the site typical for this time of year? Yes X No (If no. explain in Remarks.)	
Are Vegetation N . Soil N . or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No	
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, e	c.
Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area         Hydric Soil Present?       Yes X       No       within a Wetland?       YesNo X         Wetland Hydrology Present?       YesNo X       No X       No X       No X         Remarks:       No       No       No       No       No	
*Area not mapped on the NWI. High area at center/northeast portion of property. Property was former cattle pasture that has become overgrown over past 30 to 50 years.	
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)	
$\square$ Water Marks (B1) $\square$ Oxidized Rhizospheres along Living Roots (C3) $\square$ Dry-Season Water Table (C2)	
$\square$ Sediment Deposits (B2) $\square$ Presence of Reduction in Tilled Soils (C6) $\square$ Saturation Visible on Aerial Imagery (C0)	
Algal Mat or Crust (B4)	
$\square$ Iron Deposits (B5) $\square$ Other (Explain in Remarks) $\square$ Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	
Water-Stained Leaves (B9)	
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes <u>No X</u> Depth (inches):	
Saturation Present? Yes <u>No X</u> Depth (inches): <u>Wetland Hydrology Present?</u> Yes <u>No X</u> (includes capillary fringe)	-
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Pomorko:	
Remarks.	
Area well drained by small drainage features spread out throughout property flowing north into larg	Э
drainage ditch along horthern property line.	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <sup>30 ft</sup> )	% Cover	Species?	Status	Number of Deminant Species
1. Ulmus americana (Am. elm)	30	Y	FAC	That Are OBL, FACW, or FAC: <sup>8</sup> (A)
2 Celtis laevigata (Sugarberry)	30	Υ	FACW	
Liquidambar styraciflua (Sweet gum)	20	N	FAC	Total Number of Dominant
Quercus virginiana (Live oak)	40	Y	FACU	
4. Quercus pigra (Water oak)	25	N	FAC	Percent of Dominant Species
	20		17.0	That Are OBL, FACW, or FAC: $\frac{8/12=67\%}{}$ (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				$\frac{1}{1} \frac{1}{1} \frac{1}$
	145	= Total Cov	er	
50% of total cover: 72.5	20% of	total cover:	29	FAC vv species x 2 =
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species X 3 =
1. Liquidambar styraciflua (Sweet gum)	10	Ν	FAC	FACU species x 4 =
2. Quercus nigra (Water oak)	15	Ν	FACU	UPL species x 5 =
3. Acer negunda (Box-elder)	25	Y	FAC	Column Totals: (A) (B)
4 Celtis laevigata (Sugarberry)	20	Y	FACW	Drevelance Index D/A
5 Ulmus americana (Am. elm)	10	N	FAC	Prevalence Index = B/A =
o Malus angustifolia (S. Crabapple)	20	Y	NI	Hydrophytic Vegetation Indicators:
		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
7				
8				$\Box$ 3 - Prevalence Index is $\leq 3.0^1$
	100	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 50	20% of	total cover:	20	
Herb Stratum (Plot size: 30 ft )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Pluchea camphorata (Camphorweed)	5	Ν	FACW	be present, unless disturbed or problematic.
2. Persicaria virginiana (Jumpseed)	5	Ν	FAC	Definitions of Four Vegetation Strata:
3. Rubus spp.	10	N	FAC	
Galium aparine (Bedstraw)	15	N	FACU	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
C Quercus nigra (Water oak)	10	N	FACU	height.
S. Vicia sativa (Narrow-leaf vetch)	20	Y	FACU	
- Frideron annuus (Daisy fleabane)	20	· · · · · · · · · · · · · · · · · · ·	FACU	<b>Sapling/Shrub</b> – Woody plants, excluding vines, less
	20	<u> </u>		
8. Lonicera japonica (Japanese honeysuckie)	25	<u> </u>	FAC	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				
	110	= Total Cov	er	
50% of total cover: 55	20% of	total cover:	22	
Woody Vine Stratum (Plot size:				
1 Toxicodendron radicans (Poison ivy)	20	Y	FAC	
Vitis rotundifolia (Muscadine vine)	10	Y	FAC	
Campsis radicans (Trumpet creener)	40	· ·	FAC	
	40	<u> </u>	TAC	
4	<u> </u>			
5				Hydrophytic
	70	= Total Cov	er	Vegetation
50% of total cover: 35	20% of	total cover:	14	Present? res <u>~</u> No
Remarks: (If observed, list morphological adaptations belo	w).			1
FAC Neutral test = $2.4$ (negative)				
Former overgrown cattle pacture				
i onnei overgrown came pasiure.				

SUL
-----

Profile Desc	ription: (Describe	to the dep	oth needed to docur	ment the i	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 3/2	100					Clay loam	
3-14	10 YR 4/2	90	10 YR 5/8	10	С	М	Clay loam	
	10 11( 1/2		10 11( 0/0		<u> </u>		Ciay ioani	
			-		·			
·								
17 0.0							21	
Type: C=C	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	rwise not	ed.)		Indicators	for Problematic Hydric Solls":
Histosol	(A1)		Polyvalue Be	elow Surfa	ice (S8) <b>(L</b>	.RR S, T, I	<b>U) <u>Ц</u> 1 ст М</b>	luck (A9) <b>(LRR O)</b>
Histic Ep	pipedon (A2)		🔲 Thin Dark Sι	urface (S9	) (LRR S,	T, U)	2 cm M	luck (A10) <b>(LRR S)</b>
📕 Black Hi	stic (A3)		Loamy Muck	y Mineral	(F1) (LRF	R O)		ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	(F2)		Piedmo	ont Floodplain Soils (F19) (LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			🗌 Anoma	lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	P. T. U)	Redox Dark	Surface (F	-6)		(MLR	(A 153B)
5 cm Mu	ucky Mineral (A7) (L	RR P. T. U	Depleted Da	rk Surface	e (F7)			arent Material (TF2)
	esence (A8) <b>(I RR I</b>	N		essions (F	8)		Very SI	hallow Dark Surface (TE12)
	ick (A9) (I RR P T)	,	Marl (F10) (I	RR II)	0)		Other (	Explain in Remarks)
	d Below Dark Surfac	ο (Δ11)		hric (F11)	(MI RA 1	51)		Explain in Romanoy
	ark Surface (A12)				(F12)		T) <sup>3</sup> Indice	ators of hydrophytic vegetation and
	rairia Daday (A12)						, I) Illuica	alors of hydrophytic vegetation and
					(LKK F, I	, 0)	well	and hydrology must be present,
	lucky Mineral (S1) (	LRR 0, 5)		(F17) (IVIL	-RA 151)		unie	ess disturbed or problematic.
Sandy G	Bleyed Matrix (S4)			rtic (F18) (	(MLRA 15	0A, 150B)	)	
Sandy R	(S5)		Piedmont Flo	podplain S	Soils (F19)	(MLRA 14	49A)	
Stripped	Matrix (S6)		L Anomalous E	Bright Loa	my Soils (	F20) <b>(MLR</b>	RA 149A, 153C,	153D)
Dark Su	rface (S7) <b>(LRR P, S</b>	S, T, U)						
Restrictive I	Layer (if observed)	:						
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes X No
Remarks:								
S	oils are hydrid	c from c	lepleted matrix	x. Area	a is we	ell drain	ed, but cla	v soils located in sample
2	rea		1				,	5
a	ica.							

Project/Site: Parks Property- Lots 7, 40 through 43	City/County: Geismar-Ascension Paris	sh Sampling Date: 1-7-15
Applicant/Owner: Lew Parks	State: LA	Sampling Point: Site U3
Investigator(s). Hunter Guidry, Dustin Johnson	Section Township Range. Section 22, 7	
Landform (billslope terrace etc.). Upland Forest	ocal relief (concave, convex, none). Con	/ex Slope (%). 0-1%
Subragion (LRB or MLRA): LRR O	04800040 Long: 90.9922845	1920 Datum: NAD83
Soli Man Linit Name. Commerce silty clay loam	LONG	esifiestion: *NA
Are climatic / hydrologic conditions on the site typical for this time of ye	r? Yes <u>^</u> No (If no, explain	n in Remarks.)
Are Vegetation <u>IN</u> , Soil <u>IN</u> , or Hydrology <u>IN</u> significantly	listurbed? Are "Normal Circumstance"	ces" present? Yes <u>^</u> No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally pr	blematic? (If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, trans	ects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present?         Yes No _X	within a Wetland? Yes	No X
Wetland Hydrology Present?   Yes No X		
Remarks:		
*Area not mapped on the NWI. High area at c	nter along the northern porti	on of property. Property
was former cattle pasture that has become over	rgrown over past 30 to 50 ye	ars.
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary I	ndicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Soil Cracks (B6)
Surface Water (A1)	) Description Descripti Description Description Description Description Description Descri	y Vegetated Concave Surface (B8)
High Water Table (A2)	(LRR U)	e Patterns (B10)
Saturation (A3)	dor (C1) 📃 Moss T	rim Lines (B16)
U Water Marks (B1)	res along Living Roots (C3) 🛛 📙 Dry-Sea	ason Water Table (C2)
Sediment Deposits (B2)	d Iron (C4)	n Burrows (C8)
Drift Deposits (B3)	on in Tilled Soils (C6)	on Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	C7) Geomo	phic Position (D2)
		Aquital (D3)
Water-Stained Leaves (B9)		um moss (D8) (LRR T. U)
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	Wetland Hydrology Pi	esent? Yes <u>No <math>X</math></u>
(includes capillary fringe)	nrevious inspections) if available:	
Describe Recorded Data (stream gauge, monitoring weil, achar prot		
Remarks:		
Area well drained by small drainage features s	pread out throughout propert	v flowing north into large
drainage ditch along northern property line.		,

00.0	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species	
1. Ulmus americana (Am. elm)	15	<u>N</u>	FAC	That Are OBL, FACW, or FAC: $6$ (A)	
2. Celtis laevigata (Sugarberry)	20	<u>N</u>	FACW	Total Number of Dominant	
3. Quercus nigra (Water oak)	40	Y	FAC	Species Across All Strata: 10 (B)	
4. Quercus virginiana (Live oak)	50	Y	FACU	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: $6/10=60\%$ (A/B)	
6				Provalance Index worksheet:	
7				Total % Cover of: Multiply by:	
8					
	125	= Total Cov	er		
50% of total cover: <u>62.5</u>	20% of	total cover	25	FAC w species $x_2 = $	
Sapling/Shrub Stratum (Plot size: <u>30 ft</u> )				FAC species $x = $	
1. Liquidambar styraciflua (Sweet gum)	5	N	FAC	FACO species         x 4 =           UDL species         x 5 =	
2. Quercus nigra (Water oak)	30	Y	FACU	$\begin{array}{c} \text{OPL species} \\ \text{Column Tatalay} \\ \end{array} $	
3. Acer negunda (Box-elder)	15	N	FAC	Column Totals: (A) (B)	
4. Celtis laevigata (Sugarberry)	40	Y	FACW	Prevalence Index = B/A =	
5. Ulmus americana (Am. elm)	10	Ν	FAC	Hydrophytic Vegetation Indicators:	
6. Malus angustifolia (S. Crabapple)	10	Ν	NI	1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8				$\boxed{\square}$ 3 - Prevalence Index is $\leq 3.0^{1}$	
	110	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
50% of total cover: <u>55</u>	20% of	total cover:	23		
Herb Stratum (Plot size: <u>30 ft</u> )				<sup>1</sup> Indicators of bydric soil and wetland bydrology must	
1. Pluchea camphorata (Camphorweed)	5	Ν	FACW	be present, unless disturbed or problematic.	
2. Persicaria virginiana (Jumpseed)	5	Ν	FAC	Definitions of Four Vegetation Strata:	
3. Rubus spp.	10	Ν	FAC	Tree Weady planta avaluding vince 2 in (7.6 cm) or	
4. Galium aparine (Bedstraw)	15	Υ	FACU	more in diameter at breast height (DBH), regardless of	
5. Quercus nigra (Water oak)	10	Ν	FAC	height.	
6. Vicia sativa (Narrow-leaf vetch)	20	Υ	FACU	Sapling/Shrub – Woody plants, excluding vines, less	
7. Sambucus canadensis (elderberry)	10	Ν	FACW	than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8. Lygonium japonicum (Climbing Japanese fern)	20	Y	FAC	Herb – All berbaceous (non-woody) plants, regardless	
9. Sabal minor (Palmetto)	5	Ν	FACW	of size, and woody plants less than 3.28 ft tall.	
10				Woody vine All woody vines greater than 2.28 ft in	
11				height.	
12					
	100	= Total Cov	er		
50% of total cover: 50	20% of	total cover	20		
Woody Vine Stratum (Plot size:)					
1. Toxicodendron radicans (Poison ivy)	25	Υ	FAC		
2. Vitis rotundifolia (Muscadine vine)	20	Y	FAC		
3. Campsis radicans (Trumpet creeper)	30	Y	FAC		
4.					
5.				Hydrophytic	
	75	= Total Cov	er	Vegetation	
50% of total cover: 37.5	20% of	total cover:	15	Present? Yes X No	
Remarks: (If observed, list morphological adaptations belo	w).			<u> </u>	
FAC Neutral test – 1.4 (negative)	,				
Former overgrown cattle pasture					
i onnei overgrown calle pasture.					

S	Ο	11	
-	-		

Profile Desc	cription: (Describe	to the dept	n needed to docu	ment the	indicator	or confirn	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	10 YR 2/2	100					Clay loam	
4-10	10 YR 3/2	100					Clay loam	
10-14	10 YR 4/3	100					Clay loam	
					·			
							· ·	
							·	
$^{1}$ Type: C=C	oncentration D-Der	letion RM-I	Reduced Matrix M	S-Masker	d Sand Gra	ains	<sup>2</sup> Location:	PI –Pore Lining M–Matrix
Hvdric Soil	Indicators: (Applic	able to all L	RRs. unless othe	rwise not	ed.)		Indicators f	for Problematic Hydric Soils <sup>3</sup> :
	(A1)					ррети		
	(A1)			urfaco (SO		κκ 3, 1, t τ 11\	$D_{2} $ m M	
	stic (A3)			Mineral	(E1) (I DD	1, U)		ad Vertic (E18) (outside MI BA 150A B)
	Suc(A3)			d Matrix	(E2)	0)		vot Eloodolain Soile (E10) (I PP D S T)
	d overe (AE)			tu ivialitik (	(ГZ)			Int Floodplain Soils (F19) (LKK F, S, I)
	Dedice (AG)	о <b>т</b> ну		Rurfago (E	5			A 162D)
	boules (Ab) (LKK F	, I, U) DD D T IIV		Sunace (r	-0) (E7)			rant Material (TE2)
		κκ Γ, Ι, Ο) Ν		n Sunace	( <i>Г1)</i>			allow Dark Surface (TE12)
		)		<b>DD II</b>	0)			Evolution in Remarks)
	d Below Dark Surfac	re (A11)		hric (F11)	(MI RA 14	51)		
	ark Surface (A12)			inio (ETT)	es (F12) (		T) <sup>3</sup> Indica	ators of hydrophytic vegetation and
	rairie Redox (A16) (		Umbric Surf	ace (F13)		11)	wet!	and hydrology must be present
	/ucky Mineral (S1) (			(F17) <b>(MI</b>	RA 151)	, 0)	unle	ss disturbed or problematic
Sandy C	Reved Matrix (S4)			rtic (F18)	(MI RA 15	0A 150R)	unic	
	2edox (S5)			niic (i 10) Sodolain S	oile (F19)	(MI RA 14	IQΔ)	
	Matrix (S6)			Bright Loa	my Soils (I	(MERCA 13	Δ 149Δ 153C	153D)
Dark Su	rface (S7) <b>(LRR P.</b> 3	S. T. U)		Singin Lou		20) (МЕК	1407, 1000,	1000)
Restrictive	Layer (if observed)	:						
Туре:								
Depth (in	ches):						Hydric Soil I	Present? Yes $\frac{\chi}{\chi}$ No
Remarks:								
S	oils are hydri	c from de	pleted matri	x. Are	a is we	II drain	ed, but cla	y soils located in sample
a	rea.							

Project/Site: Parks Property- Lots 7, 40 through 43 City/County: Ge	eismar- Ascension Parish Sampling Date: 1-7-15
Applicant/Owner: Lew Parks	State: LA Sampling Point: Site U4
Investigator(s). Hunter Guidry, Dustin Johnson Section Townsh	hip Range. Section 22, T-10-S, R-2-E
Landform (hillslope, terrace, etc.): Upland Forest Local relief (cond	cave, convex, none): <u>Convex</u> Slope (%): <u>0-1%</u>
Subregion (LRR or MLRA): LRR O Lat: 30.17331376150	Long: 90.99730038690 Datum: NAD83
Soil Map Unit Name: Commerce silt loam, 0 to 1 percent slopes	NWI classification: *NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X	No (If no, explain in Remarks.)
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?	Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	pint locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No       Is the Sa         Hydric Soil Present?       Yes       No       x         Wetland Hydrology Present?       Yes       No       x         Remarks:       Is the Sa       Is the Sa	mpled Area Wetland? Yes No X
*Area not mapped on the NWI. High area at northwest co cattle pasture that has become overgrown over past 30 to	orner of property. Property was former 50 years.
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) (LRR U)         Saturation (A3)       Hydrogen Sulfide Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres along Living         Sediment Deposits (B2)       Presence of Reduced Iron (C4)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils         Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Iron Deposits (B5)       Other (Explain in Remarks)         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)	Surface Soil Cracks (B6)     Sparsely Vegetated Concave Surface (B8)     Drainage Patterns (B10)     Moss Trim Lines (B16)     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 X Depth (inches):	_
Water Table Present? Yes <u>No X</u> Depth (inches):	
Saturation Present? Yes <u>No X</u> Depth (inches):	Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ections), if available:
Area well drained by good slope to the west into large wat	ter body found along western property line.

	Absolute	Dominant	Indicator	Dominance Test worksheet:				
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Number of Dominant Species				
1. Ulmus americana (Am. elm)	20	Ν	FAC	That Are OBL, FACW, or FAC: (A	۹)			
2. <u>Celtis laevigata (Sugarberry)</u>	30	Υ	FACW	Total Number of Deminent				
3. Quercus nigra (Water oak)	20	Ν	FAC	Species Across All Strata: 8 (E	3)			
4. Quercus virginiana (Live oak)	50	Y	FACU	(-	- /			
5. Carya illenoiensis (Pecan hickory)	10	Ν	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 6/8=75% (A	√B)			
6	<u> </u>							
7				Prevalence Index worksheet:				
8				Total % Cover of: Multiply by:				
	130	= Total Cov	er	OBL species x 1 =				
50% of total cover: <sup>65</sup>	20% of	total cover:	26	FACW species x 2 =				
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =				
1. Ulmus americana (Am. elm)	10	Ν	FAC	FACU species x 4 =				
2 Quercus nigra (Water oak)	30	Y	FACU	UPL species x 5 =				
Acer negunda (Box-elder)	20	N	FAC	Column Totals: (A) (	(B)			
Celtis laevigata (Sugarberry)	40	Y	FACW					
4				Prevalence Index = B/A =				
5				Hydrophytic Vegetation Indicators:				
6				1 - Rapid Test for Hydrophytic Vegetation				
7	·							
8				$\Box$ 3 - Prevalence Index is $\leq 3.0^1$				
	100	= Total Cov	rer	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
50% of total cover: 50	20% of	total cover:	20					
Herb Stratum (Plot size: <u>30 ft</u> )				<sup>1</sup> Indicators of hydric soil and wetland hydrology mus	st			
1. Pluchea camphorata (Camphorweed)	10	N	FACW	be present, unless disturbed or problematic.				
2. Acer negunda (Box-elder)	5	Ν	FAC	Definitions of Four Vegetation Strata:				
3. Rubus spp.	5	Ν	FAC	Tree Woody plants, excluding vince 2 in (7.6 cm	) or			
4. Galium aparine (Bedstraw)	5	Ν	FACU	more in diameter at breast height (DBH), regardless of				
5. Allium canadense (Wild onion)	10	Ν	FACU	height.				
6. Vicia sativa (Narrow-leaf vetch)	10	Ν	FACU	Sanling/Shrub - Woody plants excluding vines le	<b></b>			
7. Solidago altissima (Tall goldenrod)	10	Ν	FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.				
8 Lonicera japonica (Japanese honeysuckle)	25	Y	FAC					
G Chasmanthium spp.	20	Y	FAC	<b>Herb</b> – All herbaceous (non-woody) plants, regardle	ess			
10	·							
10				Woody vine – All woody vines greater than 3.28 ft i	in			
	·			neight.				
12	100							
50	100	= Total Cov	ver 20					
50% of total cover: 50	20% of	total cover						
<u>Woody Vine Stratum</u> (Plot size:)	20	V	FAC					
	20	ř						
2. Vitis rotundifolia (Muscadine vine)	30	Y	FAC					
3								
4								
5				Hydrophytic				
	50	= Total Cov	rer	Vegetation				
50% of total cover: 25	20% of	total cover	10	Present? Yes <u>^ No</u>				
Remarks: (If observed, list morphological adaptations belo FAC Neutral test = 2:2 (negative)	ow).							

S	Ο	11	
-	-		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Features	s			
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks
0-2	10 YR 3/2	100					Silty clay loam	
2-10	10 YR 4/2	100					Silty clay loam	
10-14	10 YR 4/3	100					Silty clay loam	
<sup>1</sup> Type: C=Cc Hydric Soil I Histosol Histic Ep Black Hi Hydroge Stratified Organic 5 cm Mu Muck Pr 1 cm Mu Depleted Thick Da Coast Pr Sandy M Sandy R Sandy R Dark Su	Dencentration, D=Dep Indicators: (Applid (A1) Dipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR F icky Mineral (A7) (L esence (A8) (LRR I ick (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) ( fucky Mineral (S1) ( Sleyed Matrix (S4) eedox (S5) Matrix (S6) rface (S7) (LRR P, S)	P, T, U) RR P, T, U) Se (A11) MLRA 150A) LRR O, S)	Reduced Matrix, Ma RRs, unless othe Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oc Iron-Mangan Umbric Surfa Delta Ochric Reduced Ve Piedmont Flo Anomalous B	S=Masked rwise note alow Surfa urface (S9) y Mineral ed Matrix ( ttrix (F3) Surface (F rk Surface essions (F .RR U) hric (F11) ese Masse ace (F13) ( (F17) (ML rtic (F18) ( podplain S Bright Loar	<u>d Sand Gr</u> ed.) ce (S8) (L ) (LRR S, (F1) (LRF F2) = (F7) 8) (MLRA 1 es (F12) ( (LRR P, T .RA 151) (MLRA 15 oils (F19) my Soils (	ains. .RR S, T, U T, U) X O) 51) (LRR O, P, , U) 50A, 150B) (MLRA 14 F20) (MLR	<sup>2</sup> Location: PL <sup>1</sup> Indicators for ) □ 1 cm Muc □ 2 cm Muc □ 2 cm Muc □ Piedmont □ Piedmont □ Anomalou (MLRA □ Red Parei □ Very Shal □ Other (Exi T) ³Indicato wetland unless 9A) A 149A, 153C, 15	_=Pore Lining, M=Matrix. r Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S) Vertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) us Bright Loamy Soils (F20) 153B) nt Material (TF2) llow Dark Surface (TF12) plain in Remarks) ors of hydrophytic vegetation and d hydrology must be present, disturbed or problematic. 53D)
Restrictive I	_ayer (if observed)	:						
Туре:								
Depth (ind	ches):						Hydric Soil Pre	esent? Yes $\frac{X}{X}$ No
Remarks: S ai	oils are hydrio rea.	c from de	pleted matri	x. Area	a is we	ell drain	ed, but clay	soils located in sample

Project/Site: Parks Property- Lots 7, 40 through 43 City/County: Ge	ismar- Ascension Parish Sampling Date: 1-7-15
Applicant/Owner: Lew Parks	State: LA Sampling Point: Site U5
Investigator(s): Hunter Guidry, Dustin Johnson Section, Townshi	 p. Range: Section 22, T-10-S, R-2-E
Landform (hillslope, terrace, etc.): Upland Forest Local relief (conc	ave, convex, none): Convex Slope (%): 0-1%
Subregion (I RR or MI RA): LRR O	Long: 90.99412446960 Datum: NAD83
Soil Map Unit Name: Commerce silt loam, 0 to 1 percent slopes	NWI classification: *NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X	No (If no, explain in Remarks.)
Are Vegetation N . Soil N . or Hydrology N significantly disturbed?	Are "Normal Circumstances" present? Yes X No
Are Vegetation N . Soil N . or Hydrology N naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	int locations, transects, important features, etc.
Hydrophytic Vegetation Present?     Yes     No     Is the Sar       Hydric Soil Present?     Yes     No     X       Wetland Hydrology Present?     Yes     No     X       Remarks:     Is the Sar     No     X	npled Area Vetland? Yes <u>No X</u>
*Area not mapped on the NWI. High area at the center/so former cattle pasture that has become overgrown over pas	uth portion of property. Property was at 30 to 50 years.
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) (LRR U)         Saturation (A3)       Hydrogen Sulfide Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres along Living         Sediment Deposits (B2)       Presence of Reduced Iron (C4)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils         Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Iron Deposits (B5)       Other (Explain in Remarks)         Mater-Stained Leaves (B9)       Field Observations:	Surface Soil Cracks (B6)         Sparsely Vegetated Concave Surface (B8)         Drainage Patterns (B10)         Moss Trim Lines (B16)         Roots (C3)         Dry-Season Water Table (C2)         Crayfish Burrows (C8)         (C6)         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 X Depth (inches):	
Water Table Present? Yes <u>No X</u> Depth (inches):	×
Saturation Present? Yes <u>No X</u> Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ctions), if available:
Area well drained by good slope to the west into large wat	er body found along western property line.

	,	Dominant	inuicator	Dominance rest worksheet.	
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Number of Dominant Species	
1. Ulmus americana (Am. elm)	20	Ν	FAC	That Are OBL, FACW, or FAC: 6	(A)
2. Celtis laevigata (Sugarberry)	35	Y	FACW	Total Number of Dominant	
3. Quercus nigra (Water oak)	40	Y	FAC	Species Across All Strata: 8	(B)
4. Acer negunda (Box-elder)	15	Ν	FACW		· /
5. Carya illenoiensis (Pecan hickory)	10	Ν	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 6/9= 67%	(A/B)
6				Drevelence Index werkeheet:	. ,
7				Total % Occurrents	
8				Iotal % Cover or: Multiply by:	-
	120	= Total Cov	er		
50% of total cover: <u>60</u>	20% of	total cover	24	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =	
1. Ulmus americana (Am. elm)	10	Ν	FAC	FACU species x 4 =	
2. Quercus nigra (Water oak)	20	Υ	FACU	UPL species x 5 =	
3. Acer negunda (Box-elder)	30	Ν	FAC	Column Totals: (A)	(B)
4. Celtis laevigata (Sugarberry)	40	Y	FACW	Dravalance Index - P/A -	
5					-
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
8	100			$\square$ 3 - Prevalence Index is $\leq 3.0^{1}$	
50	100	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	)
50% of total cover: <u>50</u>	20% of	total cover	20		
Herb Stratum (Plot size: 30 II )	-		E4 0)4/	<sup>1</sup> Indicators of hydric soil and wetland hydrology m	ust
1. Pluchea camphorata (Camphorweed)		<u>N</u>	FACW	be present, unless disturbed or problematic.	
2. Acer negunda (Box-elder)	5	Ν	FAC	Definitions of Four Vegetation Strata:	
3. Ampelopsis aborea (Pepper vine)	10	N	FAC	Tree – Woody plants, excluding vines, 3 in, (7.6 ci	m) or
4. Galium aparine (Bedstraw)	20	Y	FACU	more in diameter at breast height (DBH), regardles	ss of
5. Geranium maculatum (Wild geranium)	20	Y	FACU	height.	
6. Lygodium japonicum (Climbing Japanese fern)	20	Y	FAC	Sapling/Shrub – Woody plants, excluding vines, I	ess
7. Persicaria virginiana (Jump seed)	10	Ν	FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb – All berbaceous (non-woody) plants, regard	المعج
9				of size, and woody plants less than 3.28 ft tall.	1000
10.				We advertise All we advertise a prostor them 2.20 f	4 t.a
11.				height.	tin
12					
	100	- Total Cov	or		
50% of total cover: 50	20% of	total cover	20		
Woody Vino Stratum (Plot size:	2070 01				
Toxicodendron radicans (Poison ivv)	20	Y	FAC		
Vitis rotundifolia (Muscadine vine)	30	v	FAC		
		<u> </u>	1710		
3					
4					
5				Hydrophytic	
	50	= Total Cov	er	Vegetation Present? Yes X No	
50% of total cover: 25	20% of	total cover	10		
Remarks: (If observed, list morphological adaptations be FAC Neutral test = 2:3 (negative)	low).				

SOIL	
------	--

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redox	Feature	S 1					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Туре	Loc	<u>Texture</u>		Remarks	
0-3	10 YR 2/2	100					Silty loam			
3-10	10 YR 4/3	100					Silty loam			
10-14	10 YR 4/3	85	7.5 YR 4/6	15	С	Μ	Silty loam			
		·				<u> </u>				
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore L	ining, M=Ma	trix.
Hydric Soil I	Indicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicators f	or Proble	matic Hydrid	: Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Bel	ow Surfa	ace (S8) <b>(L</b>	.RR S, T, U	<b>յ) <u>  </u>1 cm Mu</b>	uck (A9) <b>(I</b>	LRR O)	
Histic Ep	oipedon (A2)		Thin Dark Su	face (S9	) <b>(LRR S,</b>	T, U)	2 cm Mi	uck (A10)	(LRR S)	
Black Hi	stic (A3)		Loamy Mucky	Mineral	(F1) <b>(LRF</b>	R O)		d Vertic (F	18) <b>(outside</b>	MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix	(F2)			nt Floodpl	ain Soils (F19	) (LRR P, S, T)
	Layers (A5)	<b>T</b> 10	Depleted Mat	rix (F3)				ous Bright	Loamy Soils	(F20)
	Bodies (Ab) (LRR P	, I, U) ровт II\		Surface (I	-6) > (E7)			A 153B)	ial (TE2)	
	esence (A8) <b>(I RR I</b>	((( 1 , 1 , 0) ()		ssions (F	5 (17) 58)			allow Dar	k Surface (TF	-12)
	ick (A9) (LRR P. T)	/	Marl (F10) (L	RR U)	0)		Other (E	Explain in	Remarks)	12)
Depleted	Below Dark Surfac	e (A11)	Depleted Och	ric (F11)	(MLRA 1	51)			,	
Thick Da	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12) (	LRR O, P,	T) <sup>3</sup> Indica	ators of hydrogeneration	drophytic veg	etation and
Coast Pi	rairie Redox (A16) <b>(I</b>	/LRA 150/	A) 🔲 Umbric Surfa	ce (F13)	(LRR P, T	', U)	wetla	and hydrol	ogy must be	present,
Sandy M	lucky Mineral (S1) <b>(I</b>	_RR O, S)	Delta Ochric (	F17) <b>(M</b>	LRA 151)		unles	ss disturbe	ed or problem	atic.
Sandy G	leyed Matrix (S4)		Reduced Vert	ic (F18)	(MLRA 15	0A, 150B)				
Sandy R	edox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	9A)			
Stripped	Matrix (S6)		Anomalous B	right Loa	my Soils (	F20) <b>(MLR</b>	A 149A, 153C,	153D)		
Dark Su	mace (S7) (LRR P, 3	5, I, U)					1			
Typo	_ayer (il observeu)									
Type.	-h ).						Ukudain Coll I	<b>2</b>	Vee	No X
Depth (ind							Hydric Soll F	resent?	res	NO
Remarks:	oils are hydrid	from d	epleted matrix	Are	a is we	ll drain	ed but clay	v soils	located i	n sample
21	and thy and			. 700				y 00110	locatoa i	li dampio
a	ca.									

Project/Site: Parks Property- Lots 7, 40 through 43	City/County: Geismar- Ascension Parish Sampling Date: 1-7-15
Applicant/Owner: Lew Parks	State: LA Sampling Point: Site U6
Investigator(s): Hunter Guidry, Dustin Johnson	Section, Township, Range: Section 22, T-10-S, R-2-E
Landform (hillslope, terrace, etc.): Upland Forest	ocal relief (concave, convex, none): <u>Convex</u> Slope (%): <u>0-1%</u>
Subregion (LRR or MLRA): LRR O	26439830 Long: 90.99242112050 Datum: NAD83
Soil Map Unit Name: Commerce silt loam, 0 to 1 percent slopes	NWI classification: *NA
Are climatic / hydrologic conditions on the site typical for this time of yea	r? Yes X No (If no, explain in Remarks.)
Are Vegetation N . Soil N . or Hydrology N significantly d	listurbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation N . Soil N . or Hydrology N naturally prob	plematic? (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 X No	
Hydric Soil Present? Yes No $\frac{x}{x}$	Is the Sampled Area
Wetland Hydrology Present? Yes No X	within a wettand? Yes <u>No <u>No</u></u>
Remarks:	
*Area not mapped on the NWI. High area at the	e southeastern portion of property. Property was
former cattle pasture that has become overgrov	vn over past 30 to 50 years.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
High Water Table (A2)	(IRR II) Sparsely vegetated Concave Surface (B8)
Saturation (A3)	dor (C1) $\square$ Moss Trim Lines (B16)
Water Marks (B1)	res along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	d Iron (C4)
Drift Deposits (B3)	on in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	C7) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Re	marks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Field Observations:	<b></b> Spragnum moss (D8) (LRR 1, 0)
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X 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:
Pomorko	
Area well drained by good along to the west into	a large water body found clong control partice of
Area well drained by good slope to the west into	b large water body found along central portion of
alea.	

00.1	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Ulmus americana (Am. elm)	30	N	FAC	That Are OBL, FACW, or FAC: 8 (A)
2. Cettis laevigata (Sugarberry)	40	Y	FACW	Total Number of Dominant
3. Quercus nigra (vvater oak)	45	Y	FAC	Species Across All Strata: 9 (B)
4. Acer negunda (Box-elder)	5	N	FACW	Percent of Dominant Species
5. Liquidamber styraciflua (Sweetgum)	5	N	FACU	That Are OBL, FACW, or FAC: $8/9=89\%$ (A/B)
6				Provalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	125	= Total Cov	er	
50% of total cover: <u>62.5</u>	20% of	total cover:	25	
Sapling/Shrub Stratum (Plot size: 30 ft )				
1. Sambucus canadensis (Elderberry)	10	N	FACW	
2. Quercus nigra (Water oak)	20	N	FACU	$\begin{array}{c} \text{OFL Species} \\ \text{Column Tatala:} \\ \text{Column Tatala:} \\ \text{(A)} \\ \text{(B)} \\ \end{array}$
3. Acer negunda (Box-elder)	30	Y	FAC	(A)(B)
4. Celtis laevigata (Sugarberry)	30	Y	FACW	Prevalence Index = B/A =
5. Gleditsia triacanthos (Honey locusts)	10	N	FAC	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				$\boxed{1}$ 3 - Prevalence Index is $\leq 3.0^{1}$
	100	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 50	20% of	total cover:	20	
Herb Stratum (Plot size: 30 ft )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Pluchea camphorata (Camphorweed)	5	Ν	FACW	be present, unless disturbed or problematic.
2. Acer negunda (Box-elder)	5	Ν	FAC	Definitions of Four Vegetation Strata:
3. Rubus spp.	20	Υ	FAC	<b>Tree</b> – Woody plants, excluding vines 3 in (7.6 cm) or
4. Galium aparine (Bedstraw)	15	Y	FACU	more in diameter at breast height (DBH), regardless of
5. Lonicera japonica (Jap. honeysuckle)	20	Y	FAC	height.
6. Sambucus canadensis (Elderberry)	10	Ν	FACW	Sapling/Shrub – Woody plants, excluding vines, less
7. Thelypteris kunthii (Fern, Southern shield)	10	Ν	FACW	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				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
11				height.
12				
	85	= Total Cov	er	
50% of total cover: 42.5	20% of	total cover:	17	
Woody Vine Stratum (Plot size:)				
1. Toxicodendron radicans (Poison ivy)	25	Υ	FAC	
2. Vitis rotundifolia (Muscadine vine)	20	Υ	FAC	
3. Campsis radicans (Trumpet creeper)	15	Ν	FAC	
4				
5				Hydrophytic
	60	= Total Cov	er	Vegetation
50% of total cover: <u>30</u>	20% of	total cover:	12	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo	w).			1
FAC Neutral test = $2.1$ (negative)	-			

S	Ο	11	
-	-		

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the i	indicator	or confirm	the absence	of indicato	vrs.)
Depth	Matrix		Redo	x Feature	S				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-3	10 YR 2/2	100					Silty loam		
3-9	10 YR 4/2	100					Silty loam		
9-14	10 YR 4/3	100					Silty clay loam		
					·				
					·				
					·				
					·				
	D Dop	lation DM	Deduced Metrix M	- Maakar			<sup>2</sup> L continue		ining M. Motrix
Hvdric Soil	Indicators: (Applic	able to all I	RRs. unless othe	rwise not	ed.)	ains.	Indicators	for Proble	matic Hvdric Soils <sup>3</sup> :
					(S8) (I	ррети			
	(A1)			urfaco (SQ	) /I PP S	кк 3, 1, 0 т II)	$\square 2 \text{ cm}$	luck (A9) (L	
	stic (A3)			v Mineral	(E1) (I DD	(0)		ad Vartic (F	(LRR S)
	$\operatorname{Suc}(A3)$			y willerai	(F1) <b>(LKK</b> (E2)	0)		eu venic (r	To) (Outside MERA ISUA,B)
					(FZ)				
	Layers (A5)	<b>T</b> 10		trix (F3)	-0)			alous Bright	Loamy Soils (F20)
	Bodies (Ab) (LRR P	, I, U)		Surface (F	-6)			(A 153B)	
	icky Mineral (A7) (LI	(R P, I, U)		rk Surface	e (⊢7)			arent Materi	
Muck Pr	esence (A8) (LRR U	)		essions (F	8)			hallow Dark	(Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (L	.RR U)			U Other (	Explain in F	Remarks)
	Below Dark Surfac	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) <b>(</b>	LRR O, P,	T) <sup>°</sup> Indic	ators of hyc	Irophytic vegetation and
Coast Pi	rairie Redox (A16) <b>(I</b>	MLRA 150A	) 📙 Umbric Surfa	ace (F13)	(LRR P, T	, U)	wet	land hydrolo	ogy must be present,
Sandy M	lucky Mineral (S1) <b>(I</b>	_RR O, S)	Delta Ochric	(F17) <b>(ML</b>	_RA 151)		unle	ess disturbe	d or problematic.
Sandy G	leyed Matrix (S4)		Reduced Ve	rtic (F18) (	(MLRA 15	0A, 150B)			
Sandy R	edox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	9A)		
Stripped	Matrix (S6)		Anomalous E	Bright Loa	my Soils (I	F20) (MLR.	A 149A, 153C	, 153D)	
Dark Su	rface (S7) (LRR P, S	S, T, U)					T		
Restrictive I	_ayer (if observed):								
Type:								<b>D</b> (0)	х Х
Depth (ind	ches):						Hydric Soil	Present?	Yes No
Remarks:	oils are hvdrid	from de	epleted matri	x. Are	a is we	II draine	ed. but cla	av soils I	located in sample
a	rea.						,	.,	

Project/Site: Parks Property- Lots 7, 40 through 43	City/County: Geismar- Ascension Parish Sampling Date: 1-7-15
Applicant/Owner: Lew Parks	State: LA Sampling Point: Site U7
Investigator(s): Hunter Guidry, Dustin Johnson	Section, Township, Range: Section 22, T-10-S, R-2-E
Landform (hillslope, terrace, etc.): Upland Forest	Local relief (concave, convex, none): <u>Convex</u> Slope (%): <u>0-1%</u>
Subregion (LRR or MLRA): LRR O	0.16845609790 Long: 90.99591017130 Datum: NAD83
Soil Map Unit Name: Commerce silt loam, 0 to 1 percent sl	ppes NWI classification: *NA
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No (If no. explain in Remarks.)
Are Vegetation N . Soil N . or Hydrology N signific	antly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation Y , Soil N , or Hydrology N natura	Ilv problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes No X	within a Wetland?
Wetland Hydrology Present? Yes No X	
Remarks:	
at southwest corner of property. Property over past 30 to 50 years.	was former cattle pasture that has become overgrown
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	oply) Surface Soil Cracks (B6)
Surface Water (A1)	a (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Mari Deposits	(B15) (LRR U) L Drainage Patterns (B10)
Saturation (A3) Hydrogen Su	Tide Odor (C1) Moss Trim Lines (B16) Veseberge along Living Poets (C2)
Sediment Deposits (B2)	Reduced Iron (C4)
Drift Deposits (B3)	Leduction in Tilled Soils (C6)
Algal Mat or Crust (B4)	rface (C7)
Iron Deposits (B5)	n in Remarks)
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 <u>No </u> Depth (ir	.ches):
Water Table Present? Yes <u>No ^</u> Depth (ir	.ches): X
Saturation Present? Yes No ^ Depth (ir (includes capillary fringe)	ches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
Area well drained by good slope to the eas	t into water body at center of southern portion of property.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,

00.11	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: _4 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $4/5=80\%$ (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =
1 Triadica sebifera (Chinese tallow)	15	Y	FAC	FACU species x 4 =
<ul> <li>Sambucus canadensis (Elderberry)</li> </ul>	10	Y	FACW	UPL species x 5 =
2				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6	·			1 - Rapid Test for Hydrophytic Vegetation
7				
8	·			$\Box$ 3 - Prevalence Index is $\leq 3.0^1$
	25	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 12.5	20% of	total cover	5	
Herb Stratum (Plot size: <u>30 ft</u> )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Cyperus rotundus (Purple nut-sedge)	20	Y	FACW	be present, unless disturbed or problematic.
2. Sorghum halepense (Johnson grass)	10	Ν	FACU	Definitions of Four Vegetation Strata:
3. Rubus spp.	5	Ν	FAC	Tree March clarte evolution views 2 in (7.0 err) or
4. Sonchus asper (Spiny sow-thistle)	5	N	FACU	more in diameter at breast height (DBH), regardless of
5. Geranium maculatum (Wild geranium)	20	Y	FAC	height.
6. Vicia sativa (Narrow-leaf vetch)	30	Y	FACU	Sanling/Shrub Weady plants evoluting vines loss
7 Ambrosia trifida (Giant ragweed)	10	N	FAC	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
0				Herb – All herbaceous (non-woody) plants, regardless
3		·		
	·			Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	100			
50	100	= Total Cov	rer	
50% of total cover: 50	20% of	total cover	20	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:	20% of	total cover	:	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo	ow).	· · · ·		
FAC Neutral test = $2.1$ (negative)	500).			
Understory is fond along edge of cut-ou	er area	s		
Charles of y is folia along eage of out-ou		0.		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10 YR 3/1	100		<u></u>	. <u> </u>		Clay loam	
2-12	10 YR 3/2	100		<u></u>	<u> </u>		Clay loam	
6-12	10 YR 4/3	100			<u> </u>		Clay loam	
12-14	10 YR 4/3	80	10 YR 4/6	20			Clay loam	
<sup>1</sup> Type: C=Ce	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic Er Black Hi Hydroge Stratified Organic Stratified Organic 5 cm Mu Muck Pr 1 cm Mu Depleted Thick Da Coast P Sandy M Sandy R Stripped Dark Su	(A1) pipedon (A2) stic (A3) In Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P acky Mineral (A7) (LF esence (A8) (LRR U ack (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (I fucky Mineral (S1) (L Beyed Matrix (S4) tedox (S5) Matrix (S6) rface (S7) (LRR P, S	, T, U) RR P, T, U) ) e (A11) /ILRA 150/ .RR O, S)	Polyvalue Be     Thin Dark Su     Loamy Muck     Loamy Gleye     Depleted Mai     Redox Dark S     Depleted Dar     Redox Depre     Marl (F10) (L     Depleted Ocl     Iron-Mangan     Umbric Surfa     Delta Ochric     Reduced Ver     Piedmont Flo     Anomalous E	low Surfa rface (S9 y Mineral ed Matrix ( fat Surface (F k Surface (F k Surface (F k Surface ssions (F <b>RR U)</b> nric (F11) ese Mass ce (F13) (F17) <b>(MI</b> tic (F18) bodplain S Bright Loa	(F2) (F1) (LRR S, (F1) (LRR S, (F2) (F	RR S, T, U T, U) O) LRR O, P, , U) 0A, 150B) (MLRA 14 F20) (MLR	J)       1 cm I         2 cm I         Reduct         Piedma         Anoma         (ML         Red P         Very S         Other         T) <sup>3</sup> India         we         unl         PAA         A149A, 1530	Muck (A9) <b>(LRR O)</b> Muck (A10) <b>(LRR S)</b> ced Vertic (F18) <b>(outside MLRA 150A,B)</b> nont Floodplain Soils (F19) <b>(LRR P, S, T)</b> alous Bright Loamy Soils (F20) <b>RA 153B)</b> Parent Material (TF2) Shallow Dark Surface (TF12) (Explain in Remarks) cators of hydrophytic vegetation and tland hydrology must be present, ess disturbed or problematic.
Restrictive I	_ayer (if observed):							
Туре:								V
Depth (in	ches):						Hydric Soil	Present? Yes <u>^ No</u>
Remarks: Soils are hydric from depleted matrix. Area is well drained, but clay soils located in sample area.								

Project/Site: Parks Property- Lots 7, 40 through 43	<sub>Citv/County:</sub> Gei	smar- Ascension Parish	Sampling Date: 1-7-15
Applicant/Owner: Lew Parks		State: LA	Sampling Point: Site U8
Investigator(s). Hunter Guidry, Dustin Johnson	Section, Townshir	Bange: Section 22, T-10	-S, R-2-E
Landform (hillslope, terrace, etc.). Upland Forest	Local relief (conca	ve. convex. none): Convex	Slope (%). 0-1%
Subregion (I RR or MI RA). LRR O	.16883027390	l ong. 90.9949896016	0 Datum: NAD83
Soil Map Unit Name: Commerce silty clay loam		NWL classifi	cation: *NA
Are climatic / hydrologic conditions on the site typical for this time o	f vear? Yes X	No (If no explain in F	Remarks )
Are Vegetation N Soil N or Hydrology N significan	ntly disturbed?	Are "Normal Circumstances"	present? Yes X No
Are Vegetation N Soil N or Hydrology N paturally	nny distance:	(If needed, explain any answe	ers in Remarks )
SUMMARY OF FINDINGS – Attach site map showi	ing sampling poi	int locations, transects	s, important features, etc.
Hydrophytic Vegetation Present?     Yes     No       Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No       Remarks:	Is the Sam within a W	pled Area /etland? Yes	No <u>X</u>
*Area not mapped on the NWI. High woode	d area at the s	outhwestern portion	of property.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly)	Surface Soil	Cracks (B6)
Surface Water (A1)	(B13)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	B15) <b>(LRR U)</b>	🔟 Drainage Pa	atterns (B10)
L Saturation (A3) L Hydrogen Sulfic	de Odor (C1)	∐ Moss Trim L	ines (B16)
U Water Marks (B1) U Oxidized Rhizos	spheres along Living F	Roots (C3) Dry-Season	Water Table (C2)
	duced Iron (C4)	(Ce) Crayfish Bull	(co)
Algo Mat or Crust (P4)		$(C6)$ $\Box$ Saturation V	Position (D2)
	in Remarks)		(D2)
Inundation Visible on Aerial Imagery (B7)	in Kondikoj		L Test (D5)
Water-Stained Leaves (B9)		Sphagnum i	moss (D8) <b>(LRR T, U)</b>
Field Observations:			
Surface Water Present? Yes No X Depth (incl	hes):		
Water Table Present? Yes <u>No X</u> Depth (incl	hes):		
Saturation Present? Yes <u>No X</u> Depth (incl (includes capillary fringe)	hes):	Wetland Hydrology Prese	nt? Yes No_X
Describe Recorded Data (stream gauge, monitoring well, aerial pl	hotos, previous inspec	tions), if available:	
Pemorko:			
Area well drained by good along to the east	into lorgo wata	r hady found along	control portion of
Area well drained by good slope to the east	into large wate	r body lound along	central portion of
area.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species		
1. Ulmus americana (Am. elm)	20	N	FAC	That Are OBL, FACW, or FAC: 9 (A)		
2. Celtis laevigata (Sugarberry)	50	Y	FACW	Total Number of Dominant		
3. Quercus nigra (Water oak)	40	Y	FAC	Species Across All Strata: <u>10</u> (B)		
4. <u>Acer negunda (Box-elder)</u>	5	Ν	FACW			
5. Triadica sebifera (Ch. Tallow)	30	Ν	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 9/10=90% (A/I	B)	
6					,	
7				Prevalence Index worksheet:		
8				Total % Cover of: Multiply by:		
	145	= Total Cov	er	OBL species x 1 =		
50% of total cover: 72.5	20% of	total cover:	29	FACW species x 2 =		
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =		
1 Triadica sebifera (Ch. Tallow)	40	Y	FAC	FACU species x 4 =		
2 Quercus nigra (Water oak)	10	N	FAC	UPL species x 5 =		
2. Acer negunda (Box-elder)	20	N	FAC	Column Totals: (A) (B	3)	
Celtis laevigata (Sugarberry)	30	v	FACW			
	50	<u> </u>	TACW	Prevalence Index = B/A =		
5				Hydrophytic Vegetation Indicators:		
6				1 - Rapid Test for Hydrophytic Vegetation		
7						
8				$\square$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>		
	100	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
50% of total cover: <u>50</u>	20% of	total cover:	20			
Herb Stratum (Plot size: 30 ft )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must		
1. Pluchea camphorata (Camphorweed)	5	Ν	FACW	be present, unless disturbed or problematic.		
2 Acer negunda (Box-elder)	5	Ν	FAC	Definitions of Four Vegetation Strata:		
3 Rubus spp.	15	Y	FAC			
△ Galium aparine (Bedstraw)	5	N	FACU	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm)	or	
Lonicera japonica (Jap. honevsuckle)	15	Y	FAC	height.	JI	
S	10	N	FAC			
<ul> <li>Thelynteris kunthii (Fern, Southern shield)</li> </ul>	15	v	FACW	<b>Sapling/Shrub</b> – Woody plants, excluding vines, less	5	
Campsis radicans (Trumpet creener)	10		FAC			
8. <u>Campsis radicans</u> (Wild enion)	20		EACU	Herb – All herbaceous (non-woody) plants, regardles	S	
9. Allum canadense (wild onion)	20	ř	FACU	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						
	100	= Total Cov	er			
50% of total cover: 50	20% of	total cover:	20			
Woody Vine Stratum (Plot size:)						
1. Toxicodendron radicans (Poison ivy)	20	Υ	FAC			
2. Vitis rotundifolia (Muscadine vine)	30	Y	FAC			
3. Campsis radicans (Trumpet creeper)	10	N	FAC			
4						
5						
	60	- Total Cav		Hydrophytic		
EQ9/ of total acuser 30	20% of total cover: 12		12	Present? Yes $\times$ No		
	20% 01	total cover.				
Remarks: (If observed, list morphological adaptations belo	w).					
FAC Neutral test = 3:1 (positive)						

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox	k Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 2/2	100					Clay loam	
3-9	10 YR 4/2	100					Clay loam	
9-14	10 YR 4/3	98	7.5 YR 4/2	>2	С	Μ	Clay loam	
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise not	ted.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Hydric Soli Indicators: (Applicable to all LKRs, unless otherwise loted.)       Indicators for Problematic Hydric Solis :         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)         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)         Muck Presence (A8) (LRR P, T, U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Redox Depressions (F12) (LRR O, P, T)         Depleted Below 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 (F17) (MLRA 150A, 150B)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)								
Type:	ches):						Hydric Soil	Present? Yes No X
Remarks:							Tryano con	
S al	oils are hydric rea.	from d	epleted matrix	. Are	a is we	ell draine	ed, but cla	ay soils located in sample