Exhibit Y – Franklin Farm Wetland Delineation and Determination





Franklin Farm Wetland Delineation and Determination

WETLAND DELINEATION AND DETERMINATION

PREPARED FOR

Northeast Louisiana Economic Alliance Franklin Farm Mega Site

For an ~ 1440 acre parcel of land Located within partial Sections 27 & 34, Township 18 North, Range 8 East, And Section 3, Township 17 North, Range 8 East, Richland Parish, Louisiana

January 2008

By

Wildlife Technical Services, Inc.

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INTRODUCTION

Wildlife Technical Services, Inc. (WTSI) was retained by the Northeast Louisiana Economic Alliance to complete a wetlands delineation and determination on a parcel of land containing approximately 1,440.0 acres referred to as the Franklin Farm Mega Site located within the Holly Ridge Community in Richland Parish, Louisiana. The property is more particularly described as being within portions of Sections 27 and 34, Township 18 North, Range 8 East, and Section 3, Township 17 North, Range 8 East, all located in Richland Parish, Louisiana. The exact physical location of the property is shown on the attached copy of the U.S.G.S. Whitney Island South and Bee Bayou, Louisiana Quadrangle Map (Appendix I).

WTSI completed the wetland delineation and determination on January 3, 2007. The principal investigators for this project were Clay Cromwell, Dustin Simmons, Adam Goff and Bert Turcotte of WTSI. The project was completed using standard accepted procedures for wetland delineation and determination as established by the U.S. Army Corps of Engineers.

The following report contains:

- 1) methodology used for actual wetland determination;
- 2) a site description, including the observed ecological processes occurring on site; and
- 3) conclusions drawn from this study.

Appendices included are an integral and inseparable part of this report and are listed as **I**) copies of the Richland Parish, Louisiana General Highway Map, U.S.G.S. Whitney Island South and Bee Bayou, Louisiana Quadrangle Maps, 1999/2000 NASA LandSat Color photograph and 2004 color aerial photograph of the subject property; **II**) copies of the property site map showing the location of the wetland and "other waters of the United States," Global Positioning System (GPS) waypoint locations and wetland data point locations; **III**) completed copies of the Data Forms for Routine Wetland Determination from the 1987 Corps of Engineers' *Wetlands Delineation Manual*, including field notes; **IV**) a copy of the Richland Parish, Louisiana Soils Survey Map and related information; and **V**) photographs of selected property features.

METHODOLOGY

The overall goal of this project was to complete a comprehensive property review and assessment of all appropriate wetland features associated within the boundaries of the proposed Northeast Louisiana Economic Alliance – Franklin Farm Mega Site. The primary project scope was the delineation and determination of wetland areas associated with the property. A secondary project scope included obtaining concurrence of the wetland determination by the Regulatory Program of the U.S. Army Corps of Engineers (COE), Vicksburg District.

The initial phase of the project included assimilation of all available information related to the property that would help establish a historical perspective of the property and surrounding area, as well as to highlight the physical attributes of the property, the primary drainage patterns and the physical location of the suspected wetland areas and "other waters of the United States" present on the property. An integral component of this phase was the review of the 1999/2000 NASA LandSat color photograph and the 2004 color aerial photographic coverage of the subject property (Appendix I). Review of the U.S.G.S. topographic maps and the Richland Parish, Louisiana soil survey maps were also included as a part of this phase, as well as interviews with persons knowledgeable of the subject property.

Once the key physical aspects of the property were identified, a field review and assessment was conducted to identify the habitat or land use types present. A primary focus of this initial field assessment was to verify the presence of the primary drainages and other potential wetland areas identified from the aerial photographs and topographic maps covering the subject property.

The initial field review revealed that the property was primarily an upland site with a predominant open field habitat type interspersed with minor occurrences of forested habitats throughout. The significance of the open field upland habitat is primarily utilized for agricultural row crop purposes with the remaining portions of the site occupied by a bottomland hardwood forested complex type. The field assessment completed on the subject property revealed segment of four (4) Relatively Permanent Waters (RPW) with "Typical Year Round" flows and segments of two (2) RPW with "Seasonal" flows traversing portions of the subject property. The primary RPW with "Typical Year Round" flows traversing the central portion of the subject property. In addition, the field assessment revealed segments of three (3) Non-RPW's transecting portions of the subject property and one (1) open water pond habitat within the eastern portion of the site. The presence of the primary, secondary drainages and open water habitat would be considered as "other waters of the United States" based upon the current COE regulatory framework.

The field assessment completed covering the project site further revealed the presence of a forested wetland complex and herbaceous wetland complex each adjacent and/or abutting the presence of the primary and secondary drainages previously described.

Given the predominant upland and open field characteristics of the subject property, systematic transect lines were not employed in the field delineation methodology. Rather, wetland data points were established as verification of the known and/or suspected jurisdictional wetland areas or "other waters of the United States", and to confirm the presence of the primary upland open field habitat. A mapping system was employed whereby all the wetland habitats/boundaries and "other waters of the United States" were mapped on a property site map. The specific location of these wetland habitats/boundaries and "other waters of the United States" were verified on the site topographic maps and the 2004 color aerial photography.

Wetland delineation points were established using a systematic approach based upon spacing between points, observations of vegetative and topographic features, and transitions that were encountered in the field. The delineation points were spaced to insure adequate coverage of each of the predominant habitat types and the different habitat types within each of the predominant types. In some cases, as needed, wetland delineation points were randomly established at wetland/upland transitions that were encountered or to rule out observed characteristics, to help validate the data within the open field and forested uplands, and to aid in the field mapping of the wetland areas and "other waters of the United States". A total of twenty-three (23) points were identified throughout the project site. In addition, supplemental points were established between the delineation points to provide data on soils, vegetation and hydrology.

As wetland transition zones and/or boundaries were encountered throughout the property, the mapping effort was enhanced through the gathering of compass bearings and distances relative to wetland juxtaposition. Wetland delineation points were identified utilizing the Global Positioning System (GPS), and their location established on the site map relative to the GPS coordinates. The wetland transition zones and/or boundaries were then investigated and their position within the property was established and mapped accordingly. The in-field mapping was justified to the 2004 color aerial photograph utilizing accepted photo interpretation methods.

At each delineation point, specific observations and determinations were made using accepted U.S. Army Corps of Engineers' techniques for the delineation of wetland habitats and/or boundaries [Environmental Laboratory, 1987, Corps of Engineers' *Wetlands Delineation Manual* (and Supplemental Guidance), Technical Report Y-87-1, U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mississippi]. Soil samples were taken using either a soil probe or hand auger to a minimum depth of twelve (12) inches. Munsell Color Charts were used to reference soil matrix, mottle and hue. In addition, representative vegetative characteristics in the general locale of each point were identified and recorded. Hydrologic characteristics were noted at each plot location and a determination was made in the field as to whether or not the area was an upland or wetland area. All observations were documented on the "Data Form – Routine Wetland Determination" from the referenced 1987 Corps of Engineers' *Wetlands Delineation Manual*.

Site maps depicting the location of the jurisdictional wetland areas, "other waters of the United States," other upland habitats and/or land use types determined to be present on

the property and the location of the wetland delineation points are included as Appendix II. Copies of the data forms completed for each plot are also included as Appendix III.

SITE DESCRIPTION AND ECOLOGICAL PROGRESSION

The proposed Northeast Louisiana Economic Alliance – Franklin Farm Mega Site Property which has heretofore been described according to physical and geographic location is hereinafter described according to wetland classification, disturbance patterns, wetland quality and soils. Descriptions will be in general terms, and without specific chronology.

WETLAND CLASSIFICATIONS: Wetlands are typically defined by plants, soils and frequency and duration of flooding. The term "system" is used to describe the broad complex of interrelated components that define the ecological limits of a particular ecosystem. The subject property can best be described as a Palustrine System with Class/Subclass associates of forested and herbaceous wetlands with non-wetland and transitional open field and forested uplands. The principal drainage through the project site is maintained through West Fork Creek being considered as an RPW as well as secondary RPW's dissecting the limits of the Franklin Farm Mega Site Property. In general, storm water runoff flows to the south through West Fork Creek and unnamed tributaries of Hurricane Bayou.

Relatively Permanent Waters (RPW) with "Typical Year Round" Flows -RPW with "Typical Year Round" flows serve as the primary source of storm water runoff relief from within the boundaries of the subject property. The primary stream channel present within the site is West Fork Creek, dissecting the property in generally an east to west orientation. Other primary stream channels are unnamed tributaries of Hurricane Bayou, located to the south of the subject property. The site reconnaissance revealed the presence of West Fork Creek and segments of three (3) additional RPW with "Typical Year Round" flows present within the subject property. These streams may be characterized by well defined channels and the overall lack of any significant vegetative components within the stream channel. In some instances, hydrophytic vegetative components has established within the banks of the stream channel. This is due primarily from beaver activity within the stream disrupting the natural flows of the channel. RPW with "Typical Year Round" flows exhibit typical year round flows or perennial flows. The presence of the RPW with "Typical Year Round" flows identified within the limits of the project site would be considered as "other waters of the United States."

The soils matrix color within the RPW with "Typical Year Round" flows was observed as a 5/1 - 6/1 (gray) on the 10YR Munsell Soil Color chart with limited amounts of soil mottling present within the stream channels.

<u>Relatively Permanent Waters (RPW) with "Seasonal" Flows</u> – RPW with "Seasonal" flows are associated with the presence of the RPW with "Typical Year Round" flows identified within the project site and surrounding areas each atribiting in the storm water runoff relief through the interior portions of the site.</u> The site reconnaissance revealed the presence of two (2) RPW with "Seasonal" flows present within the subject property. The RPW with "Seasonal" flows may

be characterized by well defined stream channels with the overall lack of significant vegetative components within the channel. More specifically, these stream channels exhibit seasonal flows or intermittent flows. For the most part, these stream channels transect the open agricultural fields being utilized for storm water runoff relief. As a result, these drainages have been maintained through the course of the years as a part of the historic land use as agricultural row crop production. The presence of the RPW with "Seasonal" flows identified within the limits of the project site would be considered as "other waters of the United States."

The soils matrix color within the RPW with "Seasonal" flows ranges from a 5/1 - 6/1 (gray) to 5/2 (grayish brown) on the 10YR Munsell Soil Color chart. There is a soil mottle present (~15% - 45%) with a soil mottle color ranging from 4/3 - 5/3 (brown) to 5/6 (yellowish brown) on the 10YR chart.

Non-Relatively Permanent Waters (Non-RPW) - The field reconnaissance revealed segments of three (3) Non-RPW streams dissecting portions of the subject property. These secondary drainages are directly associated with the RPW with "Typical Year Round" flows and the RPW with "Seasonal" flows, previously discussed. Similarly to the RPW with "Seasonal" flows, these secondary drainages are primarily utilized for storm water runoff relief through the interior portions of the subject property. In some cases, these drainages have been constructed through the open agricultural fields to capture storm water runoff through the interior portions of the property. These stream channels may be characterized by shallow stream channels with the overall lack of significant vegetative components within the channel. The site reconnaissance further revealed that this drainage provides a source of surface storm water relief for a short duration after precipitation events in a typical year. Furthermore, runoff from rainfall is the primary source of water flow for the drain channels with no apparent ground water recharge. In addition, the soils and vegetative components along the top banks of the ephemeral drainage ditch are upland in nature.

Open Water Impoundment – One (1) open water impoundment habitat was identified within the central portion of the subject property. This open water habitat is located to the north of Burns Road and along the west boundary of West Fork Creek. The site reconnaissance revealed that this open water habitat was excavated for borrow purposes. However, this habitat is associated with the presence of West Fork Creek and an abutting forested wetland habitat. As a result, this open water habitat would be considered as jurisdictional waters.

Forested Wetland Abutting a Relatively Permanent Water (RPW)- As discussed, the Franklin Farm Mega Site is predominantly occupied by an open field habitat type that has historically been utilized for agricultural row crop production purposes. The field reconnaissance confirmed the presence of a forested wetland fringe habitat abutting either bank of West Fork Creek and its associated RPW dissecting the interior portions of the subject property. In

addition, a forested wetland habitat was identified within the southern portion of the site abutting and/or adjacent to an RPW. Characteristics exhibited include saturation in upper 12 inches, inundation and a predominant hydrophytic plant community throughout. The primary vegetative components include willow oak (*Quercus phellos*), green ash (*Fraxinus pennslyvanica*), red maple (*Acer rubrum*), American elm (*Ulmus Americana*) and overcup oak (*Quercus lyrata*) with several facultative wetland and obligate plant species throughout the understory stratum.

The soils matrix colors within the forested wetland habitat range from a 4/1 (dark gray), 5/1 - 6/1 (gray) to a 5/2 (grayish brown) on the 10YR Munsell Soil Color chart. There is a soil mottle (~25%) with a soil mottle color ranging from 4/3 - 5/3 (brown) present within these areas. Hydrologic indicators present include water stained leaves, swell butted trees, water marks and oxidized root channels in the upper 12 inches.

<u>Herbaceous Wetland Abutting a Relatively Permanent Water (RPW)</u> – As discussed, the Franklin Farm Mega Site is transected by a segment of West Fork Creek. This stream segment transects a predominant open field habitat type within the central and southern portions of the subject property. The field reconnaissance revealed the presence of an herbaceous wetland habitat or fringe habitat along either bank of the primary stream channel. The characteristics exhibited within the wetland habitats include saturation within the upper 12 inches and the presence of facultative wetland and obligate plant species throughout.

The soil matrix color within the herbaceous wetland areas ranges from a 5/2 (grayish brown), 6/2 (light brownish gray) to 6/3 (pale brown) on the 10YR Munsell Soil Color chart. There is a significant soil mottling present (~10% - 15%) with a soil mottle color ranging from 3/2 (very dark grayish brown), 5/2 (grayish brown) to 4/3 - 5/3 (brown) on the 10YR soil color chart. Hydrologic indicators within these areas include soil saturation in the upper 12 inches and drainage patterns in wetlands.

Non-Wetland and Transitional Forested and Open Field Uplands – The subject property is predominantly occupied by an open field upland habitat type that has historically been utilized for agricultural row crop production purposes. For the most part, the forested habitats are contained along primary and secondary drainages transecting the subject property. However, the significance of the site is occupied by an open field habitat type intensively managed for agricultural purposes.

Based upon coordination efforts with the Rayville, Louisiana, U.S.D.A. Natural Resources Conservation Service (NRCS), the property contains soils that would be considered as prime farmland soils. The site however, has been used for agricultural production purposes for as long as apparent records show. In addition, the significance of the open agricultural fields are considered as "Prior Converted Cropland" (PC). PC is defined by the Soil Conservation Service (Section 512.15 of the National Food Security Act Manual, August 1988) as

wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values.

The normal circumstances for PC croplands generally do not support a prevalence of hydrophytic vegetative components and as such are not subject to regulation under Section 404 of the Clean Water Act. In most cases, because of the magnitude of hydrological alterations that have most often occurred on PC croplands, such cropland minimally if at all, meet the hydrology requirements as described within the 1987 Corps of Engineers' *Wetlands Delineation Manual*. Given this, "waters of the U.S." do not include PC cropland. Notwithstanding the determination of an area's status as PC cropland by any other Federal Agency, for the purpose of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

If PC cropland is abandoned (512.17 National Food Security Act Manual as amended, June 1990) and wetland conditions return, then the area will be subject to regulation under Section 404 of the Clean Water Act. An area will be considered abandoned if for five (5) consecutive years there has been no cropping, management or maintenance activities related to agricultural production. In this case, positive indicators of all mandatory wetlands criteria, including hydrophytic vegetation, hydrology and hydric soils must be observed.

Disturbance Patterns –The Franklin Farm Mega Site is bordered along the east boundary via Highway 183, along the west boundary via Jaggers Lane and along the north boundary via Smalling Road. The site is also transected via Burns and Wade Road. As mentioned, the site is predominantly occupied by an open field habitat with little associated disturbances within the property. Minor disturbances are found within the stream bottoms and fringe areas as a result of land management activities. However, the primary streams have been left relatively undisturbed allowing the natural drainage pattern of the property to continue.

<u>Wetland Quality</u> – While some quality wetland functions occur within the subject property, associated natural processes could seemingly contraindicate any description as a "flow through" wetland system. For the most part, the wetland functions on the property are related to the storm water flows through the Relatively Permanent Waters (RPW's) transecting the property. Certainly, significant ground water recharge occurs within this site, and it is suspected that a certain amount of water quality enhancement, via filtration, also occurs. The subject property is not in a geographic location for primary aquifer recharge.

<u>Soils</u> – The subject property is located in what is referred to as the Forestdale-Perry Soils Association. This association consists of poorly drained, level soils that are rarely flooded. They formed in loamy and clayey alluvium. The subject property is also located in what is referred to as the Gilbert-Necessity-Egypt Soils Association. These soils are poorly drained and somewhat poorly drained soils that are level to gently undulating soils. These soils formed in thin loess and in the underlying loamy sediments. The more commonly occurring soils identified within the property are what are referred to as the Deerford silt loams. These soils are nearly level and somewhat poorly drained. It is on broad flats on terraces. Another commonly occurring soil type is the Dexter silt loams. These soils are very gently sloping with 1 to 3 percent slopes that are well drained. They are on long narrow, convex ridges on terraces. Individual areas range from 10 to 100 acres in size. Another commonly occurring soil type is the Foley silt loams. These soils are level and poorly drained soils on broad flats and in depressions located on terraces. It is subject to rare flooding events. Individual areas are irregular in shape and range from 15 to 80 acres in size. Slopes are dominantly less than 1 percent.

Another commonly occurring soil type is the Forestdale silty clay loam. These soils are level and poorly drained soils in depressions on the alluvial plans of streams and small drainageways that drain the terraces. These soils are subject to rare flooding. Individual areas are irregular in shape and range from about 10 to 500 acres in size. Slopes are mainly less than 1 percent. The Giger silt loams are also identified within the subject property. These soils are very gently sloping with slopes from 1 to 3 percent. These soils are moderately well drained. They are located on low ridges on terraces. Individual areas are long and narrow and range from 10 to 150 acres in size. Another commonly occurring soil type is the Gilbert silt loam. These soils are level and poorly drained soils located on broad flats and in depressions along drainagways on terraces. It is subject to rare flooding. Individual areas are irregular in shape and range from 10 to 300 acres in size. Slopes are less than 1 percent. The Necessity silt loams are also identified within the limits of the subject property. These soils are very gently sloping with slopes ranging from 1 to 3 percent. They are somewhat poorly drained located on low ridges and knolls on terraces. Individual areas are irregular in shape and range from 20 to 200 acres in size.

Copies of the Richland Parish, Louisiana Soil Survey Maps covering the subject property are included in Appendix IV.

FINDINGS AND CONCLUSIONS

From the historic review and wetland assessment completed on the subject property, it is concluded that the property is generally representative of the geographic area in which it is located. The topography of the site is very similar in nature to the adjoining property and the overall geographic area in which it is located.

The property is located within an area that has historically been rural in nature. The past land use activities have been primarily for agricultural row crop production purposes. Given this, intensive land management activities have been prevalent on the site.

The property is predominantly occupied by an upland open field habitat interspersed with forested habitats throughout. The principal drainage through the property is maintained through segments of four (4) RPW with "Typical Year Round" flows and two (2) RPW with "Seasonal" flows transecting the Franklin Farm Mega Site Property. The primary and secondary drainages present on the property are considered as "other waters of the United States." The preponderance of the jurisdictional wetland areas found on the property are "other waters of the United States" and are associated with the presence of the principal drainages throughout the site.

Based upon field investigations, it is determined that approximately 1,383.59 acres of the property is classified as upland (non-wetland) habitat. It was further determined that approximately 12.45 acres (~25,126 Linear Feet) are contained within the RPW with "Typical Year Round" flows, approximately 0.98 acres (~2,000 Linear Feet) are contained within the RPW with "Seasonal" flows, approximately 0.63 acres are contained within the Non-RPW and approximately 0.99 acres are contained within the non-isolated impoundment, all of which would be considered as "other waters of the United States." In addition, approximately 34.53 acres are contained within the forested wetland habitat and approximately 6.83 acres are contained within the herbaceous wetland habitat. Given this, it is determined that a total of approximately 56.41 acres of jurisdictional wetlands and "other waters of the United States" are present on the property. With a total land area of approximately 1,440.00 acres, this relates to an approximately 96% upland to 4% jurisdictional wetland and "other waters of the United States" mix (approximately 25:1 upland to wetland ratio).

The following is an account of the different habitat types that were found to be present on the subject property:

Forested and Open Field Uplands 1,383.59 Acres

RPW with "Typical Year Round" Flows ("Other waters of the U.S.")...... 12.45 Acres (~25,126 LF)

RPW with "Seasonal" Flows

TOTAL	.1,440.00 Acres
Non-Isolated Impoundment	0.99 Acres
Herbaceous Wetlands	6.83 Acres
Forested Wetlands	34.53 Acres
Non-RPW	0.63 Acres
("Other waters of the U.S.")	0.98 Acres (~2,000 LF)

APPENDIX I

- Richland Parish, Louisiana General Highway Map

- U.S.G.S. Whitney Island South and Bee Bayou, Louisiana Quadrangle Site Maps

- 1999/2000 NASA Land Sat Color Photograph

- 2004 Aerial Color Photograph





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APPENDIX II

- U.S.G.S. Whitney Island South and Bee Bayou, LA Quadrangle Maps Depicting Wetland Areas, Wetland Delineation Data Points and GPS Waypoints

- 2004 Aerial Color Photograph Depicting Wetland Areas



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Northeast Louisiana Economic Alliance Franklin Farm Mega Site Richland Parish, Louisiana Wetland Location Map





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NLEA Franklin Farm Mega Site Wetland Report

APPENDIX III

- Wetland Data Forms

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Franklin Farm</u> Applicant/Owner: <u>NELEA</u> Investigator: <u>WTSI</u>		Date: <u>1-3-03</u> County: <u>Richland</u> State: <u>LA</u>	
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : Transect ID:0 Plot ID:1.)	
VEGETATION		WPI ForstoDunto.D	
Dominant Plant Species Stratum Indicator	Dominant Plant Specie		
1. <u>Cettis laevigata OS FACU</u> 2. <u>Gleditsia triacanthas DS/US FAC</u> 3. <u>Quercus stellata OS FACU</u> 4 <u>Carya Illinsensis OS FACt</u> 5. <u>Ligustrum sinense US FAC</u> 6. <u>Smilax rotunditalia</u> US FAC	9 10 11 12 13 14		
8	15 16		
Percent of Dominant Species that are OBL, FACW or FAC <u>5/6-833</u>			
Remarks:			

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines	
Field Observations:Depth of Surface Water: $\cancel{14}$ (in.)Depth to Free Water in Pit: 212 (in.)Depth to Saturated Soil: 212 (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test	
Remarks: No hydrology prosed		

(Series and	Map Unit Name (Series and Phase): Gilbert - Egypt Silf looms, grafty undulating Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No				
Profile Des Depth (inches) 12 ³ "	scription: Horizon 3	Matrix Color (Munsell Moist) 4/3 1042	Mottle Colors (<u>Munsell_Moist)</u> 		Texture, Concretions, <u>Structure, etc.</u> <u>clay Isam</u>
Hydric Soil Indicators: Histosol Concretions Histic Epipedon High Organic Content in Surfa ce Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks:					

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	Is this Sampling Point Within a Wetland?	(Circle) Yes No
Remarks:	spland) saple.	

Approved by HQUSACE 3/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Farm Date: 1-3-08 Applicant/Owner: <u>NELEA</u> County: Richland Investigator: WTSI State: LA Do Normal Circumstances Exist on the site? (Yes) No Community ID : Is the site significantly disturbed (Atypical Situation)? Yes (No) Transect ID: 1.0 Is the area a potential Problem Area? Yes (No Plot ID: (If needed, explain on reverse.) WP2 VEGETATION Coltow Cotonion Dominant Plant Species Stratum Indicator **Dominant Plant Species** Stratum Indicator 1. Fraxinus pennsylvanica OS FACW 9. Quercus Igrata US OBL 2. Acer negunds 05 FACW 10. /lex decidua US FACW-05 FACW-3. Quercus phellos 11._____ -----Smilax rotunditalia US FAC 12._____ -----US FAC-5. Lonicera japonica 13._____ _____ 6. Campsis radicans US FAC 14._____ ------7. Caryo illnoensis US FACT 15.____ 8. Sabal minor US FACW 16. ____ -----9/10=90% Percent of Dominant Species that are OBL, FACW or FAC

Remarks:

(excluding FAC-).

Typical vegetation knowload

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines	
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):	
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12"	
Depth to Free Water in Pit:	Water-Stained Leaves	
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)	
Remarks:		
within Porestal Labital.		

Map Unit Name (Series and Phase): Gilbert-Egypts: IF hans, genty undulating Drainage Class: Taxonomy (Subgroup): Field Observations Confirm Mapped Type? Yes No					
<u>Profile De</u> Depth <u>(inches)</u> 	Secription: Horizon 3 3 3 3	Matrix Color (<u>Munsell_Moist)</u> 	Mottle Colors (Munsell Moist) /4 10-172	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u>
Hydric Soil Indicators: Concretions Histic Epipedon Sulfidic Odor Aquic Moisture Regime Listed on Local Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks:					

Hydrophytic Vegetation Present? Yes No (0 Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	Circle)	Is this Sampling Point Within a Wetland?	(Circle) Yes No
Remarks:		Brists weller	

Approved by HQUSACE 3/92

DATA FORM **ROUTINE WETLAND DETERMINATION**

(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Franklin Farm</u> Applicant/Owner: <u>NELEA</u> Investigator: <u>WTSI</u>			Date: <u>1-3-08</u> County: <u>Richland</u> State: <u>LA</u>
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)		Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:
VEGETATION		W1	P3 Trasitional
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	ies <u>Stratum</u> Indicator
1. Juniperus Virginiana	05 FACU-	9. Lonicera japo	snica US FAC-
2. <u>Quercus pagoda</u>	OSIMS FACT	10. Prunus serotine	a <u>US</u> FACU
3. Quercus phellos	OS FACW.	11	
4. Duercus lyrata	05 OBL	12	
5. Quercus nigra	OS FAC	13	
6. Carya illinoensis	OS FACT	14	
7. Ulmus americana	OSLUS FACW	15	
8. Sabal minor	US FACW	16	
Percent of Dominant Species that are OBL, FACW or FAC 7/10 = 70 Z,			
Remarks:			
	Trans : 4.0 mol	habitat.	

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water:/ (in.)	Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit: <u>>/2 "</u> (in.)	Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil: <u>>/2 ''</u> (in.)	FAC-Neutral Test Other (Explain in Remarks)
Remarks:	
L	bo hudrology presal.

S	0	11	_S
S	0	11	_S

Map Unit N (Series and Taxonomy	I Phase): (Gill	pext-Egyptsilt	loans, gently u		age Class: Observations onfirm Mapped Type? (Yes) No
$\frac{\text{Profile Depth}}{\text{Depth}}$ $\frac{1/2^{n}}{24''}$	scription: Horizon D	Matrix Color (Munsell Moist) <u>5/4 16 v</u> R <u>5/3 16 v</u> R	Mottle Colors (Munsell_Moist) 5/10-172	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
	·····				
Hydric Soil Indicators: Concretions Histosol Concretions Histic Epipedon High Organic Content in Surfa ce Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks:		Soils	ore transitio	onal bupla	-0

Hydrophytic Vegetation Present? Yes No. (Circle) Wetland Hydrology Present? Yes No. Hydric Soils Present? Yes No.	Is this Sampling Point Within a Wetland?	(Circle) Yes No
Remarks:		

Approved by HQUSACE 3/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Franklin</u> Applicant/Owner: <u>NELEA</u> Investigator: <u>WTSI</u> Do Normal Circumstances Exi	Date: <u>1-3-08</u> County: <u>Richland</u> State: <u>LA</u> Community ID :		
Is the site significantly disturbe Is the area a potential Problem (If needed, explain on rever	n Area?	Yes No Yes No Yes No	Transect ID: <u>7.0</u> Plot ID: <u>7.0</u>
VEGETATION		WP7	to rest. O wetle.
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	es <u>Stratum Indicator</u>
1. Querous phellos	os/ms FACW-	9	
2. Quercus lyrata	OS OBL	10	
3. Celtis laevigata	ms FACW	11	
4. Sabal minor	US FACW	12	
5. Forestiera acuminata	US OBL	13	
6. Ulmus crassifolia	US FAC	14	
7. Smilax rotunditolia	US FAC	15	
8. Ulmus americana	US FACW	16	
Percent of Dominant Species tha (excluding FAC-).	t are OBL, FACW or FAC	100 2	
Remarks:			

)

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated V Saturated in Upper 12 Inches Vater Marks Drift Lines
Field Observations: 1' - pools	Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water:/\(Secondary Indicators (2 or more required):
Depth to Free Water in Pit: 22 (in.)	Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Remarks:	

	I Phase):	pertsilt laim		Field	age Class: Observations onfirm Mapped Type? Yes No
Profile Des Depth (inches)	scription: Horizon	Matrix Color (<u>Munsell Moist)</u> 5/1 10 YR	Mottle Colors (Munsell Moist) 5/4 18-/12	Mottle <u>Abundance/Contrast</u> /094	Texture, Concretions, <u>Structure, etc.</u> <u>Clay Isa</u>
Hydric Soil Indicators: Concretions Histosol Concretions Histic Epipedon High Organic Content in Surfa ce Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks:					

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:		fe	orested	wetlad

Approved by HQUSACE 3/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Frankling Farm</u> Applicant/Owner: <u>NELER</u> Investigator: <u>WTSI</u>		Date: <u>1-3-08</u> County: <u>Richlan d</u> State: <u>LA</u>
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situ Is the area a potential Problem Area? (If needed, explain on reverse.)	uation)? Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:
VEGETATION	W	198 forest. Dwatten
Dominant Plant Species Stratum Ind	icator Dominant Plant Specie	es <u>Stratum</u> Indicator
1. Fraxinus pennsylvanica bs FR	9	
2. Quercus phellos OS FA	<u>CW</u> - 10	
3. Quercus nigra OS FR	<u>AC</u> 11	
4. Liquidambar styraciflua OS FR	12	
	ACW 13	
6. Cornus formina US FA	1CW- 14	
7. Sabal minor US FR	15	
8	16	
Percent of Dominant Species that are OBL, FACV (excluding FAC-).		5
Remarks:	Q wetle 9 hobital.	

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:Depth of Surface Water: $\mathcal{D} \mathcal{A}$ (in.)Depth to Free Water in Pit: $\geq l \geq 2^{-n}$ (in.)Depth to Saturated Soil: $\geq l \geq 2^{-n}$ (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks:	

(Series and	Map Unit Name (Series and Phase): Gibrat Silt Ioung Drainage Class: Taxonomy (Subgroup): Field Observations Confirm Mapped Type? Yes Notes					
Profile Des Depth (inches) /2 "	<u>Horizon</u> : <u>Horizon</u> 	Matrix Color (<u>Munsell Moist)</u> 	Mottle Colors (Munsell Moist) 4/6 10412	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u> <u>clay loam</u>	
Hydric Soil Indicators: Concretions Histosol Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Other (Explain in Remarks)						
Remarks:		sample T	eo'nd			

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No Yes No Yes No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	Typia	0 6	ested wetled sample

Approved by HQUSACE 3/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Franklin Farm</u> Applicant/Owner: <u>NELEA</u> Date: 1-3-08 County: Richland Investigator: WTSI State: LA (Yes) Do Normal Circumstances Exist on the site? Community ID : ____ No Is the site significantly disturbed (Atypical Situation)? Transect ID: 10 Yes (No) Is the area a potential Problem Area? Yes No Plot ID: 1.6 (If needed, explain on reverse.) WPID Formatio upland VEGETATION Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Liauidambar styracitlua OS FACt 9._____ 2. Quercus nigra 05 FAC 10._____ -----3. Melia azedarach US FAC 11._____ _____ US FACW 4. Illmus americana 12._____ 13._____ ____ -----6. 14._____ -----------_____ 7. 15._____ _____ 8. 16._____ Percent of Dominant Species that are OBL, FACW or FAC 100 23 (excluding FAC-). Remarks: Typical unplative comparats.

 Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available 	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:Depth of Surface Water: \mathcal{N} / Δ (in.)Depth to Free Water in Pit: \mathcal{N} / Δ (in.)Depth to Saturated Soil:	Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks:	o hydrology prisel

	I Phase):	ert-Egypt silt to	Sector and the sector of the s	Field	age Class: Observations onfirm Mapped Type? (Yes) No	
Profile Des Depth (inches)	<u>scription</u> : <u>Horizon</u> 	Matrix Color (Munsell Moist) 5/3 1698	Mottle Colors (<u>Munsell Moist)</u> 	Mottle <u>Abundance/Contrast</u> ろらし	Texture, Concretions, <u>Structure, etc.</u> <u>silty clay loam</u>	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors			Concretions High Organic Content in Surfa ce Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)			
Remarks:		5a:1s	are tras.	liqued to upl	o. D.	

Hydrophytic Vegetation Present? (Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	Is this Sampling Point Within a Wetland?	(Circle) Yes No
Remarks:) so-5-le	

Approved by HQUSACE 3/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Farm Date: 1-3-08 Applicant/Owner: <u>NELEA</u> County: Richland Investigator: WTSI State: LA Yes) Do Normal Circumstances Exist on the site? No Community ID : Is the site significantly disturbed (Atypical Situation)? Yes Transect ID: (No_ 1.0 Is the area a potential Problem Area? Yes No Plot ID: 1. 7 (If needed, explain on reverse.) WP12 Forestal water VEGETATION Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Quercus lyrata 05 OBL 9._____ -----2. Liquidambar styraciflua 05 FACT 10._____ 3. Carya x lecontei 05 OBL 11._____ -----05/US FACW-4. Quercus phellos 12. _____ _____ 5. Celtis laeviaata ms/us FACW 13._____ -----6. Sabal miner US FACW 14._____ -----7. Acer rubrum US FAC 15._____ _____ 8 16.__ -----_____ Percent of Dominant Species that are OBL, FACW or FAC 1003 (excluding FAC-). Remarks:

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Vater Marks Drift Lines		
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):		
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12"		
Depth to Free Water in Pit: $2iz^{\prime\prime}$ (in.)	∕_ Water-Stained Leaves Local Soil Survey Data		
Depth to Saturated Soil:	FAC-Neutral Test 5? ⊖ Other (Explain in Remarks)		
Remarks: Saturation on surface			

Map Unit Name (Series and Phase): Gilbert Silt Iban Taxonomy (Subgroup):			Field	Drainage Class: Field Observations Confirm Mapped Type? (Yes) No	
Profile De Depth (inches) 24''	<u>Boription</u> : Horizon 	Matrix Color (Munsell Moist) 5/1 10 yr	Mottle Colors (Munsell Moist) 4/6 10 YR	Mottle <u>Abundance/Contrast</u> <u>15 Z</u>	Texture, Concretions, Structure, etc.
Hydric Soil Indicators: Concretions Histic Epipedon High Organic Content in Surfa ce Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks: boil clay - texture					

Hydrophytic Vegetation Present? Ves No (Circle) Wetland Hydrology Present? Ves No Hydric Soils Present? Ves No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	forst. O welle O

Approved by HQUSACE 3/92
Project/Site: Franklin Farm Date: 1-3-08 Applicant/Owner: County: Richland Investigator: WITSI State: LA Do Normal Circumstances Exist on the site? Yes No Community ID : Is the site significantly disturbed (Atypical Situation)? Yes (No) Transect ID: Is the area a potential Problem Area? Yes No Plot ID: (If needed, explain on reverse.) WP13 sample within VEGETATION 10. ~. Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Rubus spp. US FACU 9._____ _____ 2. Verbena brasiliensis US FAC-10._____ _____ 11._____ 3. _____ _____ 12._____ _____ _____ 13._____ 5. _____ _____ 6. 14._____ -----------15. _____ 7. _____ _____ 8. 16._____ _____ Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: uselation throughout Ordin. Man-mode Non-RPW

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: 11 Depth to Free Water in Pit: Surface (in.) Depth to Saturated Soil:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Droin - Monn male Dise	cting fields.

(Series and	Map Unit Name (Series and Phase): <u>Gilbert Egypt Silt loans, grathy Undulation</u> grainage Class: Field Observations						
Taxonomy	Taxonomy (Subgroup): Confirm Mapped Type? Ves No						
Profile Des Depth (inches) 12 "		Matrix Color (Munsell Moist) 	Mottle Colors (<u>Munsell Moist)</u> 5/10 107R	Mottle <u>Abundance/Contrast</u> <u>45%</u>	Texture, Concretions, <u>Structure, etc.</u> <u>5:Hy clay loa</u>		
Hydric Soil Indicators: Concretions Histic Epipedon High Organic Content in Surfa ce Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)							
Remarks:		Locatio	poils are t within fie	r_{0} siteral.			

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	No (Circle) No No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:		s within a Won-RPW in traspoting open og fiellOs.

Project/Site: <u>Franklin Farm</u>	Date: <u>1-3-08</u>
Applicant/Owner: <u>NELEA</u>	County: <u>Richland</u>
Investigator: <u>WTSI</u>	State: <u>LA</u>
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID:

VEGETATION

WP	14
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r)	rse	along	Qro'n
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		

		Nor	berroos fringe along		
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. Ludvigia alterniflora	US OBL	9			
2. Polygonum hydropiper	US OBL	10			
3. <u>Salix nigra</u>	<u>ms</u> OBL	11			
4. Juncus spp.	US OBL	12			
5. Cephalanthus occidental	is us obl	13			
6. Populus deltoides	us/ms FAC+	14			
7. Fraxinus pennsylvanica	US FACW	15			
8		16			
Percent of Dominant Species that a (excluding FAC-).	are OBL, FACW or FAC	100 23			
Remarks: Vesetation is through channel wast Furk Creak					

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines			
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):			
Depth of Surface Water:(in.) Depth to Free Water in Pit:	Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)			
Depth to Saturated Soil:				
Remarks:				
~20' w'De Harbona.	our tringe.			

	I Phase): <u>+</u> D	restdale silty		Field	age Class: Observations onfirm Mapped Type? Yes No
Profile Des           Depth           (inches)           /2 "	<u>scription</u> : <u>Horizon</u>	Matrix Color ( <u>Munsell Moist)</u> 	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u>
	_ Histosol _ Histic Epipeo _ Sulfidic Odor _ Aquic Moistu _ Reducing Co	r ire Regime		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydrio Other (Explain in Remar	oils List c Soils List
Remarks:	5.	aple alors	oose of	west Forle (	reot.

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No Yes No Yes No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	1Jer	olors	us Wetle Offinge eiterbal
			Approved by HQUSACE 3/92

Project/Site: <u>Franklin</u> Applicant/Owner: <u>NELE</u> Investigator: <u>WT</u>				Date: <u>1-3-0⁻⁸</u> County: <u>Richland</u> State: <u>LA</u>	
Do Normal Circumstances Exist Is the site significantly disturbed Is the area a potential Problem (If needed, explain on revers	-	Yes Yes Yes	No No No	Community ID : Transect ID: Plot ID:/./O	
VEGETATION				WP16	Aerbeceous fringe
Dominant Plant Species	<u>Stratum</u> Ir	ndicator	Dominar	t Plant Specie	es <u>Stratum</u> Indicator
1. Cuperins Sppi	<u>us (</u>	SBL	9		
2. Juncus spp.	US O	BL	10		
3. Salix nigra	ms o	BL	11		
4. Ludwigia peploides	US O	BL	12		
5. Cephalanthus occidentalis	US C	BL	13		
6			14		
7			15	·	
8	<u> </u>		16		
Percent of Dominant Species that a (excluding FAC-).	are OBL, FA	CW or FAC			
Remarks: Norb	000005	wetle 9	friege	alons	west Fork Crask

Recorded Data (Describe i Stream, Lake, o Aerial Photograp Other No Recorded Data Availal	r Tide Gauge bhs	Wetland hydrology Indicators:
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	(in.) C <u>surfor (</u> in.) C <u>surfor</u> (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks:	sample alors	fringe area of Creals

	I Phase): <u>+00</u>	estdale sitty clo	Field	Drainage Class: Field Observations Confirm Mapped Type? (Yes) No		
Profile Des Depth (inches)	scription: Horizon	Matrix Color (Munsell_Moist)	Mottle Colors (Munsell_Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
12**	ß	5/110-12	5/3 10-12	103	clay loa_	
	Indicators:		. <u></u>			
Hydric Soil Indicators:      Concretions        Histic Epipedon      High Organic Content in Surfa ce Layer Sandy Soils        Sulfidic Odor      Organic Streaking in Sandy Soils        Aquic Moisture Regime      Listed on Local Hydric Soils List        Beducing Conditions      Listed on National Hydric Soils List        Gleyed or Low-Chroma Colors      Other (Explain in Remarks)						
Remarks:						

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
	Harbaceous wetled hobital. along back of west Fork Creek. a) by formers,

Project/Site: 'Franklin Farm Date: 1-3-08 Applicant/Owner: <u>NELEA</u> County: Richland Investigator: WTSI State: LA (Yes) Do Normal Circumstances Exist on the site? No Community ID : Transect ID: _____ Is the site significantly disturbed (Atypical Situation)? Yes No) Is the area a potential Problem Area? 1.11 Yes Plot ID: No (If needed, explain on reverse.) West Forle Crael WP17 VEGETATION Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Salix nigra 1. Salix nigru 2. Ludwigia peploides 6BL MS 9._____ US OBL 10._____ ······ US OBL 11._____ US OBL 4. Cyperus spp. _____ 12.____ 5. Cephalanthus occidentalis US OBL 13. _____ 6. Ulmus thomasii US FAC 14._____ _____ _____ 15._____ _____ 8. 16._____ Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 10020 Remarks: saple is write upst Forthe Crack

, FC
[.] 12"
- 1

	I Phase): <u>try</u>	esidale. Silty c	8		Field	age Class: Observations Infirm Mapped Type? Yes No	
Profile Des Depth (inches)	scription: Horizon	Matrix Color <u>(Munsell_Moist)</u>	Mottle Colo (Munsell_M		Mottle <u>Abundance/Contrast</u>	Texture, Concretions, Structure, etc.	
<u>12 "</u>	<u> </u>	5/1 104R	310 7.	54R	1575	clay loam	
		<u></u>					
Hydric Soil				C	Concretions		
	Histosol       Concretions         Histic Epipedon       High Organic Content in Surfa ce Layer Sandy Soils         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Réducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks)						
Remarks:							

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland?
Remarks:	ſ		le is along obje of whee wetlad fringe dors balls.

Project/Site: Franklin Applicant/Owner: NELEA Investigator: WTSI	Date: <u>1-3-08</u> County: <u>Richland</u> State: <u>L</u> H		
Do Normal Circumstances Exis Is the site significantly disturbed Is the area a potential Problem (If needed, explain on revers	d (Atypical Situation)? Area?	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:
VEGETATION		WP 18	fornsted with a O fringe
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	es <u>Stratum Indicator</u>
1. Salix nigra	MS OBL	9. Forestiera acur	ninata US OBL
2. Fraxinus pennsylvanica	05 FACW	10	
3. Quercus lyrata	DS DBL	11	
4. Quercus phellos	OS FACW-	12	
5. Cephalanthus occidental	IS US OBL	13	
6. Celtis laevigata	MS FACW	14	
7. Brunnichia ovata	U.5 03L	15	
8. Campsis radicans	US FAC	16	
Percent of Dominant Species that (excluding FAC-).	are OBL, FACW or FAC	100 3	
Remarks: forestes	) wetlend fring	se alons balls o	fwee.

Recorded Data (Describe in Remarks):          Stream, Lake, or Tide Gauge         Aerial Photographs         Other         No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines	
Field Observations:Depth of Surface Water: $\mathcal{N}/\mathcal{N}$ (in.)Depth to Free Water in Pit: $212 \ \ensuremath{\mathfrak{C}}$ (in.)Depth to Saturated Soil: $\mathcal{O}_{U}$ face (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	
Remarks: fringe along balls of	wrc	

(Series and	Map Unit Name (Series and Phase): <u>Fryest date silly day barn</u> Drainage Class:         Taxonomy (Subgroup):       Field Observations Confirm Mapped Type? (Yes) No							
Taxonomy	(Subgroup):		Cc	onfirm Mapped Type? Yes No				
Profile Des Depth (inches) 	<u>Horizon</u>	Matrix Color (Munsell Moist) 	Mottle Colors ( <u>Munsell Moist)</u> 	Mottle <u>Abundance/Contrast</u> <u>/ ð 7/a</u>	Texture, Concretions, Structure, etc.			
	Hydric Soil Indicators:        Concretions          Histosol        Concretions          Histic Epipedon        High Organic Content in Surface Layer Sandy Soils          Sulfidic Odor        Organic Streaking in Sandy Soils          Aquic Moisture Regime        Listed on Local Hydric Soils List          Reducing Conditions        Listed on National Hydric Soils List          Gleyed or Low-Chroma Colors        Other (Explain in Remarks)							
Remarks:		Locard	ohro-a so:	Ь.				

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	No (Circle) No No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	Forda	welled habital

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Project/Site: <u>Franklin</u> Applicant/Owner: <u>NELE</u> Investigator: <u>WTST</u>	Date: <u>1-3-08</u> County: <u>Richland</u> State: <u>LA</u>				
Do Normal Circumstances Exis Is the site significantly disturbed Is the area a potential Problem (If needed, explain on revers	Community ID : Transect ID: Plot ID:				
VEGETATION			WP21 Forestad wetter Ofring.		
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	es Stratum Indicator		
1. Fraxinus pennsylvanica	DS FACW	9			
2. Quercus lyrata	OS OBL	10			
3. Ulmus americana	MS FACU	11			
4. Ligustrum sinense	US FAC	12			
5. Sabal minor	U.S FACH	13			
6		14			
7		15			
8		16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks:	ipical vesetatio	e co-porels	alons ball of Creek		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water: $\cancel{\sqrt{/2}}$ (in.)	Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit: $2^{\prime\prime}$ (in.)	Water-Stained Leaves
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Remarks:	
frinse along loc	ale art Creek

(Series and	Map Unit Name         (Series and Phase):       Forest date Sty day 102m         Taxonomy (Subgroup):       Drainage Class:         Confirm Mapped Type?       Feel Observations						
Profile Desth           Depth           (inches)           /2"           _24"	<u>scription</u> : <u>Horizon</u> <u>13</u> 	Matrix Color (Munsell Moist) 5/1 10412 5/2 10412	Mottle Colors ( <u>Munsell Moist)</u> <u>4/4</u> (2472 <u>4/4</u> 10472	Mottle <u>Abundance/Contrast</u> <u> </u>	Texture, Concretions, Structure, etc. 		
Hydric Soil Indicators:      Concretions        Histic Epipedon      Concretions        Sulfidic Odor      Organic Streaking in Sandy Soils        Aquic Moisture Regime      Listed on Local Hydric Soils List        Reducing Conditions      Listed on National Hydric Soils List        Gleyed or Low-Chroma Colors      Other (Explain in Remarks)							

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	fe	nest.D	welle Ohabital along bal of Crale
			Approved by HOUSACE 2/02

Project/Site: $Franklin Farm$ Applicant/Owner: $N \equiv L \equiv A$ Investigator: $W \equiv S \equiv$		Date: <u>//3/08</u> County: <u>Richlan9</u> State: <u></u> a.
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:/ , /
VEGETATION	<u></u>	foresto wall of fring wp+ 27

#### VEGETATION

Dominant Plant Species	<u>Stratum</u>	Indicator	Dominant Plant Species	Stratum Indicator
1. Cephalauthus occidentals	<u>wis</u>	OH	9	
2. Gleditsia triaumthos	<u> </u>	FAC	10	
3. Fraxinos pennsyluania	0S	FACW	11	
4. Queveus phellos	05	FAC W-	12	
5			13	
6			14	
7			15	<u></u>
8			16	
Percent of Dominant Species that are OBL, FACW or FAC				
Remarks:				
	1	pically	unsolative contronals all	ors lop leal.

Řecorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated (in pools) Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:         Depth of Surface Water:         1 " (in.)         Depth to Free Water in Pit:         Surface (in.)         Depth to Saturated Soil:	
Remarks: OID more Datis	of changel

Map Unit Name (Series and Phase): <u>brestate sitty clay loan</u> Drainage Class:         Field Observations Confirm Mapped Type? Yes					
Profile Des Depth (inches) 	<u>Horizon</u>	Matrix Color ( <u>Munsell Moist)</u> ///////////////////////////////	Mottle Colors (Munsell Moist) 	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u> Silly Clay loom
	Indicators:				
	_ Histosol _ Histic Epiped _ Sulfidic Odor _ Aquic Moistu _ Reducing Co	re Regime		Concretions High Organic Content in Organic Streaking in Sa Listed on Local Hydric S Listed on National Hydri Other (Explain in Remai	Soils List ic Soils List
Remarks:					

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:			

Project/Site: Franklin Farm Applicant/Owner: <u>A/ELEA</u> Investigator: <u>NTST</u>		Date: <u>1/3/08</u> County: <u>18ch/a.0</u> State: <u>2</u> <u>4</u>
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:

#### VEGETATION

Agricultural Field

WT=1 2	8
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Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1	·	9	
2	·····	10	<u> </u>
3		11	
4/		12	
5		13	
6	······	14	····
7		15	
8		16	
Percent of Dominant Species that a (excluding FAC-).	are OBL, FACW or FAC		
Remarks: സ്	on agricoltural	fielQ.	

Recorded Data (Describe in Remarks):     Stream, Lake, or Tide Gauge     Aerial Photographs     Other     No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water: $_ \bigcirc / \stackrel{\land}{\sim} _$ (in.)	Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit: $22^{11}$ (in.)	Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:/(in.)	FAC-Neutral Test Other (Explain in Remarks)
Remarks:	
lo hys	Drology presal.

Map Unit Name (Series and Phase): <u>Gilbert - Egypt Silt Joans, gently undulation</u> prainage Class:								
	Taxonomy (Subgroup): Yes No							
Profile Des Depth (inches) 2.4."	scription:           Horizon	Matrix Color ( <u>Munsell Moist)</u> 	Mottle Colors ( <u>Munsell Moist)</u>	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u> <u>Clay</u> Hewbere			
Hydric Soil Indicators:      Concretions        Histosol      Concretions        Histic Epipedon      High Organic Content in Surfa ce Layer Sandy Soils        Sulfidic Odor      Organic Streaking in Sandy Soils        Aquic Moisture Regime      Listed on Local Hydric Soils List        Reducing Conditions      Listed on National Hydric Soils List        Gleyed or Low-Chroma Colors      Other (Explain in Remarks)								
Remarks: Soils nie clay tautura, monipulated via forming classified as PC								

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	No No No	Is this Sampling Point Within a Wetland?	(Circle) Yes No
Remarks:				

Project/Site: Franklin Farm Date: 13/08 Applicant/Owner: NELE A County: Richland Investigator: WT 51 State: LĀ Yes Do Normal Circumstances Exist on the site? Community ID : NQ Is the site significantly disturbed (Atypical Situation)? No Transect ID: Yes Is the area a potential Problem Area? Plot ID: Yes No (If needed, explain on reverse.)

VEGETATION

Forested wetle O

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Sabal minor	US FACW	9	
2. Ulmus americana	MS FACW	10	
3. Celtis laevigata	MS/05 FACW	11	
4. Quercus lyrata	OS OBA	12	
5		13	
6		14	
7		15	<u> </u>
8		16	
Percent of Dominant Species (excluding FAC-).	s that are OBL, FACW or FAC	100 L	
Remarks:	Typical forestal	wetter D hobitat along b	ande
		of whe	

#### HYDROLOGY

Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: <u> んん</u> (in.) Depth to Free Water in Pit: <u> フィント</u> (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil: <u>Suffére</u> (in.)	Other (Explain in Remarks)
Remarks:	

1:1Pt 29

S	0	I	L	S
S	0	I	L	S

(Series and	Map Unit Name         (Series and Phase):       Forestdale_sity_day_loan         Taxonomy (Subgroup):       Field Observations						
Profile Des Depth (inches) 	<u>Horizon</u>	Matrix Color (Munsell Moist) 	Mottle Colors (Munsell Moist) <u>4/4104</u> 72	Mottle <u>Abundance/Contrast</u> パウ な。	Texture, Concretions, <u>Structure, etc.</u> Silly, Clay loom		
Hydric Soil Indicators:							
Remarks:	Remarks: Low-ohrona Soil adlors.						

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:			

Project/Site: Franklin Farm Applicant/Owner: <u>NELEA</u> Investigator: <u>wtst</u>	Date: <u>//3/08</u> County: <u>Richla O</u> State: <u>L</u>	
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	YesNoCommunity ID :YesNoTransect ID:1.0YesNoPlot ID:1.0	

#### VEGETATION

VEGETATION			Drate	wpt 32			
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	<u>Stratum</u>	Indicator			
1		9					
2		10	· <u> </u>				
3		11					
4 A		12					
5 <i>N</i> A		13					
6		14					
7		15					
8		16					
Percent of Dominant Species that are OBL, FACW or FAC							
Remarks: Within	Planted Ag.	1.10/d					

Recorded Data (Describe in Remarks):         Stream, Lake, or Tide Gauge        Aerial Photographs        Other        No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water: <u>2</u> (in.)	─ Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit:	Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Remarks: RPW tre	-sections open as field.

(Series and	Map Unit Name         (Series and Phase):       Forestale Sity clay loan         Taxonomy (Subgroup):       Drainage Class:    Taxonomy (Subgroup):							
Profile De:           Depth           (inches)	<u>Horizon</u>	Matrix Color (Munsell Moist) /2	Mottle Colors (Munsell Moist) 	Mottle <u>Abundance/Contrast</u> <u>IU</u>	Texture, Concretions, <u>Structure, etc.</u> <u>Sandy Chy bann</u>			
Hydric Soil Indicators:      Concretions        Histosol      Concretions        Histic Epipedon      High Organic Content in Surfa ce Layer Sandy Soils        Sulfidic Odor      Organic Streaking in Sandy Soils        Aquic Moisture Regime      Listed on Local Hydric Soils List        Reducing Conditions      Listed on National Hydric Soils List        Gleyed or Low-Chroma Colors      Other (Explain in Remarks)								
Remarks:		Soils Top balk Dioin	within Dr within Do so intrion ci	-oin 5. fuilo. 9.				

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No	
Remarks:	RPW Jow"	

Project/Site: <u>Franklin Farm</u> Applicant/Owner: <u>A/ELEA</u> Investigator: <u>WT.5F</u>	Date:         1/3/08           County:         E.ch.a.Q           State:        A
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID:

#### VEGETATION

Top	bank	
·	wpt	See See

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Rubus SPP	US	FACU	9		
2. Careja illinoevisis		FAC +	10		
3. Platanus Occurdantis	03	FACUL	11		<u> </u>
4. 11/mus 2 marsonna	<u></u>	<u>raew</u>	12		
5. Querous phellos	<u>OS</u>	TAL W-	13	·····	
6			14		
7			15		
8			16		
Percent of Dominant Species that are OBL, FACW or FAC $4/5 = 802$					
Remarks: Vagetation along top back of Drain					

Recorded Data (Describe in Remarks):     Stream, Lake, or Tide Gauge     Aerial Photographs     Other     No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines	
Field Observations:         Depth of Surface Water: $\mathcal{N} \wedge \mathcal{N}$ (in.)         Depth to Free Water in Pit: $\geq /2$ (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data	
Depth to Saturated Soil:(in.)	FAC-Neutral Test Other (Explain in Remarks)	
Remarks: thin wood!	ire along field obje	

(Series and	Map Unit Name (Series and Phase):					
-------------	--------------------------------------	--	--	--	--	--



#### DATA FORM **ROUTINE WETLAND DETERMINATION**

(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Franklin Farm</u> Applicant/Owner: <u>NELEA</u> Investigator: <u>WTST</u>		Date: County: State:
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:1_3_/9

#### VEGETATION

Droin WPt 3x

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator	
1. Soughum halepense	U.S FACU	9		
2. Baccoris holimitolia	FAC	10		
3. Cypers Spr.	<u> </u>	11		
4. Typha SPF-	- DB2	12		
5. <u>Sestania mamuja</u>	<u> </u>	13		
6		14		
7		15		
8		16		
Percent of Dominant Species that are OBL, FACW or FAC 4/5- 802				
Remarks: Vogetation prosent within Drain				

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines			
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):			
Depth of Surface Water: <u>I-G</u> (in.)	Oxidized Root Channels in Upper 12"			
Depth to Free Water in Pit:	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test			
Depth to Saturated Soil:	Other (Explain in Remarks)			
Remarks: inbraction of Droins, sbra Droins for Ag field				

(Series and	Map Unit Name (Series and Phase): <u>Forestdate Silfy day loam</u> Drainage Class:         Taxonomy (Subgroup):       Confirm Mapped Type? (Yes) No					
Profile Dee Depth (inches) 24	scription: Horizon	Matrix Color ( <u>Munsell_Moist)</u> _ <u>5/2_^{Io}2/C</u>	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, <u>Structure, etc.</u> Ckay	
<u> </u>	3	5/1 layr			Silly Clar	
Hydric Soil Indicators:        Concretions          Histosol        Concretions          Histic Epipedon        High Organic Content in Surfa ce Layer Sandy Soils          Sulfidic Odor        Organic Streaking in Sandy Soils          Aquic Moisture Regime        Listed on Local Hydric Soils List          Reducing Conditions        Listed on National Hydric Soils List          Gleyed or Low-Chroma Colors        Other (Explain in Remarks)						
Remarks:		56.)	s are L.	2w-ahtora		

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes	No (Circle) No No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	-	Doir Trasecting open by field
		Approved by HQUSACE 3/92

#### SOILS

T.B. W/in

Project/Site: <u>Franklin Farm</u>	Date: <u>//3/28</u>
Applicant/Owner: <u>NELEA</u>	County: <u>Richlag</u>
Investigator: <u>WISE</u>	State: <u>6</u> A
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID : Transect ID: <u>/.O</u> Plot ID: <u>1.20</u>

#### VEGETATION

operfell 447 36

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>N/A</i>			9		
2			10	·	
3			11		
4			12		
5			13		
6			14	<u> </u>	
7			15		
8			16	· <u>····</u>	
Percent of Dominant Species that (excluding FAC-).	are OBL, I	FACW or FAC			
Remarks: Agriculturio) f	Teld		pland Sample		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators:
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:/人(in.)	Oxidized Root Channels in Upper 12" Water-Stained Leaves
Depth to Free Water in Pit: <u>&gt; 12 «</u> (in.)	Local Soil Survey Data
Depth to Saturated Soil: <u>``12.″</u> (in.)	FAC-Neutral Test Other (Explain in Remarks)
Remarks: Open Das field	

so	l	L	S
		_	-

	l Phase): 🔄 🕜	ger silt loam,		Field	age Class: Observations onfirm Mapped Type? Yes No
Profile De Depth (inches) 	<u>Horizon</u>	Matrix Color (Munsell_Moist) 	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u> <u>Silty Long</u>
	_ Histosol _ Histic Epiped _ Sulfidic Odor _ Aquic Moistul _ Reducing Co	re Regime nditions w-Chroma Colors		Drganic Streaking in Sa Listed on Local Hydric S Listed on National Hydri Dther (Explain in Remai	Soils List c Soils List rks)
		50	t: w chi	ein open	Ng. falo

Hydrophytic Vegetation Present? Ye Wetland Hydrology Present? Ye Hydric Soils Present? Ye	s No	(Circle) Is this Sampling Point Within a Wetland? Yes (No		
Remarks: Des field				
classifie Q as P.C.				
		Approved by HOUSACE 3/92		

Project/Site: Frank hin Farm Applicant/Owner: <u>A/TLEA</u> Investigator: <u>WTSE</u>	Date:         1)         10/as           County:         R:dula:         0           State:         2         4
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	No.     Community ID :       Yes     No.       Yes     No.       Yes     No.       Plot ID:     1.0       Io     1.0

#### VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Quercus Hellos	U.S Ment	9	
2. Sabil haimar	U.S FREW	10	
3. Cettis harrisonta	n.s FACU	11	
4. Caryer Minimus	M.S FACH	12	
5		13	
6		14	
7	<u> </u>	15	
8		16	
Percent of Dominant Species t (excluding FAC-).	hat are OBL, FACW or FAC	1006	
Remarks:	spical vegetative	co-pereils within Gres	deo Prinze

#### HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water: _// // _(in.)	Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit: $2i2^{\prime\prime}$ (in.)	Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil: @s <u>at face_(</u> in.)	Other (Explain in Remarks)
Remarks:	

forestad wetlend WPJ Sis

Map Unit Name (Series and Phase): <u>FD(</u> Taxonomy (Subgroup):	ι.		Field	age Class: Observations onfirm Mapped Type? Yes No
Profile Description: Depth (inches) Horizon 2011 B	Matrix Color ( <u>Munsell_Moist)</u>	Mottle Colors (Munsell Moist) 4/310-17	Mottle <u>Abundance/Contrast</u> <u>155</u>	Texture, Concretions, <u>Structure, etc.</u> heavy Jacy
Hydric Soil Indicators: Histosol Histic Epipec Sulfidic Odor Aquic Moistu Reducing Co Gleyed or Lo Remarks:	re Regime		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydrid Other (Explain in Remar	ioils List c Soils List

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes Hydric Soils Present? Yes	) N	o í í	(Circle) Is this Sampling Point Within a Wetland? (Yes) No
Remarks:	forestro wetland frinse hobital along ballsof were		"reard

Project/Site: <u>Franklin</u> Farm Applicant/Owner: <u>NFLEA</u> Investigator: <u>WTS</u>		Date:/3/377 County:R:max0 State:2.A
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : Transect ID: <u>). 〇</u> Plot ID: <u>}。てこ</u>

#### VEGETATION

Abrester fringe WPI 39

Dominant Plant Species	<u>Stratum</u>	Indicator	Dominant Plant Species	<u>Stratum</u>	Indicator
1. Sall Miner	US	FARW	9		
2. Quercus lyrata	<u>_05/18</u>	66	10		
3. Frax inus pennsyllaria	<u> Styrs</u>	FACE	11		
4		<u> </u>	12		
5			13		
6			14		
7		<u></u>	15		
8			16		
Percent of Dominant Species that (excluding FAC-).	are OBL,	FACW or FAC	1007		
Remarks: Typical unseta	tive c	orbours	olons ball		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): V Qxidized Root Channels in Upper 12"
Depth to Free Water in Pit: $Q_{u}$ (in.) Depth to Saturated Soil: $Q_{u}$ (in.)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: fringe along back	s of wfa

0	IL	.s
	0	OIL

	l Phase): <u>1070</u>	state silty cli		Field	age Class: Observations nfirm Mapped Type? Yes No
Profile Des Depth (inches) 	<u>Horizon</u> : 	Matrix Color (Munsell Moist) (d/1 104/	Mottle Colors ( <u>Munsell_Moist)</u> <u>S//o_10</u> -1/2		Texture, Concretions, <u>Structure, etc.</u>
Hydric Soil	_ Histosol _ Histic Epiped _ Sulfidic Odor ∠ Aquic Moistu ∠Reducing Co	re Regime	F C L	Concretions ligh Organic Content in Organic Streaking in Sar isted on Local Hydric S isted on National Hydrid Other (Explain in Remar	oils List c Soils List

Wetland Hydrology Present? Yes N	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:			forested wetland fringe along whe

Project/Site: <u>Franklin</u> Farm Applicant/Owner: <u>NELEA</u> Investigator: <u>WTSZ</u>		Date: <u>//3/07</u> County: <u>Righta O</u> State: <u>4</u> A
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : Transect ID:O Plot ID:

#### VEGETATION

forestar wottard Mpst 4/2

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. Ulmus Armericana	MS FACUL	9			
2. Avercus Ny Hallii	MS OBL	10			
3. Querous thelps	OS TACHT	11			
4. Canya : Minonensis	OS FACT	12			
5. Cettis kevipata	DS/WS FACW	13			
6	/	14			
7		15			
8		16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks:	fringe hold to	Ĺ			

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines			
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands			
Depth of Surface Water: <u>ルル</u> (in.)	Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12"			
Depth to Free Water in Pit: $\geq t \ge t'$ (in.)	Water-Stained Leaves			
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)			
Remarks: Smoll foresta	D fringe hobilat			
	olong lop back of Grah			

#### SOILS

Profile De	scription:				
Depth <u>(inches)</u>	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell_Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions Structure, etc.
1211	ß	5/1 10-112	<u></u>	2 <u>10%</u>	clayloa
<u> 12 ''</u>	(~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4 Day 3 And	,225 min,		clay log-
<u></u>					
Hydric Soil	Indicators:				
	_ Histosol _ Histic Epipe _ Sulfidic Odc _ Aquic Moist _ Reducing C _ Gleyed or L	or ure Regime		Concretions High Organic Content i Drganic Streaking in Sa Listed on Local Hydric Listed on National Hydr Dther (Explain in Rema	Soils List ric Soils List
Remarks:			Mong Soil e		

#### WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks: Gresta	) wolled holilot
dor	s bp bale

#### APPENDIX IV

- Richland Parish, Louisiana Soils Survey Information



# CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

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				SPECIAL SYMBOLS	FOR
	<b>CULTURAL FEATURES</b>	FEATURES		SOIL SURVEY	
BOUNDARIES		MISCELLANEOUS CULTURAL FEATURES	ES	SOIL DELINEATIONS AND SYMBOLS	DeB DIB
National, state, or province		Farmstead, house (omit in urban area)	题	ESCARPMENTS	(
County or parish		Church	<del>1-</del> 22	Bedrack (points down slope)	~ ~ ~ ~ ~ ~ ~ ~
Minor civit division		School	느퍮	Other than bedrock (points down slope)	
Reservation (national forest or park, state forest or nark and large airport)		Indian mound (label)		SHORT STEEP SLOPE	• • • • • • •
land for a point, and range on point,		Located object (label)	O Tower	GULLY	~~~~~
i imit of soil survey (Jahel)		Tank (labei)	<ul> <li>Gas</li> </ul>	DEPRESSION OR SINK	\$
clivit of sources fraction and confine		Wells, oli or gas	A A	SOIL SAMPLE (normally not shown)	Ø
AD HOC BOUNDARY (Isbel)		Windmill	,∗⊲	MISCELLANEOUS	
Small airmet airfield bark oilfield	(Davis Aimtrip)	Kitchen midden	C	Biowout	Э
cemetery, or flood pool	1000			Clay spot	*
STATE COORDINATE TICK		WATER FEATURES	ES	Gravelly spot	000
LAND DIVISION CORNER (sections and land grants)	+ + +	DRAINAGE		Gumbo, slick or scabby spot (sodic)	Ø
ROADS		Perennial, double line		Dumps and other similar non soli areas	\$11
Divided (median shown if scale permits)		Perennial, single line	) ]	Prominent hill or peak	*
Other roads		Intermittent		Rock outcrop (includes sandstone and shale)	>
Trait		Drainage end		Saline spot	- <del> -</del> -
ROAD EMBLEM & DESIGNATIONS		Canals or ditches		Sandy spot	::
Interstate	(Rad	Doubie-line {fabel}	CANAL	Severely eroded spot	11
Federal	Ē	Drainage and/or irrigation	ļ	Slide or slip (tips point upstope)	ŝ
State	۲	LAKES, PONDS AND RESERVOIRS		Stony spot, very stony spot	8
County, farm or ranch	1283	Perennial	water (B)		
RAILROAD		Intermittent			
POWER TRANSMISSION LINE (normally not shown)		MISCELLANEOUS WATER FEATURES			
DiDC 1 INC (normalic and abound	-	Marsh or swamp			
PIPE LINE (normally not shown)		Spring	ያ		
FENCE (normally not shown)	· · · · · · · · · · · · · · · · · · ·	Well, artesian	÷		
LEVEES		Well irrination	¢		
Without road	412141112223412441231		> 3		
With road			•		
With railroad					
DAMS					
Large (to scale)	(				
Medium or Small	water				
PITS	4				
Gravel pit	×				
Mine or quarry	*				

Soil map symbols and map unit names are alphabetical. Map symbols are letters. The first letter, always a capital, is the initial letter of the soil name. The second letter is a small letter except in order three map units, in which case it is a capital letter. Order three map units, in addition to having all capital letter symbols, are further indicated by the footnote 1/.

## SOIL LEGEND

### SYMBOL

NAME

Arents, dredged 1/ Calhoun sit loarm Calhoun-Calcoway sit loarms, gently undulating Calhoway sit loarm, 1 to 3 percent slopes Deserord sit hoarn, 0 to 1 percent slopes Dexter sit loarm, 1 to 3 percent slopes Dexter sit loarm, 3 to 5 percent slopes Dexter sit loarm, 3 to 5 percent slopes Durdee sity clay loarm	Duratee: tensas comptex, gently undutating Egypt silt loam, 1 to 3 percent slopes Foley silt loam, 1 to 3 percent slopes Forestdale silty clay loam Forestdale silty clay loam Forestdale silty clay loam, occasionally flooded Gallon silt loam, 1 to 3 percent slopes Gigger clibert silt loams, gently undulating Gilbert-Egypt silt loams, gently undulating Gilbert-Egypt silt loams, gently undulating Grenada silt loam, 8 to 12 percent slopes Grenada silt loam, 8 to 12 percent slopes Grenada silt loam, 8 to 12 percent slopes Grenada-Cahoun silt loams, gently undulating	Hebert stilly clay toam Hebert stilly clay toam Hebert stilly clay toam Hebert-Parry compiex, occasionally flooded Liddieville fine sandy loam, 2 to 5 percent slopes Loring stil hoam, 1 to 5 percent slopes Maurepas muck 1/ Mer Rouge still toam Mer Rouge still t	Portland say Portland clay Rilla sill loam, 1 to 3 percent slopes Rilla sill loam, 1 to 3 percent slopes Rilla-Hebert sit loams, gently undulating Sharkay clay Sterlington sill loam, 1 to 3 percent slopes Sterlington Hebert silt loams, gently undulating Tensas-Sharkey complex Yorktown clay, trequently flooded 1/
840008588566	ਗ਼ਸ਼ਸ਼ਸ਼ਸ਼ਲ਼ਲ਼ਲ਼ਲ਼ਲ਼ਫ਼	87779988888888888888888888888888888888	2 4 8 8 8 8 8 8 8 8 4 4 4 4 4 4 4 4 4 4

1/ Order three map units. Fewer soil examinations were made in these mapping units, and delineations and included areas are generally larger. These mapping units were designed primarily for woodland and wildlife habitat management.



NUMBER SHEET ۱ LOUISIANA PARISH, RICHLAND

13

corners, if shown, are approximately positioned. This soil survey map was compiled by the U.S. Department of Agriculture. Soil Conservation Service, and cooperating agencies. Base maps are prepared from 1979 - 1980 aerial photography. Coordinate grid ticks and land division corners, it shown, are approximately positioned to the U.S. Department of Agriculture, Soil Conservation Service, and cooperating agencies. Base maps are prepared from 1979 - 1980 aerial photography. Coordinate grid ticks and cooperating this soil survey map was compiled by the U.S. Department of Agriculture, Soil Conservation Service, and cooperating agencies, it shown, are approximately positioned agencies. Base maps are prepared by the U.S. Department of Agriculture, Soil Conservation Service, and cooperating agencies, it shown, are approximately positioned.




as complete by the U.S. Department of Agriculture. Soil Conservation. Service, and cooperating

1

PARISH, LOUISIANA

#### APPENDIX V

#### - Photographs of Selected Property Features

FRANKLIN FARM MEGA SITE GPS POINT LOCATIONS GPS COORDINATE											
							Latitude		Longitude		PHOTOGRAPHIC COVERAGE
						<b>WAYPOINT #</b> 1	N(deg min thou)		W(deg min thou)		
N 32/	29.376	W 91/	38.656	-							
2	N 32/	29.378	W 91/	38.486	-						
3	N 32/	29.388	W 91/	38.424	-						
4	N 32/	29.390	W 91/	38.361	1						
5	N 32/	29.457	W 91/	38.414	-						
6	N 32/	29.468	W 91/	38.365	2						
7	N 32/	29.478	W 91/	38.294	3-4						
8	N 32/	29.484	W 91/	38.227	-						
9	N 32/	29.458	W 91/	38.214	-						
10	N 32/	29.596	W 91/	38.155	5-7						
11	N 32/	29.378	W 91/	38.156	8-9						
12	N 32/	29.384	W 91/	38.225	-						
13	N 32/	30.023	W 91/	38.157	10-12						
14	N 32/	30.006	W 91/	37.762	13						
15	N 32/	30.230	W 91/	37.727	-						
16	N 32/	30.475	W 91/	37.661	14-16						
17	N 32/	30.585	W 91/	37.714	17-20						
18	N 32/	30.761	W 91/	37.889	21						
19	N 32/	30.898	W 91/	38.175	22-23						
20	N 32/	30.778	W 91/	38.340	24						
21	N 32/	30.581	W 91/	38.449	-						
22	N 32/	30.383	W 91/	38.622	25						
23	N 32/	30.025	W 91/	38.522	-						
24	N 32/	30.087	W 91/	38.564	-						
25	N 32/	30.041	W 91/	38.678	26-27						
26	N 32/	29.588	W 91/	37.649	-						
27	N 32/	30.786	W 91/	37.886	28						
28	N 32/	31.001	W 91/	38.001	-						
29	N 32/	30.907	W 91/	38.154	29-30						
30	N 32/	31.023	W 91/	38.226	31-32						
31	N 32/	31.202	W 91/	38.185	33-34						
32	N 32/	31.341	W 91/	38.061	35-36						
33	N 32/	31.343	W 91/	38.617	37						
34	N 32/	31.294	W 91/	38.616	-						
35	N 32/	31.102	W 91/	38.572	38-40						
36	N 32/	30.993	W 91/	38.579	-						
37	N 32/	30.896	W 91/	38.409	41						
38	N 32/	30.834	W 91/	38.309	42-43						
39	N 32/	30.721	W 91/	38.431	-						
40	N 32/	30.476	W 91/	38.554	44-46						
41	N 32/	30.505	W 91/	38.412	47						
42	N 32/	30.471	W 91/	37.663	-						
43	N 32/	30.342	W 91/	37.663	48-49						
44	N 32/	30.219	W 91/	37.712	-						
45	N 32/	30.040	W 91/	37.762	-						
46	N 32/	29.825	W 91/	37.719	50						
47	N 32/	29.726	W 91/	37.654	-						





January 2008





PHOTOGRAPH #1

Typical forested wetland habitat observed within the southern portion of the subject property. Photo is taken looking to the north.

WAYPOINT #6

PHOTOGRAPH #2



Transitional forested upland habitat observed within the southern portion of the subject property. Photo is taken looking to the south.



January 2008





PHOTOGRAPH #3

Overcup oak (~22 inch DBH), a common forest associate observed within the southern portion of the subject property.

WAYPOINT #7

PHOTOGRAPH #4



Willow oak (~30 inch DBH), a common forest associate observed within the southern portion of the subject property.



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PHOTOGRAPH #5



Relatively Permanent Water observed dissecting the southern portion of the subject property. Photo is taken looking to the south.

WAYPOINT #10

PHOTOGRAPH #6



View of Wade Road as it transects the southern portion of the site in an east to west orientation.



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WAYPOINT #10

PHOTOGRAPH #7

Non-Relatively Permanent Water observed to the north. This secondary drainage transects the open agricultural field within the central portion of the site.

WAYPOINT #11

PHOTOGRAPH #8



Relatively Permanent Water located within the southern portion of the site. This drainage appears to have been constructed or improved for storm water drainage relief. Photo is looking to the north from adjacent the south boundary.



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PHOTOGRAPH #9

Typical open agricultural field conditions observed within the southern portion of the subject property.

WAYPOINT #13

PHOTOGRAPH #10



Non-Relatively Permanent Water observed transecting the central portion of the site. This secondary drainage was constructed or improved for storm water drainage through the interior portion of the site.



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PHOTOGRAPH #11



Non-Relatively Permanent Water observed to the east. This secondary drainage was constructed or improved for storm water runoff relief through the interior portions of the site.

WAYPOINT #13

PHOTOGRAPH #12



Common open agricultural field conditions observed within the central portion of the subject property. Photo is taken looking generally to the north.



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WAYPOINT #14

PHOTOGRAPH #13

A segment of West Fork Creek observed to the north. Photo is taken within the western portion of the subject property.

WAYPOINT #16

PHOTOGRAPH #14



A segment of West Fork Creek observed to the south. Photo is taken from the Burns Road crossing located within the central portion of the site.



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PHOTOGRAPH #15

West Fork Creek observed to the north from the Burns Road crossing.

WAYPOINT #16

PHOTOGRAPH #16



Open water impoundment habitat located within the central portion of the subject property. Photo is taken looking north adjacent to Burns Road.



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PHOTOGRAPH #17

A segment of West Fork Creek observed looking north.

WAYPOINT #17

PHOTOGRAPH #18



Typical forested wetland "fringe" habitat located abutting West Fork Creek. Photo is taken looking generally to the north.



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PHOTOGRAPH #19

View to the west from adjacent the West Fork Creek channel.

WAYPOINT #17

PHOTOGRAPH #20



Water marks observed along the base of the trees present within the forested wetland habitat.



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WAYPOINT #18

PHOTOGRAPH #21

Wetland depressional habitat observed along the south boundary of West Fork Creek. Photo is taken looking generally to the northwest.

WAYPOINT #19

PHOTOGRAPH #22



A segment of West Fork Creek observed transecting the central portion of the subject property. Photo is taken looking to the west.



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WAYPOINT #19

PHOTOGRAPH #23

Typical forested wetland conditions observed along the south bank of West Fork Creek. Photo is taken looking southeast.

WAYPOINT #20

PHOTOGRAPH #24



Primary creek channel observed as it transects the western portion of the subject property.



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WAYPOINT #22

PHOTOGRAPH #25

Primary creek channel observed transecting the extreme western portion of the subject property. Photo is taken looking southwest.

WAYPOINT #25

PHOTOGRAPH #26



Relatively Permanent Water observed within the western portion of the site. This drainage appears to have been constructed or improved for storm water runoff relief through the interior portions of the site.



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PHOTOGRAPH #27

Culvert crossing located along Jaggers Lane. Photo is taken looking northeast.

WAYPOINT #27

PHOTOGRAPH #28



Typical forested wetland conditions observed within the forested wetland "fringe" habitat along West Fork Creek.



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WAYPOINT #29

PHOTOGRAPH #29

Primary stream channel observed to the north as it transects the northern portion of the subject property.

WAYPOINT #29

PHOTOGRAPH #30



Primary stream channel observed to the southwest as it interconnects with West Fork Creek located within the central portion of the site.



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WAYPOINT #30

PHOTOGRAPH #31

Primary stream channel observed transecting the open agricultural field areas located within the northern portion of the subject property.

WAYPOINT #30

PHOTOGRAPH #32



Primary stream channel observed transecting the open agricultural field areas located within the northern portion of the subject property.



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WAYPOINT #31

PHOTOGRAPH #33

Open agricultural field habitat observed within the northern portion of the site. Photo is taken looking south.

WAYPOINT #31

PHOTOGRAPH #34



Commonly found open agricultural field habitat observed within the northern portion of the site. Photo is taken looking north.



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WAYPOINT #32

PHOTOGRAPH #35

Primary creek channel observed transecting the northern portion of the subject property. Photo is taken looking west along the south boundary of Jaggers Lane.

WAYPOINT #32

PHOTOGRAPH #36



Bridge crossing observed under Jaggers Lane. Jaggers Lane is the north boundary of the subject property.



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WAYPOINT #33

PHOTOGRAPH #37

Relatively Permanent Water transecting the extreme northwest portion of the subject property. Photo is taken looking south.

WAYPOINT #35

PHOTOGRAPH #38



Primary creek channel observed transecting the open field habitat within the northern portion of the site. Photo is taken looking south.



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WAYPOINT #35

PHOTOGRAPH #39

Creek channel observed transecting the open agricultural field located within the northern portion of the subject property. Photo is taken looking north.

WAYPOINT #35

PHOTOGRAPH #40



Creek channel observed transecting the open agricultural field located within the northern portion of the subject property. Photo is taken looking west.



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WAYPOINT #37

PHOTOGRAPH #41

Prominent creek channel observed transecting the central portion of the subject property.

WAYPOINT #38

PHOTOGRAPH #42



Primary creek channel observed transecting the central portion of the subject property. Note: the forested wetland habitat along the banks of the creek channel.



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WAYPOINT #38

PHOTOGRAPH #43

Typical open field habitat conditions observed within the central portion of the subject property.

WAYPOINT #40

PHOTOGRAPH #44



Primary creek channel observed transecting the western portion of the site. This channel appears to have been constructed or improved for storm water runoff relief through the western portion of the site.



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WAYPOINT #40

PHOTOGRAPH #45

Creek channel observed to the north, northeast as it transects the western portion of the site. Photo is taken from Burns Road.

WAYPOINT #40

PHOTOGRAPH #46



Creek channel observed to the south, southwest as it transects the western portion of the site. Photo is taken from Burns Road.



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WAYPOINT #41

PHOTOGRAPH #47

Depressional wetland habitat identified within the central portion of the subject property.

WAYPOINT #43

PHOTOGRAPH #48



Herbaceous "fringe" wetland identified along either bank of West Fork Creek as it dissects the eastern portion of the subject property. Photo is taken looking south.



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WAYPOINT #43

PHOTOGRAPH #49

Herbaceous "fringe" wetland identified along either bank of West Fork Creek as it dissects the eastern portion of the subject property. Photo is taken looking north.

WAYPOINT #46

PHOTOGRAPH #50



West Fork Creek viewed as it dissects the eastern portion of the subject property. Note: the herbaceous wetland habitat present along the banks of the creek channel.



