Exhibit Y – 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

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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 includes West Fork Creek identified dissecting 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.

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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

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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. 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.

<u>Open Water Impoundment</u> – 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.

Herbaceous Wetland Abutting a Relatively Permanent Water (RPW) – 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 ($\sim 10\%$ - 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.

<u>Disturbance Patterns</u> –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.

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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

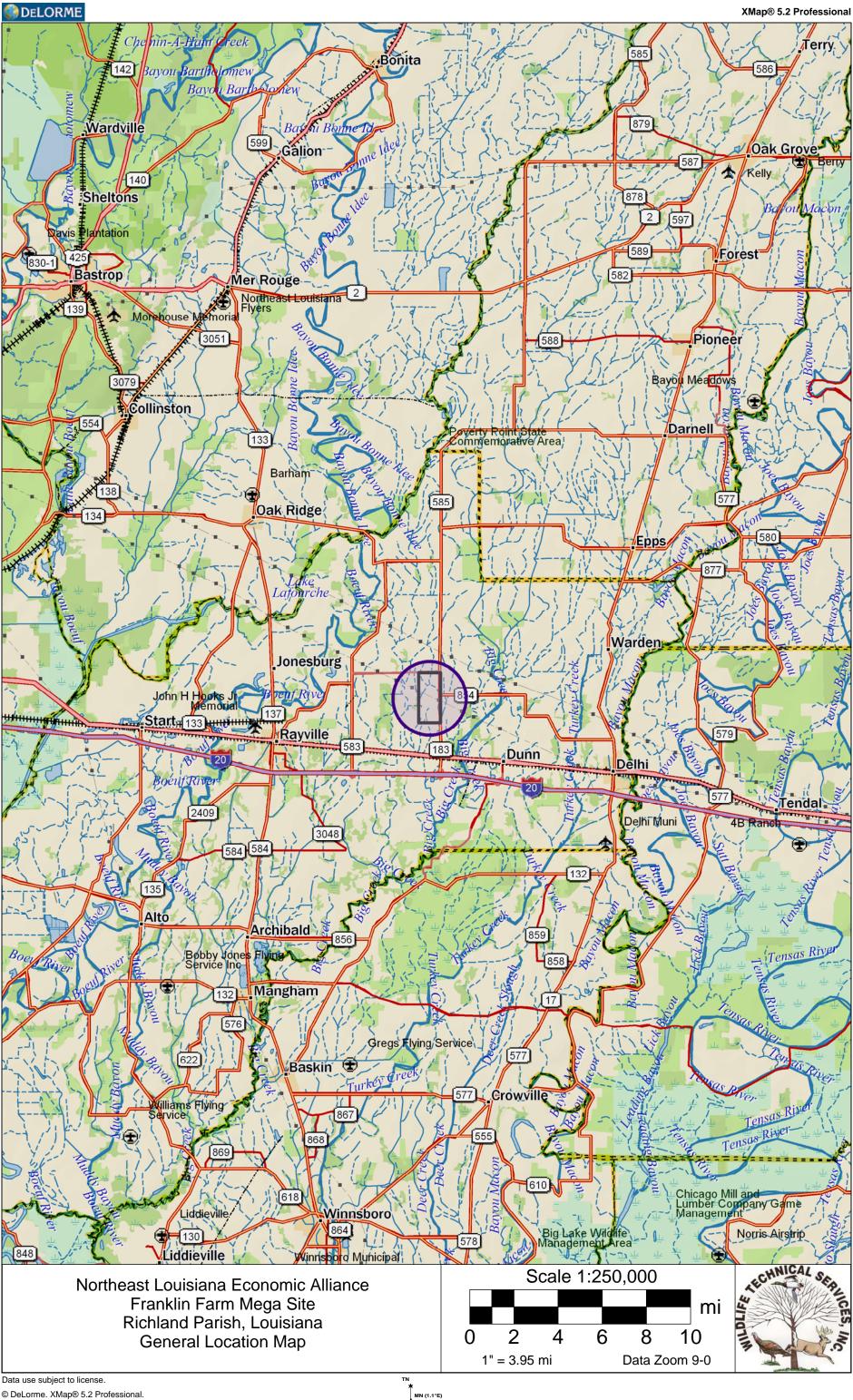
RPW with "Typical Year Round" Flows

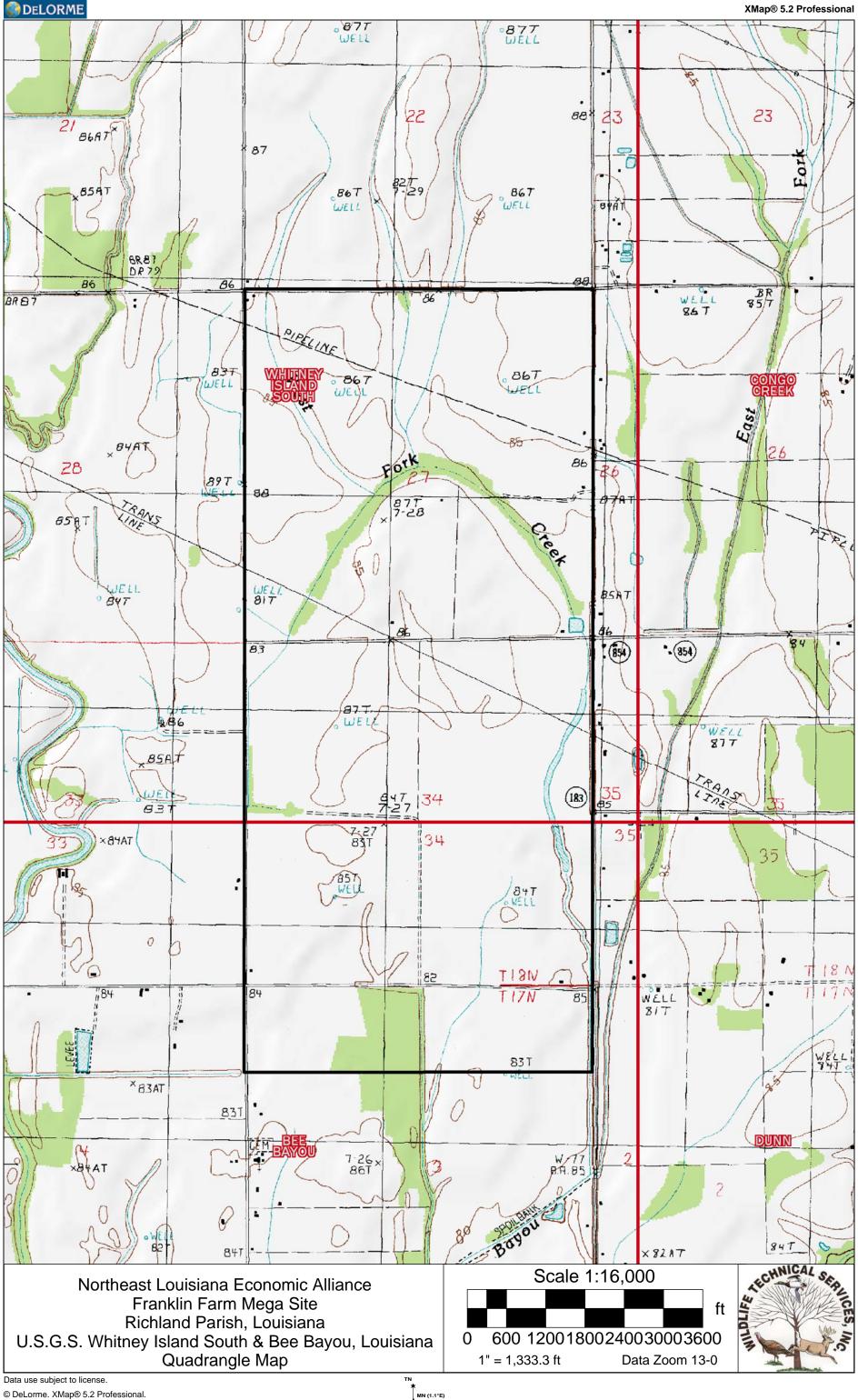
RPW with "Seasonal" Flows

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





DELORME XMap® 5.2 Professional Scale 1:16,000 Northeast Louisiana Economic Alliance Franklin Farm Mega Site Richland Parish, Louisiana 1999-2000 NASA LandSat Color Photo ft 0 600 12001800240030003600

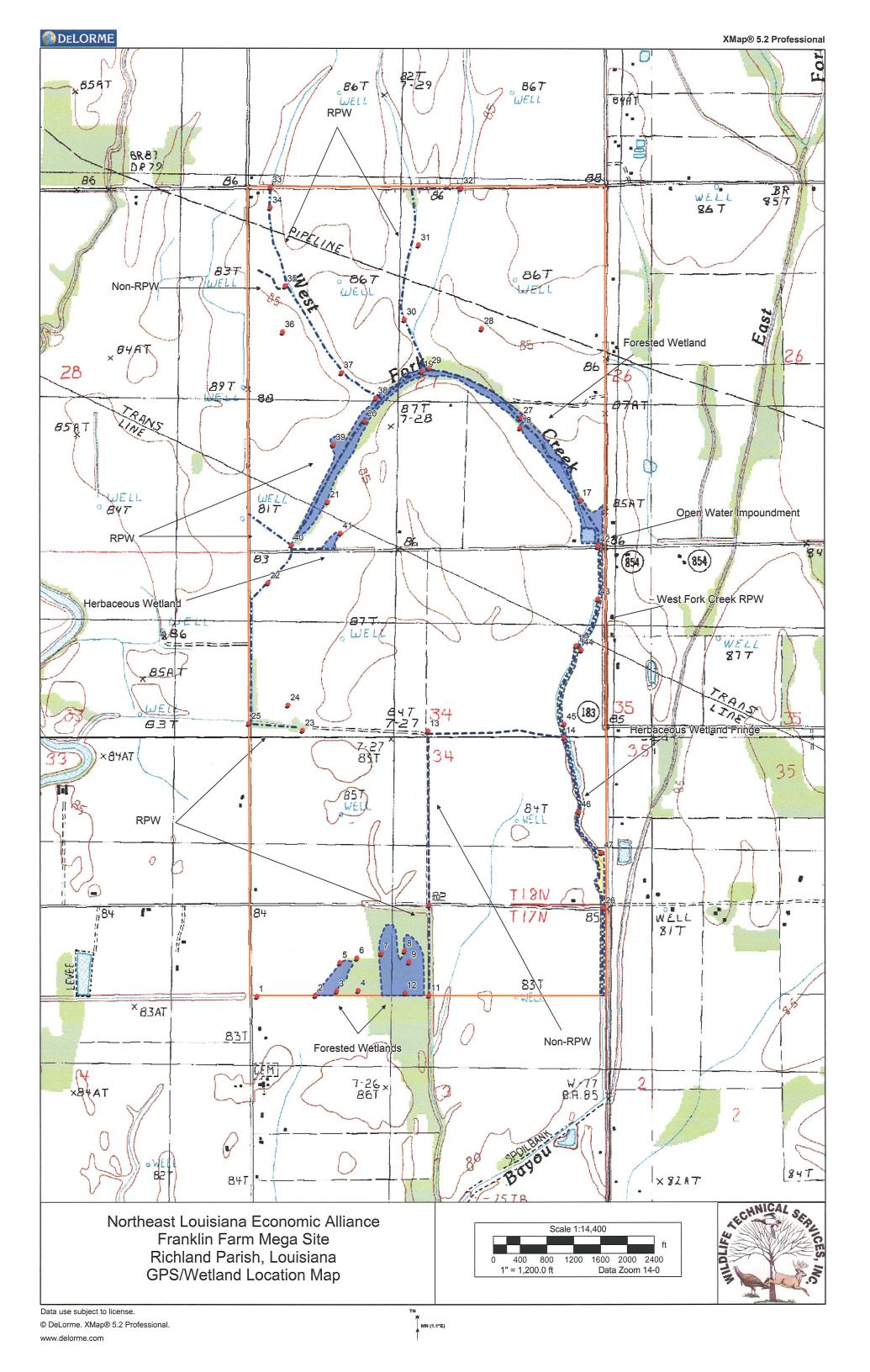
1" = 1,333.3 ft

Data Zoom 13-0

DELORME XMap® 5.2 Professional Northeast Louisiana Economic Alliance Scale 1:16,000 Franklin Farm Mega Site Richland Parish, Louisiana 2004 Aerial Photograph 600 1200 1" = 1,333.3 ft 00 2400 30 Data Zoom 14-0 3000

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



DELORME XMap® 5.2 Professional RPW Non-RPW-Forested Wetland Open Water Impoundment RPW West Fork Creek RPW Herbaceous Wetland Herbaceous Wetland Fringe RPW Non-RPW Forested Wetlands TECHNICAL STATE Northeast Louisiana Economic Alliance Franklin Farm Mega Site Richland Parish, Louisiana Scale 1:14,400 400 800 1200 1600 2000 2400 1" = 1,200.0 ft Data Zoom 14-0 Wetland Location Map Data Zoom 14-0 TN ** MN (1.1°E)

APPENDIX III

- Wetland Data Forms

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Applicant/Owner: NELEK Investigator: WTSI	Farm		Date: 1-3-03 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	d (Atypical Situation)? Area?	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:			
VEGETATION			WPI			
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator			
1. Celtis la evigata	OS FACW	9				
258	,	10				
3. Quercus stellata	os FACU	11				
4 Carya Illinsensis	OS FACT	12				
5. Ligustrum sinense	US FAC	13				
6. Smilax rotunditalia	US FAC	14				
7		15				
8		16	4444			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).						
Remarks:						
fol0 .050						
HYDROLOGY						
Recorded Data (Describe in Ro Stream, Lake, or Tid Aerial Photographs Other No Recorded Data Available		Water Marks Drift Lines	n Upper 12 Inches s			
Field Observations:		Sediment De	eposits atterns in Wetlands			
Depth of Surface Water:	<u> </u>	Secondary Indicators (
		Water-Staine				
Depth to Free Water in Pit:	≥/2 ″ (in.)		urvev Data			
Depth to Free Water in Pit: Depth to Saturated Soil:	<u> </u>	Local Soil St				

SOILS

(Series and Phase): (Scries and Phase): (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No							
Profile De Depth (inches)	scription: Horizon 3	Matrix Color (Munsell Moist) 4/3 1042	Mottle Colors (Munsell_Moist) 4/4 ルール	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
	I Indicators: _ Histosol _ Histic Epipee _ Sulfidic Odo _ Aquic Moistu _ Reducing Co _ Gleyed or Lo	r ure Regime		Concretions High Organic Content ir Drganic Streaking in Sa Listed on Local Hydric S Listed on National Hydr Other (Explain in Rema	Soils List ic Soils List		

WETLAND DETERMINATION

Remarks: Spland sanda.	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:	کسه اجی) saple.	

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Farm Applicant/Owner: NELEA Investigator: WTSI		Date: 1-3-68 County: Richland State: LA
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: 7. 0
(If needed, explain on reverse.)		. 107-9

VEGETATION

Collect Colon

			HOMESTON WORKED
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Fraxinus pennsylvania	ca os FACW	9. Quercus lyrata	US OBL
2.Acer negundo	05 FACW	10. //ex decidua	US FACW-
3. Quercus phellos	OS FACW-	11	
4. Smilax rotunditalia	US_FAC	12	
5. Lonicera japonica	US FAC-	13	
6. Campsis radicans	US FAC	14	**************************************
7. Caryo illnoensis	US FACE	15	
8. Sabal minor	US FACW	16	***************************************
Percent of Dominant Species that (excluding FAC-).	are OBL, FACW or FAC	: 9/10=90%	*
Remarks:		i t	**************************************
	Typio	al vasolotion tero.	hoods

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		
Depth of Surface Water:	Secondary Indicators (2 or more required): 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:			
within forests) hobital,		

Map Unit Name (Series and Phase): Gillant-Egyptsilf loans, aroty undulating Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No							
Profile Depth (inches)	Scription: Horizon T3	Matrix Color (Munsell Moist)	Mottle C (Munsell 4/4	Moist)	Mottle Abundance/Col		Texture, Concretions, Structure, etc.
Hydric Soil Indicators: Histosol							
Remarks:							
Low chro-a soil outers.							
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:	Br. 21.9 welland

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

Project/Site: Franklin (Applicant/Owner: NELER Investigator: WTSI			Date: <u>I-3-08</u> County: <u>Richland</u> State: <u>LA</u>			
Do Normal Circumstances Exi Is the site significantly disturbe Is the area a potential Problem (If needed, explain on rever	d (Atypical Situation)?	Yes No Yes No Yes No	State: Community ID : Transect ID: Plot ID:			
VEGETATION		Wi	P3 Trasitional			
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	es Stratum Indicator			
1. Juniperus virginiana	05 FACU-	9. Lonicera japo	nica US FAC-			
2. <u>Auercus pagoda</u>			a US FACU			
3. Quercus phellos	OS FACW.	11				
4. Quercus lyrata	<u>05</u> 0BL	12				
5. Quercus nigra	OS FAC	13				
6.Carya illinoensis		14				
7. Ulmus americana	3	15				
8. Sabal minor	US FACW	16				
Percent of Dominant Species that (excluding FAC-).	t are OBL, FACW or FAC	3/10=-	202			
Remarks:						
Transitional habitat						
HYDROLOGY						
Recorded Data (Describe in F Stream, Lake, or Ti Aerial Photographs Other No Recorded Data Available	de Gauge	Wetland hydrology Ind Primary Indicators: Inundated Saturated Water Ma	d d in Upper 12 Inches arks			
Field Observations:	-	Sediment	t Deposits Patterns in Wetlands			
Depth of Surface Water:	<u> </u>	Secondary Indicato	rs (2 or more required): Root Channels in Upper 12"			
Depth to Free Water in Pit:	<u> </u>	Water-Sta	ained Leaves il Survey Data			
Depth to Saturated Soil:	>/2 '' (in.)	FAC-Neu	rtral Test kplain in Remarks)			
Remarks:			,			
		No hadrolosa				

Map Unit Name (Series and Phase): Silbert Egypt Bilt loams, gently undulating Taxonomy (Subgroup): Taxonomy						
Profile Des Depth (inches) /2"	Scription: Horizon D S	Matrix Color (Munsell Moist) 5/4 16 VR 5/3 16 VR	Mottle Colors (Munsell Moist)	Mottle Abundance/Con	_	Texture, Concretions, Structure, etc.
Hydric Soil Indicators: Histosol						
Remarks:						

WETLAND DETERMINATION

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

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

Project/Site: Frankli Applicant/Owner: NELEA Investigator: WTSI			Date: 1-3-08 County: <u>Richland</u> State: <u>LK</u>
Do Normal Circumstances Ex Is the site significantly disturb Is the area a potential Proble (If needed, explain on reve	ed (Atypical Situation)? m Area?	Yes No Yes No Yes No	Community ID :
VEGETATION		WP7	forested, se
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	s <u>Stratum Indicator</u>
1. Querous phellos	05/ms FACW-	9	
2. Quercus lyrata	OS OBL	10	
3. <u>Celtis laevigata</u>	ms FACW	11	
4. <u>Sabal minov</u>	US FACW	12	-
5. Forestiera acuminata	US OBL	13	
6. Ulmus crassifolia	US FAC	14	
7. <u>Smilax rotundifolia</u>	US FAC	15	
8. Unus americana	US FACW	16	
Percent of Dominant Species that (excluding FAC-).	at are OBL, FACW or FAC		i
Remarks:			
Recorded Data (Describe in Stream, Lake, or T Aerial Photographs Other No Recorded Data Available	ïde Gauge s	∕_ Water Ma	in Upper 12 Inches
Field Observations:	r'-pools		
Depth of Surface Water:	_ <i>N/W</i> (in.)	Oxidized F	Root Channels in Upper 12" ined Leaves
	7. (")		
Depth to Free Water in Pit: Depth to Saturated Soil:	12' (in.)	Local Soil FAC-Neut	Survey Data

ì	d Phase):(<u>⊃</u> ∭	pertsilt laum		Field	age Class: Observations onfirm Mapped Type? Yes No
Profile De: Depth (inches)	Scription: Horizon	Matrix Color (Munsell Moist) 5/1 10 YR	Mottle Colors (Munsell Moist) 5/4 10-12	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil	_ Histosol _ Histic Epiped _ Sulfidic Odor _ Aquic Moistur _ Reducing Coi	e Regime		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric So Listed on National Hydric Other (Explain in Remart	oils List c Soils List

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Hydric Soils Present? Yes	No No No	(Circle)	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	fc	oresto0	wetled

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Applicant/Owner: NELER Investigator: WTSI	Form		Date: 1-3-08 County: Richland State: LA
Do Normal Circumstances Exist Is the site significantly disturbed Is the area a potential Problem A (If needed, explain on reverse	(Atypical Situation)? Area?	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID: 1.0
/EGETATION		V	188 forest. Dwot.
Dominant Plant Species 1. Fraxinus pennsylvanica	Stratum Indicator	Dominant Plant Specie	
. '	OS FACW-	910	
*	OS FAC	11	
4. <u>Liquidambar styrac</u> iflua	OS FACT	12	
5. Celtis laevigata	ms FACW	13	
3. Cornus foemina	US FACW-	14	
1. Sabal minor	US FACW	15	
3		16	
Percent of Dominant Species that a (excluding FAC-).	re OBL, FACW or FAC	1003	i
Remarks:	0 10		
	toustine we	the S hobitat.	
YDROLOGY			
Recorded Data (Describe in Rer Stream, Lake, or Tide Aerial Photographs Other	marks): Gauge	Wetland hydrology Ind Primary Indicators:Inundated	Establish & Brown
No Recorded Data Available		Water Ma Drift Lines	arks s
Field Observations:			Patterns in Wetlands
Depth of Surface Water:	<u> ル </u>	Oxidized	rs (2 or more required): Root Channels in Upper 12"
Depth to Free Water in Pit:	<u> >/2 ″</u> (in.)	Water-Sta	ained Leaves I Survey Data
Depth to Saturated Soil:	ン/と" (in.)	FAC-Neu	

l	I Phase): <u>⊘∭</u>	pert Silt logar		Field	age Class: Observations onfirm Mapped Type? (Yes No
Profile Des Depth (inches)	Scription: Horizon 73	Matrix Color (Munsell Moist) 5/2 104/2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. clay loan
Hydric Soil	_ Histosol _ Histic Epiped _ Sulfidic Odor _ Aquic Moistur _ Reducing Coi	re Regime		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydric Other (Explain in Remar	oils List c Soils List
Remarks:		saple F	6.7		

WETLAND DETERMINATION

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:	()	ه نجر	0 6	ested welland sample

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Farm Applicant/Owner: NELEA Investigator: WTSI		Date: 1-3-08 County: Richland State: LA
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: / . (a)
VEGETATION	WPIO	Forestal uple
Dominant Plant Species Stratum Indicator 1. Liquidambar styraciflua OS FACt 2. Quercus nigra OS FAC 3. Melia azedarach US FAC 4. Ulmus americana US FACW 5 6 7 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	Dominant Plant Species 9 10 11 12 13 14 15 16	
Remarks: Typical usalofice HYDROLOGY	comporats.	
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	Water Mar Drift Lines Sediment I	in Upper 12 Inches ks
Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	Oxidized R Water-Stai Local Soil FAC-Neutr	Root Channels in Upper 12" ned Leaves Survey Data
	o hydrology s	rsel

i i	lame I Phase): (Subgroup):	ed Egypt siltla	ám, gently un	Fleid	age Class: Observations onfirm Mapped Type? (Yes) No
Profile Des Depth (inches)	Horizon	Matrix Color (Munsell Moist) 5/3 1698	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. silty clay loam
Hydric Soil	_ Histosol _ Histic Epiped _ Sulfidic Odor _ Aquic Moistur _ Reducing Coi	re Regime		Concretions digh Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydric Other (Explain in Remar	oils List c Soils List
Remarks:		5a:ls	ore tras	lgo of losoif	o.D.

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:) so-ple

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Franklin Farm Applicant/Owner: NELEA Investigator: WTSI	Date: 1-3-68 County: Richland State: LA
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. Plot ID: Plot ID:
VEGETATION	WP12 Forest-O watled
Dominant Plant Species 1. Quercus lyrata 2. Liquidambar styraciflua 3. Carya x lecontei 4. Quercus phellos 5. Celtis laevigata 6. Sabal minsv 7. Acer rubrum 8.	Dominant Plant Species Stratum Indicator 9
Percent of Dominant Species that are OBL, FACW or FA (excluding FAC-).	16 .C /OO %
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: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Voxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Satura	tion on surface

	l Phase):	gert Silt loon		Field	age Class: Observations onfirm Mapped Type? (Yes No	
Profile Des Depth (inches)	Scription: Horizon	Matrix Color (Munsell Moist) 5/1 /6 yr	Mottle Colors (Munsell Moist) 4/6 つか	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. clay_loam	
	_ Histosol _ Histic Epiped _ Sulfidic Odor _ Aquic Moistu _ Reducing Co	re Regime		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydric Other (Explain in Reman	oils List c Soils List	
Remarks:		Low-ch. cla.	ora 50.1 yr textuse			

WETLAND DETERMINATION

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

Project/Site: Franklin Applicant/Owner: NE	Farm E A		Date: 1-3-08 County: Richland State: LA
Do Normal Circumstances Exiles the site significantly disturbe Is the area a potential Problem (If needed, explain on rever	d (Atypical Situation)? n Area?	Yes No Yes No	Community ID : Transect ID: Plot ID: / O
VEGETATION		WP13	saple usiteir Drain.
Dominant Plant Species	Stratum Indicator	Dominant Plant Specie	s <u>Stratum</u> <u>Indicator</u>
1. Rubus spp.	US FACU	9	
2. Verbena brasiliensis	us <u>FAC-</u>	10	
3		11	
4		12	il i
5		13	
6		14	
7		15	
8		16	
Percent of Dominant Species that (excluding FAC-).	t are OBL, FACW or FAC		
Remarks:		1 1 0	
,	rongetotion trong	hoot Oroin. Le Non-RP	w
HYDROLOGY			
Recorded Data (Describe in R Stream, Lake, or Tid Aerial Photographs Other No Recorded Data Available	lemarks): de Gauge	Wetland hydrology Indi Primary Indicators: Inundated Saturated Water Ma Drift Lines	in Upper 12 Inches rks
Field Observations:		Sediment Drainage	Deposits Patterns in Wetlands
Depth of Surface Water:	(in.)	Oxidized F	rs (2 or more required): Root Channels in Upper 12"
Depth to Free Water in Pit:	- <u>Surface</u> (in.)	Local Soil	ined Leaves Survey Data
Depth to Saturated Soil:	Burlac (in.)	FAC-Neut Other (Ex	ral Test plain in Remarks)
Remarks: Droin - V	Mar molo Disa	entire fields.	
· · · · · · · · · · · · · · · · · · ·	ware 1		

(Series and	Map Unit Name (Series and Phase): Gilbert Egypt Sill Loans, Grathy Undulating prainage Class: Field Observations Taxonomy (Subgroup): Confirm Mapped Type? Yes No				
Profile Des Depth (inches)	Scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist) 5/0 107R	Mottle Abundance/Contrast 45%	Texture, Concretions, Structure, etc. 5: Hy clay loa
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:		Locatio	poils are to	rows:tord.	

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
·	in traspoting open as follow.

Project/Site: Franklin Farm Applicant/Owner: NELEA Investigator: WTSI		Date: 1-3-08 County: Richland State: LA
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:
VEGETATION	WF	714
		Horborous fringe dong Oro:
Dominant Plant Species Stratum Indicator	Dominant Plant Spec	sies <u>Stratum</u> Indicator
1. Ludvigia alterniflora US OBL	9	
2. Polygonum hydropiper US OBL	10	
3. <u>Salix nigra</u> <u>MS OBL</u>	11	
4. Tuncus spp. US OBL	12	
5. Cephalanthus occidentalis us OBL	13	
6. Populus deltoides us/ms FAC+	14	
7. Fraxinus pennsylvanica US FACW	15	
8	16	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	1007	
Remarks:	ed wast fo	rk Crook
HYDROLOGY		
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Water M	ed in Upper 12 Inches Marks
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:	Drainag Secondary Indicat Oxidized Water-S Local So	nt Deposits e Patterns in Wetlands fors (2 or more required): d Root Channels in Upper 12" stained Leaves bil Survey Data
Remarks:	, ,	

(Series and	Map Unit Name (Series and Phase): Focestdate Sitty Clay Iran Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No				
Profile De: Depth (inches) /2"	Scription: Horizon S	Matrix Color (Munsell Moist) 6// /0-//2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
	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:	50	uple does	eOle of	west Forle C	root.

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

Project/Site: Franklin Applicant/Owner: NELE Investigator: WTI	P. C. C. S. J.		Date: 1-3-0% County: Richland State: LA
Do Normal Circumstances Exis Is the site significantly disturbed Is the area a potential Problem (If needed, explain on revers	(Atypical Situation)? Area?	Yes No Yes No	Community ID : Transect ID:/_O Plot ID:/_s/O
VEGETATION		WP16	Arbenous fringe
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Cyperus Spp.	us obl	9	
2. Juneus spp.	US OBL	10	
3. Salix nigra	WZ OBr	11	
4. Ludwigia peploides	M2 OBS	12	
5. Cephalanthus occidentalis	M2 OBT	13	
6		14	
7		15	
8		16	
Percent of Dominant Species that a (excluding FAC-).	are OBL, FACW or FAC	1002	
Remarks:	1242	Prince olons	
	accept melland	Levels and	wost tork Crank
HYDROLOGY			
Recorded Data (Describe in Re Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Available	emarks): e Gauge	Wetland hydrology Indic Primary Indicators: Inundated Saturated i Water Mari	n Upper 12 Inches
Field Observations:		Sediment [Srainage F	Deposits Patterns in Wetlands
Depth of Surface Water:	(in.)	Oxidized R	s (2 or more required): loot Channels in Upper 12"
Depth to Free Water in Pit:	<u>sorface</u> (in.)		ned Leaves Survey Data
Depth to Saturated Soil:	Su Mone(in.)	FAC-Neutro	al Test lain in Remarks)
			,

(Series and	Map Unit Name (Series and Phase): Forestdale Sifty clay locan Taxonomy (Subgroup): 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.	3	5/10-112	5/3 104/12	103	clayloa
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:					

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:	Harbaceous wetted hobital done back of west Fork Creek. a) by formers

Project/Site: 'Franklin Applicant/Owner:' NELE Investigator: WT'I			Date: 1-3-08 County: Richland State: LA
Do Normal Circumstances Ex Is the site significantly disturbe Is the area a potential Problet (If needed, explain on reve	ed (Atypical Situation)? m Area?	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:
VEGETATION		WPI7	west Forle Cran
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	<u>Stratum Indicator</u>
1. Salix nigra	MS 6BL	9	
2. Ludwigia peploides	<u>us</u> <u>obl</u>	10	
3. Juneus spp.	US OBL	11	
4. Cyperus spp.	NS OBL	12	
5. Cephalanthus occiden		13	
6. Ulmus thomasii	US FAC	14	
7		15	
8		16	
Percent of Dominant Species the (excluding FAC-).	at are OBL, FACW or FAC	1002	
Remarks:	,		
	saple is	witein east to	sole Comb
Recorded Data (Describe in Stream, Lake, or T Aerial Photograph Other No Recorded Data Available	Гide Gauge s	Water Mar	in Upper 12 Inches ks
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	<u>76" (</u> (in.) <u>Conform</u> (in.) <u>Conform</u> (in.)	Secondary Indicators Oxidized R Water-Stai Local Soil FAC-Neutr	Deposits Patterns in Wetlands s (2 or more required): Root Channels in Upper 12" ined Leaves Survey Data
Remarks:			

(Series and	Map Unit Name (Series and Phase): Toxestate, Sitty Clay Loan Field Observations Confirm Mapped Type? Yes No				
Profile Des Depth (inches)	Scription: Horizon S Horizon	Matrix Color (Munsell Moist) 5/1 10416	Mottle Colors (Munsell Moist) 3/0 7.548	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Réducing 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:					

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

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

Project/Site: Franklin Form Applicant/Owner: NELEA Investigator: WTSI		Date: 1-3-08 County: Richland State: LA	
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	WP 18	forested and a O	
Dominant Plant Species Stratum Indicator	Dominant Plant Specie	es <u>Stratum Indicator</u>	
1. Salix nigra MS OBL	9. Fore-tiera acum	ninata US OBL	
2. Fraxinus pennsylvanica OS FACW	10		
3. Quercus lyrata DS DBL	11		
4. Quercus phellos OS FACW-	12		
5. Cephalanthus occidentalis US OBL	13		
6. Celtis laevigata ms FACW	14		
7. Brunnichia ovata U.S OBL	15		
8. Campsis radicans US FAC	16		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100 %		
Remarks: for ste D wetten D fire	peolors baliso	f wec.	
HYDROLOGY	T	C	
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Water Ma	: d d in Upper 12 Inches arks	
Field Observations:	Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):		
Depth of Surface Water: <u>ル/</u> ん (in.)	Oxidized	Root Channels in Upper 12" tained Leaves	
Depth to Free Water in Pit: >/>* (in.)	Local Soi	il Survey Data	
Depth to Saturated Soil:	FAC-Neu Other (Ex	utral Test xplain in Remarks)	
Remarks: fring along bales of	WFC		

(Series and	Map Unit Name (Series and Phase): Freshale Sitty Clay ban Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? (Yes) No							
Profile Des Depth (inches)	Scription: Horizon 13	Matrix Color (Munsell Moist) 5/1 10-112	Mottle Col (Munsell 4//3	Moist)	Mottle Abundance/Contras	Texture, Concretions, Structure, etc. clay low		
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:		Lower	ohro-a	50)				

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:	well. O habital

Project/Site: Franklin For Applicant/Owner: NELEA Investigator: WTJT	m	Count	1-3-08 y: <u>Richland</u> LA			
Do Normal Circumstances Exist on th Is the site significantly disturbed (Atypo Is the area a potential Problem Area? (If needed, explain on reverse.)	ical Situation)? Yes		nunity ID : ect ID:/_O D:/_3			
VEGETATION		• •	P21 rostaD wetledfo			
Dominant Plant Species Stratu	um Indicator Dominant	Plant Species	Stratum Indicator			
1. Fraxinus pennsylvanica OS						
		<u></u>				
,	i i					
₩ .						
5. Sabal minor U.S	FACN 13					
6	14					
7	15					
8	16					
Percent of Dominant Species that are OE (excluding FAC-).	BL, FACW or FAC	100 %				
Remarks: Typical vasatative co-parats along bala of Creek						
Croele						
HYDROLOGY						
HYDROLOGY						
Recorded Data (Describe in Remarks Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	s): Wetland ge Prima	hydrology Indicators: ary Indicators: Inundated Saturated in Upper 1. Water Marks Drift Lines	For sto			
Recorded Data (Describe in Remarks Stream, Lake, or Tide Gauge Aerial Photographs Other	s): Wetland ge Prima - - - -	ary Indicators: Inundated Saturated in Upper 1 Water Marks	2 Inches			
Recorded Data (Describe in Remarks Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	ge Prima	ary Indicators: Inundated Saturated in Upper 1. Water Marks Drift Lines Sediment Deposits Drainage Patterns in Indary Indicators (2 or mor Oxidized Root Chann	2 Inches Wetlands e required): nels in Upper 12"			
Recorded Data (Describe in Remarks Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	ge Prima	ary Indicators: Inundated Saturated in Upper 1 Water Marks Drift Lines Sediment Deposits Drainage Patterns in Indary Indicators (2 or mor Oxidized Root Chanr Water-Stained Leave	2 Inches Wetlands e required): nels in Upper 12"			
Recorded Data (Describe in Remarks Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	ge Prima	ary Indicators: Inundated Saturated in Upper 1 Water Marks Drift Lines Sediment Deposits Drainage Patterns in Indary Indicators (2 or mor Oxidized Root Chanr Water-Stained Leave	Wetlands e required): nels in Upper 12" s ta			
Recorded Data (Describe in Remarks Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	ge Prima	ary Indicators: Inundated Saturated in Upper 1. Water Marks Drift Lines Sediment Deposits Drainage Patterns in Indary Indicators (2 or mor Oxidized Root Chanr Water-Stained Leave Local Soil Survey Da FAC-Neutral Test Other (Explain in Rer	Wetlands e required): nels in Upper 12" s ta			

	ame I Phase): <u>√ó́</u> (Subgroup): _	restdate silty d	Field	age Class: Observations onfirm Mapped Type? Yes No			
Profile Des Depth (inches) /2" 	Scription: Horizon S S	Matrix Color (Munsell Moist) 5/1 10412 5/2 10412	Mottle Colors (Munsell Moist) 4/4 104/2	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. clay 16017 clay 18017		
Hydric Soil	Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Heducing 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:							

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:	fb	mst.O	wells Ohabital along back of Crafe

Project/Site: Franklin Applicant/Owner: 15	Farm		Date: <u>1/3/08</u> County: <u>Rickla_9</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	d (Atypical Situation)? Area?	Yes No T Yes No P	Community ID : Transect ID: Plot ID: 7,14
VEGETATION		Lord	estal walland fries
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Cephalanthus occidents		9	***************************************
2. Gleditsia traconthos		10	
3. Fraxipos pennsylvania	, I	11	
4. Queveus Phellos	<u>05 </u>	12	
5		13	
7		14	
7 8.		16	
Percent of Dominant Species that (excluding FAC-). Remarks:	are OBL, FACW or FAC		
HYDROLOGY	Typiaally	regulative components	olors lop leal.
Recorded Data (Describe in R Stream, Lake, or Tie Aerial Photographs Other No Recorded Data Available	de Gauge	Wetland hydrology Indicators Primary Indicators: Inundated Saturated in Up Water Marks Drift Lines	in pools) oper 12 Inches
		Sediment Depo	
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	1" (in.)	Drainage Patter Secondary Indicators (2 o Oxidized Root (Water-Stained I Local Soil Surve FAC-Neutral Te Other (Explain i	or more required): Channels in Upper 12" Leaves ey Data est

Map Unit Name (Series and Phase): Destate Sitty day loan Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No									
Profile Des Depth (inches)	Secription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Mois	<u>:t)</u>	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. Sity Clay Jonn			
Libraria Cali									
	Hydric Soil Indicators: Histosol								
Remarks:	Remarks:								
WETLAND DETERMINATION									
	c Vegetation Pi ydrology Prese s Present?	nt? Yes N	lo (Circle) lo lo	ls t	his Sampling Point Witl	(Circle) hin a Wetland? Yes No			
Remarks:									

Project/Site: Franklin Form Applicant/Owner: MELEA Investigator: WTSI		Date: 1/3/08 County: 18chland State: LA
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 :
VEGETATION Agricultural Field		WJ=1 28
Dominant Plant Species Stratum Indicator 1	Dominant Plant Species 9	
Remarks:	fiel O	
HYDROLOGY		
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	Water Marks Drift Lines Sediment De Drainage Pa Secondary Indicators (Oxidized Ro Water-Staine Local Soil Se	n Upper 12 Inches seposits atterns in Wetlands (2 or more required): bot Channels in Upper 12" ned Leaves Survey Data
Remarks:	Orology presal.	£

Map Unit Name (Series and Phase): Silbert - Egypt Silt loams, gently undulating Drainage Class: Field Observations Taxonomy (Subgroup): Confirm Mapped Type? Yes No								
Profile Des Depth (inches) 24"	Horizon	Matrix Color (Munsell_Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. Chay texture			
	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: Soils are clay deuture, monipulated via forning classified as PC								
WETLANI	D DETERMIN	IATION						

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:	

Project/Site: /-/a Applicant/Owner: // Investigator: // // // // // // // // // // // // //		Date: 1/3/08 County: Richael State: LA		
Do Normal Circumstances E Is the site significantly distur Is the area a potential Proble (If needed, explain on rev	bed (Atypical Situation)? em Area?	Yes No Yes No Yes No	Community ID : Transect ID: /・ク Plot ID: /。	
VEGETATION			Foresto Duella O 10Pt 29	
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator	
1. <u>Sabal</u> minor	US FACW	9		
2. U/mus americana		10		
3. Celtis laevigata	MS/OS FACW	11		
4. Quercus lyrata	<u>OS OBA</u>	12		
5				
6		14		
7		15		
Percent of Dominant Species t (excluding FAC-).	:hat are OBL, FACW or FAC	16		
	Tusical foresta	wotten Dhobitot olo	n 1 1.	
	7 P	of wore		
HYDROLOGY				
Recorded Data (Describe i Stream, Lake, or Aerial Photograp Other No Recorded Data Availab	r Tide Gauge ohs	Water Mark Drift Lines	n Upper 12 Inches ks	
Field Observations:			Patterns in Wetlands	
Depth of Surface Water:	<u> ルル</u> (in.)	Secondary Indicators Oxidized R	s (2 or more required): toot Channels in Upper 12" ned Leaves	
Depth to Free Water in Pit:	<u> > / > / (</u> in.)		Survey Data	
Depth to Saturated Soil:	<u> Surface</u> (in.)		ai rest Ilain in Remarks)	
Remarks:				

(Series and	Map Unit Name (Series and Phase): Forestdate sity day loan Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No						
	Indicators: Histosol Histic Epiped Sulfidic Odor Aquic Moistu Reducing Co	re Regime		Concretions	Soils List		
	_ Gleyed or Lo	w-Chroma Colors		Other (Explain in Rema	rks)		
Remarks: Low-ohro-a Soil adors.							
WETLAN	D DETERMIN	IATION					
Hydrophytic Vegetation Present? Yes No (Circle) (Circle)							

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

Project/Site: Frank in Farm Applicant/Owner: NE LEA Investigator: WTSZ	Date: //3/08 County: /ヒンchleuO State: 上心
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 Yes No Plot ID: Community ID: Transect ID:
VEGETATION	Droin upt 32
Dominant Plant Species Stratum Indicator 1	Dominant Plant Species Stratum Indicator 9
Remarks: Within Planted Ag. HYDROLOGY	
Recorded Data (Describe in Remarks): Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: [in.)	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines 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: (in.) Remarks: RPW +ra.	Other (Explain in Remarks)

	l Phase): <u>√Ω</u> Ω	stoale sity de		Field	age Class: Observations onfirm Mapped Type? (Yes) No
Profile Des Depth (inches) 2t/"	Scription: Horizon S	Matrix Color (Munsell Moist)	T	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Réducing 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:		Top bale	of nistice	s. 2.10.	

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

Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Primary Indicators: Inundated Saturated in Upper 12 Inches 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)		Date: <u>パ3/0 &</u> County: <u>たんし</u> State: <i>人名</i>	Co	Provi	Project/Site: Franklin FARM Applicant/Owner: MELEA Investigator: WTSF				
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator Plant Species Plant	<u>)</u> 18	Transect ID: //	No Tra		l (Atypical Area?	nificantly disturbed potential Problem	Is the site signifies the area a po		
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other		,					EGETATION		
2 Carya il inoevisio	tor_	Stratum Indi	ninant Plant Species	Indicator	Stratum		400		
2 Carya il inocusis 3 Platanes Occidents 4 Ill. 4 Ill. 5 Querrus Profes 6 Ill. 11. 12. 5 Querrus Profes 6 Ill. 13. 6 Ill. 7 Ill. 8 Ill. 16 Ill. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Vegetor of Inc. Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Depth to Saturated Soil: Ind. Vegetor Ill. 11. 12. 13. 14. 15. 16. Vegetor FAC (excluding FAC-). Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines 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)	_			TACU	<u>VS</u>	SPP	1. Rubus		
The state of the				FAC+		ill inoensis	2. Carya il		
13. 14. 15. 16. 16. 16. 17. 18. 16. 16. 16. 17. 18. 16. 16. 17. 18. 16. 16. 16. 17. 18. 16. 16. 16. 17. 18. 16. 16. 16. 17. 18. 16. 16. 16. 16. 16. 16. 16. 16. 16. 16				FACU	<u> </u>	s Occidentals	3. Platanus		
14.							,		
7	_			MINGW	<u> 0s_</u>	<u>Phellos</u>	5. Queveus		
Remarks: Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Inundated Inundated						····	6		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Westland hydrology Indicators: Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Wetland hydrology Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Depth and Upper 12 Inches 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)						, <u>, , , , , , , , , , , , , , , , , , </u>	7		
HYDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge									
HYDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Frimary Indicators: Frimary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines 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)							3		
HYDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Wetland hydrology Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Data Marks Drift Lines 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)				FACW or FAC	are OBL, F				
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Wetland hydrology Indicators: Primary Indicators: Note Saturated in Upper 12 Inches Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)			4/5= 802			C-).	(excluding FAC		
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Wetland hydrology Indicators: Primary Indicators: No Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)			4/5= 802			C-).	(excluding FAC		
Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Frimary Indicators: Inundated Saturated in Upper 12 Inches Sediment Deposits 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)			4/5= 802			C-).	(excluding FAC		
Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Primary Indicators: Inundated Saturated in Upper 12 Inches Sediment Deposits 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)			4/5= 802			c-). vasatata	(excluding FAC- Remarks:		
Aerial Photographs Other No Recorded Data Available Water Marks Drift Lines Sediment Deposits Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)		Ζ,	4/5= 802			c-). vasatata	(excluding FAC- Remarks:		
Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Depth to Free Water in Pit: Depth to Saturated Soil: Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	Stop	Z	4/5 = 802		emarks):	C-). Vasatat control Data (Describe in R	Remarks: HYDROLOGY Recorded Da		
Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Depth to Free Water in Pit: Depth to Saturated Soil: Drift Lines 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)	stop	z. fo	etland hydrology Indicators: Primary Indicators: Inundated		emarks):	C-). Vasata (Describe in R Stream, Lake, or Tic Aerial Photographs	Remarks: HYDROLOGY Recorded Da St As		
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Depth of Surface Water: Dividized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	Sto D	z. fo	etland hydrology Indicators: Primary Indicators: Inundated Saturated in Upp Water Marks		emarks):	C-). Vasata (Describe in R Stream, Lake, or Tic Aerial Photographs Other	Remarks: HYDROLOGY Recorded Da St Ae Ott		
Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	Stop Lilo	rs: pper 12 Inches posits	etland hydrology Indicators: Primary Indicators: Inundated Saturated in Upp Water Marks Drift Lines Sediment Deposi		emarks):	C-). Vasata (Describe in R Stream, Lake, or Tic Aerial Photographs Other	Remarks: HYDROLOGY Recorded Da St Ae Ott		
Depth to Free Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	Je O	s: pper 12 Inches psits prins in Wetlands	etland hydrology Indicators: Primary Indicators: Inundated Saturated in Upp Water Marks Drift Lines Sediment Deposi Drainage Pattern		emarks):	Data (Describe in R Stream, Lake, or Tic Aerial Photographs Other ded Data Available	Remarks: HYDROLOGY Recorded Da St Ae Ot No Recorde		
Depth to Saturated Soil:(in.) Other (Explain in Remarks)	La. Jah	rs: pper 12 Inches psits prins in Wetlands or more required): Channels in Upper 1	etland hydrology Indicators: Primary Indicators: Inundated Saturated in Upp Water Marks Drift Lines Sediment Deposi Drainage Pattern Secondary Indicators (2 or Oxidized Root Ch	s top b	emarks):	Data (Describe in R Stream, Lake, or Tic Aerial Photographs Other ded Data Available ions:	Remarks: HYDROLOGY Recorded Da St Ae Ot No Recorde		
Domorko:	L. Jak	rs: pper 12 Inches psits prins in Wetlands or more required): Channels in Upper 1. Leaves yey Data	etland hydrology Indicators: Primary Indicators: Inundated Saturated in Upp Water Marks Drift Lines Sediment Deposi Drainage Pattern Secondary Indicators (2 or Oxidized Root Ch Water-Stained Le Local Soil Survey	(in.)	emarks): le Gauge	Data (Describe in R Stream, Lake, or Tic Aerial Photographs Other ded Data Available ions:	Remarks: HYDROLOGY Recorded Da St Ae Ot No Recorde Field Observation Depth of Surfa		
Remarks: thin woodline along field else	La. Jah	rs: pper 12 Inches psits perns in Wetlands or more required): Channels in Upper 1. Leaves yey Data est	etland hydrology Indicators: Primary Indicators: Inundated Saturated in Upp Water Marks Drift Lines Sediment Deposi Drainage Pattern Secondary Indicators (2 or Oxidized Root Ch Water-Stained Le Local Soil Survey FAC-Neutral Tes	(in.)	emarks): le Gauge	Data (Describe in R Stream, Lake, or Tic Aerial Photographs Other ded Data Available iions: face Water:	Remarks: HYDROLOGY Recorded Da St Ae Ot No Recorde Field Observation Depth of Surfa Depth to Free		

(Series and	Map Unit Name (Series and Phase): Focestate, Silty Clay Clay Taxonomy (Subgroup): Drainage Class: Field Observations Confirm Mapped Type? Yes No							
Profile Des Depth (inches) 12 "	Scription: Horizon S	Matrix Color (Munsell Moist) 5/3 POY/2	Mottle Colors (Munsell Moist) 4/3107/2	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
	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:		3	nie dras: loooleDolor wikir field	tool. Shop bak o	1 Crack			

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
	balial Drain / As field	

Project/Site: Franklin Farm Applicant/Owner: NELEA Investigator: WIST		Date: //s/o 2 County: Richle D 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.)	Yes No Yes No Yes No	Community ID : Transect ID:/_O Plot ID:/_3 /9				
VEGETATION		Droin Wpt 34				
Dominant Plant Species 1 Social minimum of the points of	Dominant Plant Species 9					
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Uesetation Present wikin Droin HYDROLOGY						
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indica Primary Indicators: Inundated Saturated in Water Mark	n Upper 12 Inches				
Field Observations: Depth of Surface Water: 1-6" (in.) Depth to Free Water in Pit: 3.16.2 (in.) Depth to Saturated Soil: 3.16.2 (in.)	Secondary Indicators Oxidized Ro Water-Stain Local Soil S FAC-Neutra	atterns in Wetlands (2 or more required): oot Channels in Upper 12" ied Leaves Survey Data				
Remarks: intersection of Drains, storm Drains for the field						

		restriale silty o		Field	age Class: Observations onfirm Mapped Type? Yes	
Profile De Depth (inches)	scription: Horizon 3	5/7 102/	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. Cky Silly Clay	
Hydric Soil	Indicators:					
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)						
		50.	s are L	ow-ohrona		

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
) as RPW, Doin Transating open by fills

Project/Site: Frank)in Farm Applicant/Owner: MELEA Investigator: WISZ	Date: //3/28 County: Richla State: LA
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 No Plot ID:
VEGETATION	operfell upt 36
Dominant Plant Species Stratum Indicator 1.	Dominant Plant Species Stratum Indicator 9.
HYDROLOGY	pland Sample
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: Depth to Free Water in Pit: Depth to Saturated Soil: (in.)	Sediment Deposits 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:)

	I Phase): 🕒 🕜	ger silt loam,		1 1014	nage Class: Observations onfirm Mapped Type? Yes No			
Profile Des Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
	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:		⇔ &	oils with	eir open	Dg. folo			

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

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

Project/Site: Frank in Farm Applicant/Owner: Applicant/Owner: Investigator:	Date: 1) / AS County: 10 Ala. D State: 4 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.)	on)? Yes No Community ID :
VEGETATION	foresto Dwellend
Dominant Plant Species Stratum Indicate	
1. Overcus Phellos O.S IMM	7
2. Sobil Million U.S FACE	· ·
3. Celtis lacuiseda n.s FACU	, I
4. Carry Miners M.S FAC.	
5.	13
6	
7	
8	
Percent of Dominant Species that are OBL, FACW o (excluding FAC-).	or FAC
Remarks:	ive compeneds within Grested Pringe
HYDROLOGY	
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge	Wetland hydrology Indicators: Primary Indicators:
Aerial Photographs Other	Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water:	Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit: 212" (in.)	Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Remarks:	Outer (Explain in Remarks)
Tromains.	

	ase): <u>+Dre</u> s	stdale silty o	riela	age Class: Observations Infirm Mapped Type? Yes No	
Profile Descrip	orizon	Matrix Color (Munsell_Moist)	Mottle Colors (Munsell Moist) 4/3/0-//	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. heary Jay
Hi St Ac	stosol stic Epipedo ulfidic Odor quic Moisture educing Con	e Regime		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydric Other (Explain in Remar	oils List c Soils List

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:				sho wetter fringe hobital

Project/Site: Frank/in Farm Applicant/Owner: AFFA Investigator: AFFA 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.) VEGETATION	Date: //3/27 County: Richia C State: A Yes No Yes No Yes No Yes No Plot ID: 1.0 Plot ID: 1.72
Dominant Plant Species Stratum Indicator 1. Sald Mirror US FARW 2. Quercus Iyrada OS/18 Ob 3. Frox ious Gents/Jana Offis FARW 4	Dominant Plant Species Stratum Indicator 9
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Typical vesetative companies HYDROLOGY	olors bale
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)

	Phase): 100	stdale Sitty cli		Field	age Class: Observations onfirm Mapped Type? (Yes) No				
Profile Des Depth (inches)	Horizon S Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell_Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
Hydric Soil	_ Histosol _ Histic Epiped _ Sulfidic Odor ∠ Aquic Moistui _ Reducing Co	re Regime	H C L	Concretions ligh Organic Content in Irganic Streaking in Sa isted on Local Hydric S isted on National Hydri Other (Explain in Remai	Soils List ic Soils List				
WETLANI	WETLAND DETERMINATION								

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

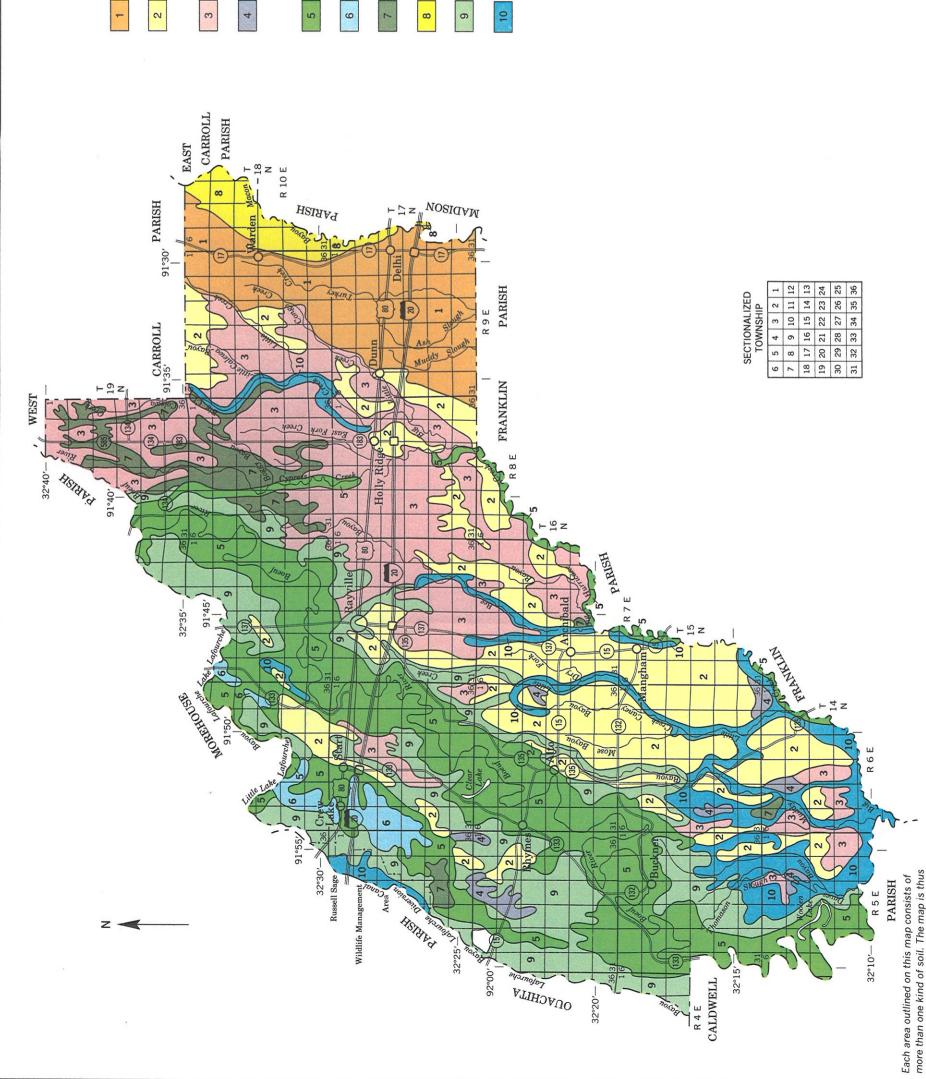
Project/Site: Frank II Applicant/Owner: W152	ELEA		Date: //3/07 County: Rights O State: 4
Do Normal Circumstances Ex Is the site significantly disturb Is the area a potential Proble (If needed, explain on reve	ed (Atypical Situation)? m Area?	Yes No Yes No Yes No	Community ID : Transect ID: Plot ID:
VEGETATION			forestall wotten
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	<u>Stratum</u> <u>Indicator</u>
1. Ulvius Americana	MS FACW	9	
2. Orevous nuttallii	ms OBL	10	
3. Querrus Phellos	OS TACKE	11	
4. Carya : Minonens:	OS FAC+	12	
5. CeHis kevigota	DSMS FACW	13	
6		14	
7		15	
8		16	
Percent of Dominant Species th (excluding FAC-).	at are OBL, FACW or FAC	1006	
Remarks:	0		
	fringe hobile	of the same of the	
HYDROLOGY			
			^ .
Recorded Data (Describe in Stream, Lake, or Aerial Photograph Other No Recorded Data Available	Tide Gauge as	Wetland hydrology Indicat Primary Indicators: Inundated Saturated in Water Marks	Upper 12 Inches
Stream, Lake, or Aerial Photograph Other	Tide Gauge as	Primary Indicators: Inundated Saturated in Water Marks Drift Lines Sediment De	Upper 12 Inches
Stream, Lake, or Aerial Photograph Other No Recorded Data Available	Tide Gauge as	Primary Indicators: Inundated Saturated in Water Marks Drift Lines Sediment De Drainage Pai Secondary Indicators (3	Upper 12 Inches eposits tterns in Wetlands 2 or more required): ot Channels in Upper 12"
Stream, Lake, or Aerial Photograph Other No Recorded Data Available Field Observations:	Tide Gauge ns e	Primary Indicators: Inundated Saturated in Water Marks Drift Lines Sediment De Drainage Par Secondary Indicators (; Oxidized Roc Water-Staine Local Soil Su	Upper 12 Inches eposits tterns in Wetlands 2 or more required): ot Channels in Upper 12" ed Leaves urvey Data
Stream, Lake, or Aerial Photograph Other No Recorded Data Available Field Observations: Depth of Surface Water:	Tide Gauge ns e <u>ルル</u> (in.)	Primary Indicators: Inundated Saturated in Water Marks Drift Lines Sediment De Drainage Pai Secondary Indicators (i Oxidized Roo Water-Staine Local Soil Su FAC-Neutral	Upper 12 Inches eposits tterns in Wetlands 2 or more required): ot Channels in Upper 12" ed Leaves urvey Data
Stream, Lake, or Aerial Photograph Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Tide Gauge is e	Primary Indicators: Inundated Saturated in Water Marks Drift Lines Sediment De Drainage Pai Secondary Indicators (i Oxidized Roo Water-Staine Local Soil Su FAC-Neutral	Upper 12 Inches eposits eterns in Wetlands 2 or more required): ot Channels in Upper 12" ed Leaves arvey Data Test in In Remarks)

(Series an	Name d Phase): <u>Fov</u> (Subgroup): _	estdale silty clay	laam	r ieic	nage Class: d Observations Confirm Mapped Type? Yes I
Profile De Depth (inches)	escription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell_Moist)		Texture, Concretions, Structure, etc.
121/	[3	4 10gy 3 2	adentic,	,	clay log_
Hydric Soi	I Indicators: _ Histosol _ Histic Epipe _ Sulfidic Odo _ Aquic Moisto _ Reducing C _ Gleyed or Lo	or ure Regime		Concretions High Organic Content i Organic Streaking in S Listed on Local Hydric Listed on National Hyd Other (Explain in Rema	Soils List ric Soils List
Remarks:		Low-ah	40-9 Soil 6	colors	

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: forestac	by bak

APPENDIX IV

- Richland Parish, Louisiana Soils Survey Information



SOIL LEGEND

AREAS DOMINATED BY LEVEL TO STRONGLY SLOPING SOILS ON TERRACES

CALHOUN-GRENADA: Poorly drained and moderately well drained, level to strongly sloping soils; formed in thick loess

GILBERT-GIGGER-DEXTER: Poorly drained, moderately well drained, and well drained, level to gently undulating soils; formed in thin loess and in the underlying loamy or loamy and sandy sediments

GILBERT-NECESSITY-EGYPT: Poorly drained and somewhat poorly drained, level to gently undulating soils; formed in thin loess and in the underlying loamy sediments

FOLEY-DEERFORD: Poorly drained and somewhat poorly drained, level and nearly level soils; formed in silty sediments

AREAS DOMINATED BY LEVEL TO GENTLY UNDULATING SOILS ON ALLUVIAL PLAINS

HEBERT-RILLA-STERLINGTON: Somewhat poorly drained and well drained, level and gently undulating soils; formed in loamy alluvium

GALLION-MER ROUGE-HEBERT: Well drained, moderately well drained, and somewhat poorly drained, level to gently undulating soils; formed in loamy alluvium

FORESTDALE-PERRY: Poorly drained, level, rarely flooded soils; formed in loamy and clayey

alluvium SHARKEY-TENSAS: Poorly drained and somewhat poorly drained, level, and very gently sloping

soils; formed in clayey or clayey and loamy alluvium

PERRY-PORTLAND: Poorly drained and somewhat poorly drained, level soils; formed in loamy and clayey alluvium

PERRY-FORESTDALE: Poorly drained, level, occasionally flooded soils; formed in clayey and loamy alluvium

Compiled 1988

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE LOUISIANA AGRICULTURAL EXPERIMENT STATION LOUISIANA SOIL AND WATER CONSERVATION COMMITTEE

GENERAL SOIL MAP RICHLAND PARISH, LOUISIANA



meant for general planning rather than a basis

for decisions on the use of specific tracts.

SOIL LEGEND

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 fetter 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*i*.

NAME	
SYMBOL	

Arents, dredged 1/ Calhoun silt loam Calhoun-Calloway silt loams, gently undulating Calloway silt loam, 1 to 3 percent slopes Deerford silt loam, 0 to 1 percent slopes Dexter silt loam, 0 to 1 percent slopes Dexter silt loam, 3 to 5 percent slopes Dexter silt loam, 3 to 5 percent slopes	Dundee-Tense somplex, gently undulating Egypt silt loam, 1 to 3 percent slopes Foley silt loam, 1 to 3 percent slopes Foley silt loam for silt loam for settled silt loam, 1 to 3 percent slopes Forestdale silty clay loam, occasionally flooded Gallion sitt loam, 1 to 3 percent slopes Gigger-Gilbert silt loams, gently undulating Gilbert-Egypt silt loams, gently undulating Genada silt loams, 1 to 3 percent slopes Grenada silt loam, 1 to 2 percent slopes Grenada silt loam, 8 to 12 percent slopes Grenada call loam, 8 to 12 percent slopes Grenada call loam, 8 to 12 percent slopes Grenada call loam, 8 to 12 percent slopes	Hebert silly clay toam Hebert-Perry complex, occasionally flooded Liddieville fine sandy loam, 2 to 5 percent slopes Loring sill loam, 1 to 5 percent slopes Maurepas muck 1/ Mer Rouge sill toam Mer Rouge sill toam Mer Rouge Gallion sill toams Necessity sills toam, 1 to 3 percent slopes Necessity Gilbert silt toams, gently undulating Perry silly clay toam Perry day	Portland sally dray loan Portland clay Rilla sill loam, 0 to 1 percent slopes Rilla sill loam, 1 to 3 percent slopes Rilla-Hebort silt loams, gently undulating Sharkey clay Sterlington silt loams, 0 to 1 percent slopes Sterlington rill toam, 1 to 3 percent slopes Sterlington rill toam, 1 to 3 percent slopes Sterlington rill toam, 1 to 3 percent slopes Sterlington rill toams, gently undulating Tensas silty clay Tensas silty clay Tensas-Sharkey complex Yorktown clay, trequently flooded 1/
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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.

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

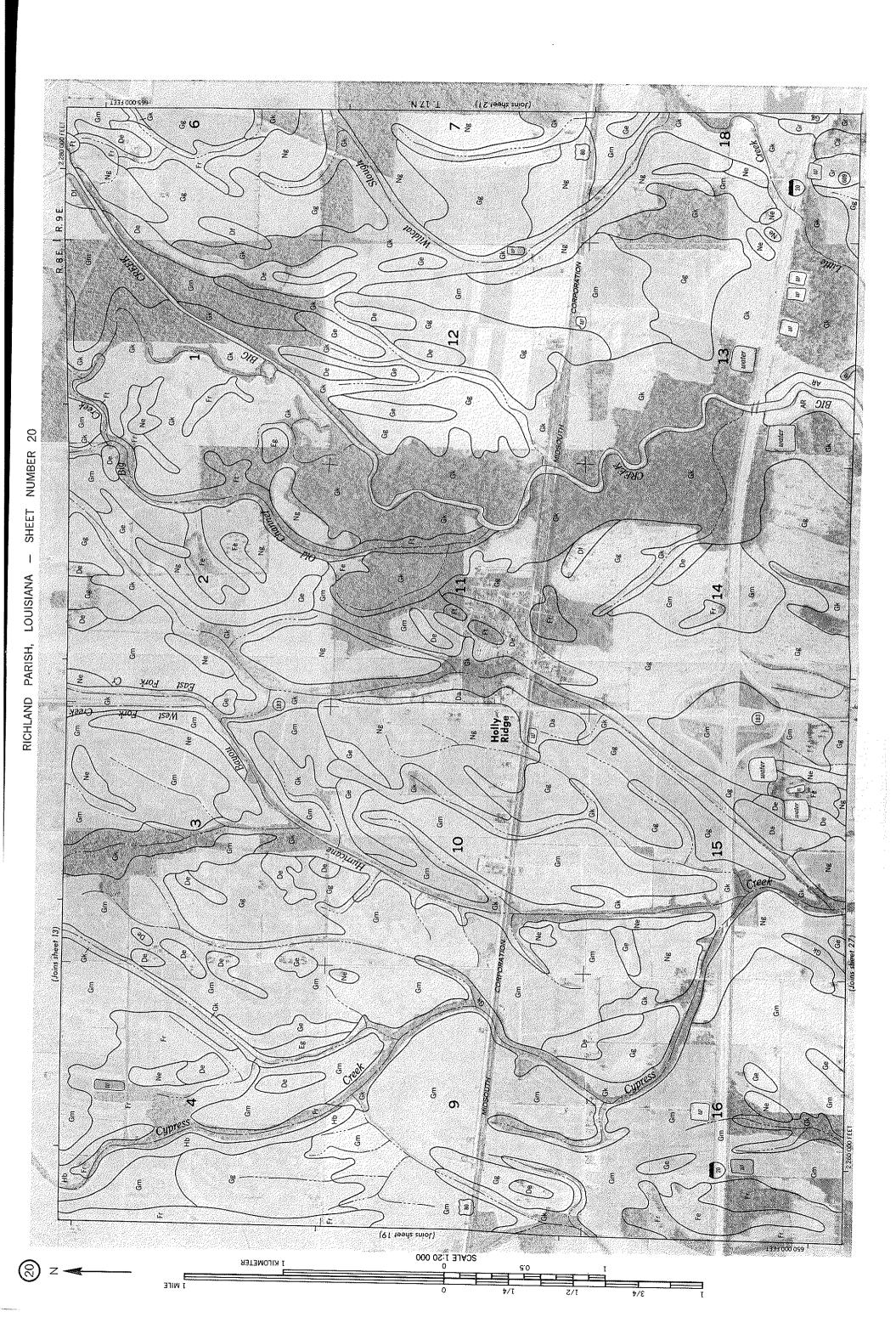
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SPECIAL SYMBOLS FOR SOIL SURVEY

BOUNDABIES		MISCELL ANEOLIC CHITTIBAN CEATHURS		S IOBINIS AND SYMBOLS	(ord
		מוסטייים מיינים מסרו מיינים בילו מערכי			O O O O
National, state, or province	1	Farmstead, house (omit in urban area)	20	ESCARPMENTS	
County or parish		Church	1- 82	Bedrock (points down slope)	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
Minor civil division		School	<u>^</u>	Other than bedrock (points down slope)	********
Reservation (national forest or park, state forest or park, and large airport)		indian mound (label)	A Mound	SHORT STEEP SLOPE	• • • • • • • • • • • • • • • • • • • •
l and roant		Located object (label)	O Tower	GULLY	~~~~
Limit of coil curvey (label)		Tank (label)	• Gas	DEPRESSION OR SINK	\$
Tions described to the control of		Weils, oif or gas	Α 49	SOIL SAMPLE (normally not shown)	Ø
Field sheet matchine and nealtine		Windmill	, *⊄	MISCELLANEOUS	
AD HOC BOUNDARY (label)	(Parts Aintein)	Kitchen midden	Ε	Biowout	Þ
Small arrport, arriteid, park, oillield, cemetery, or flood pool	1000 VOOT			Clay spot	*
STATE COORDINATE TICK	, -	WATER FEATURES	Ø	Gravelly spot	00
LAND DIVISION CORNER (sections and land orants)	+++,	DRAINAGE		Gumbo, slick or scabby spot (sodic)	Ø
ROADS		Perennial, double line		Dumps and other similar non soil areas	515
Divided (median shown if scale permits)	- Company of the Comp	Perennial, single line)	Prominent hill or peak	莽
Other roads		Intermittent	; (,	Rock outcrop (includes sandstone and shale)	>
Trail		Drainage end		Saline spot	-\$-
ROAD EMBLEM & DESIGNATIONS		Canals or ditches		Sandy spot	::
Interstate		Double-line (label)	CANAL	Severely eroded spot	1 1
Federal	(E)	Drainage and/or irrigation		Slide or slip (tips point upslope)	ನ
State	(8)	LAKES, PONDS AND RESERVOIRS		Stony spot, very stony spot	8
County, farm or ranch	1283	Perennial	(water) (1)		
RAILROAD		Intermittent	000		
POWER TRANSMISSION LINE		MISCELLANEOUS WATER FEATURES			
(normally not shown)		Marsh or swamp	淵		
PIPE LINE (normally not shown)	Ī	Spring	ን	*	
FENCE (normally not shown)		Well, artesian	÷		
LEVEES		Well, irrigation	ф		
Without road	OHOMOMENTAL OFFICE AND ADDRESS OF THE PERSON	Wetspot	•		
With road	http://pincestriction.com)-		
With railroad					
DAMS					
Large (to scale)	\bigoplus				
Medium or Small	ivater				
PITS	(2)				
Gravel pit	×				
Mine or quarry	*				

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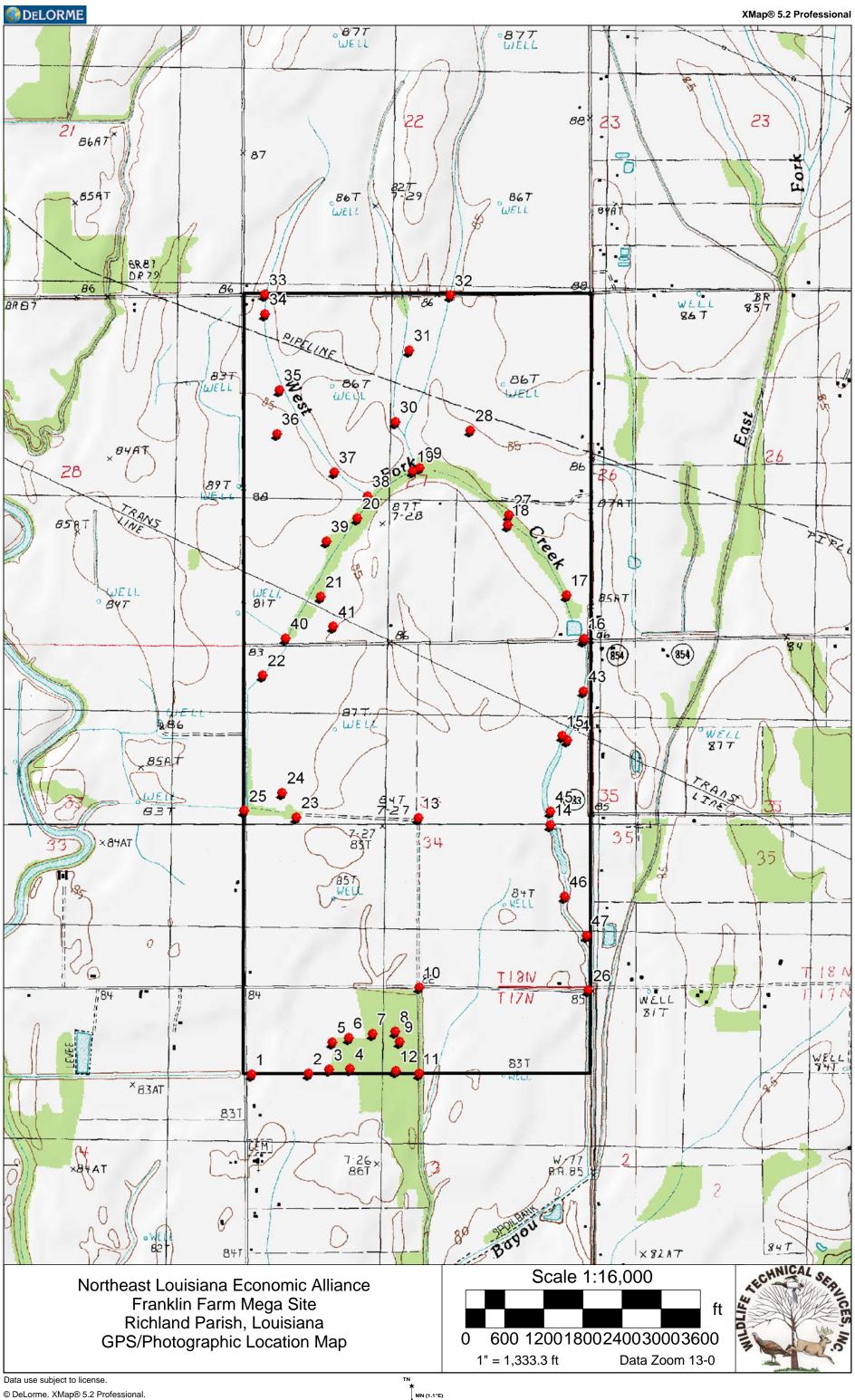
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APPENDIX V

- Photographs of Selected Property Features

FRANKLIN FARM MEGA SITE					
		GPS POIN			
		GPS COOR	DINATE		
	Latitude		Longitude		PHOTOGRAPHIC COVERAGE
WAYPOINT #	N(deg min thou)		W(deg min thou)		
1	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/	30.342	W 91/	37.712	-
45	N 32/	30.219	W 91/	37.762	<u> </u>
	N 32/	29.825	W 91/	37.762	50
46					-
47	N 32/	29.726	W 91/	37.654	-



January 2008

WAYPOINT #4

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

WAYPOINT #7

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.



January 2008

WAYPOINT #10

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.



January 2008

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.



January 2008

WAYPOINT #11

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.



January 2008

WAYPOINT #13

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.



January 2008

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.



January 2008

WAYPOINT #16

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.



January 2008

WAYPOINT #17

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.



January 2008

WAYPOINT #17

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

WAYPOINT #25

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.



January 2008

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.





The Source for Integrated Natural Resources