

Exhibit EE.

South Lafourche Airport South Site Wetlands Delineation Report



November 5, 2024

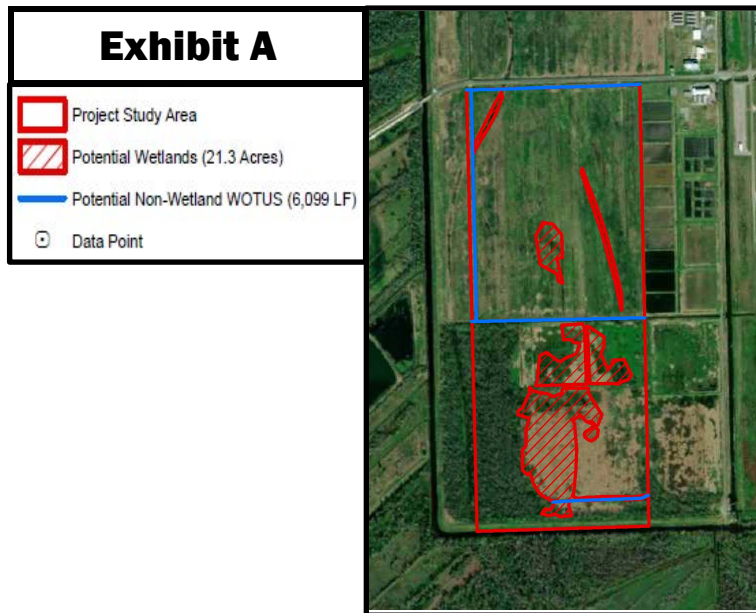
Mrs. Deanna Lafont
South Louisiana Economic Council
322 Audubon Avenue
Thibodaux, Louisiana 70310

South Lafourche Airport South Site Wetlands Delineation Report

**RE: South Lafourche Airport South Site - Wetlands Delineation Executive Summary
CSRS Project No 214002**

Dear Mrs. Lafont,

In part of the Louisiana Economic Development (LED) Certified Sites Program, a wetlands delineation was completed for the South Lafourche Airport South Site in Lafourche Parish. In December 2023, the wetland delineation, completed in accordance with the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual and Regional Supplements, identified approximately 21.3 acres of potentially jurisdictional wetlands and 6,099 linear feet of potentially jurisdictional streams within the site boundary. According to "Exhibit FF. South Lafourche Airport South Site USACE Wetland Mitigation Documentation", all the wetlands within the Larose to Golden Meadow Hurricane Protection System have been mitigated by the USACE, but a permit will still need to be obtained by the USACE before any wetlands can be altered. Since the South Lafourche Airport South Site is within the Larose to Golden Meadow Hurricane Protection System, no wetlands inside the site boundary will have to be mitigated by the future developer. The findings of the wetland delineation report are shown below in Exhibit A and the full report is provided after this executive summary for additional reference.



Thank you for the opportunity to assist you with this project. Should you have any questions or require additional information, feel free to contact me.

Respectfully,

Elliott Boudreaux
Industrial Development Practice Lead

WETLAND DELINEATION REPORT



PROPOSED SOUTH LAFOURCHE AIRPORT SOUTH SITE

AIRPORT ROAD
GALLIANO, LOUISIANA 70345

ECS PROJECT NO. 49:21691

FOR: SOUTH LOUISIANA ECONOMIC COUNCIL

DECEMBER 8, 2023





December 8, 2023

Mr. Vic Lafont
South Louisiana Economic Council
322 Audobon Avenue / NSU-Babington Hall
Thibodaux, Louisiana, 70310

ECS Project No. 49:21691

Reference: Waters of the U.S. Delineation Report, Proposed South Lafourche Airport South Site, Airport Road, Galliano, Lafourche Parish Louisiana
Dear Mr. Lafont:

ECS Southeast, LLC (ECS) is pleased submit this report of the Waters of the U.S. (WOUS) services for the above-referenced site. ECS services were provided in general accordance with ECS Proposal No. 49:37760P authorized on May 16, 2023 and generally meets the requirements of the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0 dated November 2010. **Based on our field reconnaissance, potentially jurisdictional WOUS are present onsite.**

If there are questions regarding this report, or a need for further information, please contact the undersigned.

ECS Southeast, LLC

Curt Schaeffer, CSE
Environmental Project Manager
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225-773-8624

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Associate Principal
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1.0 INTRODUCTION

This report presents the findings of a wetland delineation study conducted by ECS Southeast, LLC (ECS) for South Louisiana Economic Council at the Proposed South Lafourche Airport South Site located at Airport Road, Galliano, Lafourche Parish, Louisiana (29°25'53.33N, 90°16'17.24W). also referred to as the Project Study Area (PSA) for throughout this report, consists of an approximate 142-acre parcel. According to the Lafourche Parish Geographic Information System (GIS) website, the Parcel Identification Number (PIN) is 0102313000 (142 acres). The site includes approximately 142 acres, as shown on the Site Location Map (Appendix I, Figure 1). The site mostly consists of agricultural land, while a forested woodland occupies the western portion of the site. According to the U.S. Geological Survey (USGS) topo map, ponds and unnamed tributaries to Bayou Lafourche are depicted on site. The purpose of this study was to identify and delineate jurisdictional Waters of the U.S. (WOTUS), including wetlands, within the project study area (PSA).

Wetlands are defined by the United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (EPA) as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions.” In order for an area to be classified as wetland, hydrophytic vegetation, hydric soils, and wetland hydrology indicators must be present described in the 1987 “Corps of Engineers Wetlands Delineation Manual” and the Appropriate Regional Supplement.

2.0 METHODOLOGY

The findings of the WOTUS delineation is based on ECS’ professional judgment and application of the technical criteria presented in the 1987 USACE Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0 dated November 2010.

ECS completed the following tasks to identify and delineate potentially jurisdictional WOTUS boundaries onsite:

2.1 Literature Review

ECS reviewed supporting information from publicly-available databases to identify possible ecological effects the project may have on potential state- and/or federally-jurisdictional water resources. During the desktop review, ECS documented relevant, site-specific details (e.g., topographic characteristics, soil composition, recent precipitation, level of disturbance, plant community structure, etc.) and integrated the obtained information with the onsite delineation effort.

2.2 Methodology for Field Investigation

Wetland boundaries were delineated using the routine onsite determination method described in the USACE Manual and Regional Supplement, in conjunction with the Atlantic and Gulf Coastal Plain 2020 Regional Wetland Plant List and the USDA Soil Survey.



ECS performed onsite wetland delineations as described above. First, site hydrology was observed and the plant community within the data plot was characterized. The dominant plant species within each community were then identified, and it was determined whether or not hydrophytic (wetland) plants dominated the plant community. The USFWS has defined five wetland plant indicator categories including:

- Obligate wetland (OBL) – has >99% probability of occurring in wetlands
- Facultative wetland (FACW) – has 66% to 99% chance of occurring in wetlands
- Facultative (FAC) – has 33% to 66% chance of occurring in wetlands
- Facultative upland (FACU) – has 1 to 33% chance of occurring in wetlands
- Upland (UPL) – has <1% chance of occurring in wetlands
- No Indicator (NI) – no wetland indicator for the specified species, considered UPL

Plants identified as OBL, FACW, or FAC are considered wetland plants (or hydrophytes) by USACE.

In areas determined to be dominated by hydrophytic vegetation and potential wetland hydrology is observed, an approximately 16-inch soil pedon was excavated with a shovel to determine if hydric soils were present. The soil pit was also inspected to determine if indicators of wetland hydrology (inundation, soil saturation, oxidized rhizospheres on living roots, etc.) were present.

Once an area is determined to be a wetland, further testing was performed to locate the wetland/non-wetland boundary. A second data point was established in an adjacent non-wet area to document non-wetland conditions. Wetland boundaries were documented with a handheld global positioning unit (Trimble Geo 7X™).

Data forms specified in the Regional Supplement were completed for each wetland and non-wetland data point location. Information recorded on the USACE-approved wetland data sheets included vegetation data (species and percent cover in each stratum), soil matrix and redox conditions to a depth of 16 inches, and hydrological indicator observations utilized in making wetland determinations.

2.3 Methodology for Delineating Streams

During the field investigation for wetlands, ECS identified streams onsite that could be considered jurisdictional by state and federal regulatory agencies. ECS used field indicators such as flow, substrate composition, presence/absence of defined bed and banks, origin of hydrologic source, presence/absence of vegetation in the stream channel, and composition and relative abundance of resident benthic macroinvertebrates to classify onsite streams into three stream types: ephemeral, intermittent, and perennial.

RGL No. 05-05 provides guidance on identifying physical indicators of Ordinary High Water Mark (OHWM) as defined in 33 CFR Sections 328.3(e) and 329.11(a)(1) and discusses implementation of other appropriate means that consider the characteristics of the surrounding areas to establish the lateral limits of jurisdiction over tidal and non-tidal waters. Per RGL No. 05-05, “the lateral limits of jurisdiction over non-tidal water bodies extend to the [OHWM], in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands”.



3.0 FINDINGS

3.1 Literature Review

ECS professionals reviewed the USGS Topographic Map, U.S. Department of Agriculture -Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey, the USDA Hydric Soils List, the Federal Emergency Management Agency (FEMA) Floodplain Mapping Service, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Wetlands Mapper, and available aerial photographs to identify potentially jurisdictional Waters of the U.S. (i.e., streams, wetlands, natural ponds, lakes) and available watershed information.

3.1.1 Literature Review Summary

The following is a summary of the available desktop information that was reviewed as part of this study:

- According to the Golden Meadow (Louisiana) USGS Topographic Map Quadrangle dated 2015 (Appendix I, Figure 2) no wetlands are depicted on the PSA. Unnamed tributaries to Bayou Raphael are depicted along the southern boundary of the PSA. Additionally, a levee system and ponds are depicted on the PSA. The PSA occurs at approximately zero feet above mean sea level (MSL) (Appendix 1, Figure 6)
- According to the USDA-NRCS Web Soil Survey (Appendix I, Figure 3), the PSA consists of Rita muck (Ra). The Rita muck (Ra) soil mapping unit is listed hydric on the USDA-NRCS National Hydric Soils List for Lafourche Parish, Louisiana.
- The USFWS NWI map of the PSA (Appendix I, Figure 4) depicts a Riverine Wetland feature within the PSA. This feature is classified as Riverine, Unknown Perennial, Unconsolidated Bottom, Excavated, Non-Tidal, Permanently Flooded, (R5UBFx). No other WOTUS features are depicted within the PSA. The PSA is located in the Eastern Louisiana Coastal Watershed and is classified as Hydrologic Unit Code (HUC) 08090203.
- The FEMA Flood Insurance Rate Maps (FIRMs), Panel 22051C0425F (dated February 2, 2018) (Appendix I, Figure 5) indicate that the PSA is located in unshaded Zone X. These areas are determined to be outside the 0.2% Annual Chance Floodplain.
- ECS reviewed the National Atmospheric and Oceanic Administration (NOAA) Light Detection and Ranging (LiDAR) Digital Elevation Model (DEM) within the PSA (Appendix I, Figure 6). The DEM's, utilizing dark red, yellow, and light green shading to depict high to low elevations, respectively, to assist with identifying potential wetland areas and non-wetland waters.

3.2 Field Investigation Findings

ECS personnel conducted the field investigation of the PSA on November 15, 2023. During the reconnaissance, the PSA was observed for evidence of potential ponds, streams, and wetlands. A total of four potentially jurisdictional non-wetland WOTUS features (streams), totaling approximately 6,099 linear feet (LF), and six potentially jurisdictional wetland areas, totaling approximately 21.3 acres, were observed within the PSA.



The potentially jurisdictional areas were field-located using a Trimble GeoXH™ hand-held GPS unit capable of sub-meter accuracy, and the data downloaded to produce a Potential Waters of the US Delineation Map (Appendix I, Figure7). The potential features identified by ECS during the wetland delineation study are summarized in the table below:

Our findings have not been verified by the USACE and may be subject to change. Figure 7 should be used for preliminary planning purposes.

Table 1: Potential WOTUS Summary Table

Feature ID	GPS Coordinates (decimal degrees)	Approximate Acreage	Approximate Square Footage	Approximate Linear Feet (if applicable)
Wetland W1	29°25'28.85"N 90°16'18.62"W	12.0	522,720 SF	N/A
Wetland W2	29°25'36.31"N 90°16'18.62"W	3.4	148,104 SF	N/A
Wetland W3	29°25'35.07"N 90°16'12.91"W	2.4	104,544 SF	N/A
Wetland W4	29°25'46.72"N 90°16'19.24"W	2.0	87,120 SF	N/A
Wetland W5	29°25'52.70"N 90°16'15.14"W	1.0	43,560 SF	N/A
Wetland W6	29°25'58.45"N 90°16'24.24"W	0.5	21,780 SF	N/A
Stream S1	29°25'24.11"N 90°16'13.36"W	N/A	N/A	876 LF
Stream S2	29°25'51.76"N 90°16'26.33"W	N/A	N/A	2,061 LF
Stream S3	29°26'0.35"N 90°16'14.53"W	N/A	N/A	1,593 LF
Stream S4	29°25'40.12"N 90°16'11.81"W	N/A	N/A	1,579 LF

3.2.1 Wetland Summary

ECS observed four potential wetland areas during the field visit:

- The potential wetland area W1 exhibited both primary and secondary wetland hydrology indicators, as well as hydric soils during site reconnaissance. Primary hydrology indicators included oxidized rhizospheres (C3), while secondary indicators included a positive

FAC-Neutral test (D5). Based on the wetland characteristics review during the field visit, Wetland W1 is classified as a Palustrine, Emergent, Persistent (PEM1) wetland habitat, and totals approximately 12.0 acres. The wetland areas and data point (DP) locations are depicted on the Potential Waters of the U.S. Delineation Map (Appendix I, Figure 7). Photographs of the potential wetlands and WOTUS features are presented in Appendix II.

- The potential wetland areas W2 and W3 exhibited both primary and secondary wetland hydrology indicators, as well as hydric soils during site reconnaissance. Primary hydrology indicators included oxidized rhizospheres (C3). While secondary indicators included a positive FAC-Neutral test (D5). Based on the wetland characteristics review during the field visit, Wetland W2 is classified as a Palustrine, Emergent, Persistent (PEM1) wetland habitat, and totals approximately 5.8 acres.
- The potential wetland area (W4) exhibited primary wetland hydrology indicators, as well as hydric soils during site reconnaissance. Primary hydrology indicators included oxidized rhizospheres (C3). Based on the wetland characteristics review during the field visit, Wetland W4 is classified as a Palustrine, Emergent, Persistent (PEM1) wetland habitat, and totals approximately 2.0 acres.
- The potential wetland areas (W5) and (W6) exhibited both primary and secondary wetland hydrology indicators, as well as hydric soils during site reconnaissance. Primary hydrology indicators included oxidized rhizospheres (C3), while secondary indicators included a positive FAC-Neutral test (D5). Based on the wetland characteristics review during the field visit, Wetland W5 and W6 are classified as a Palustrine, Emergent, Persistent (PEM1) wetland habitat, and total approximately 1.5 acres.

3.2.2 Stream Summary

Four potentially jurisdictional non-wetland WOTUS features (streams), totaling approximately 6,099 LF, were observed within the PSA. Potential streams S1, S2, and S3 were determined to be intermittent and appear to provide for drainage within the PSA. Stream S4 was determined to be a perennial stream and contained standing/flowing water within the channel.

The stream features had well defined bed banks, an ordinary high water mark, and a silty substrate. The stream features varied from approximately four to twelve feet in width and approximately two to six feet in depth. The stream features are depicted on the Potential Waters of the U.S. Delineation Map (Appendix I, Figure 7). Photographs of the streams are presented in Appendix II.

4.0 REGULATORY DISCUSSION

After review of the findings in the report and at the client's request, ECS can coordinate with the USACE to acquire a jurisdictional determination and conduct a field visit, if necessary. The timeline of this process is dependent on the availability of the regulatory agency. ECS recommends receipt of the formal jurisdictional determination letter from the necessary agencies prior to conducting any land-disturbance activities.

Non-wetland WOTUS are regulated by Sections 401 and 404 of the Clean Water Act. State and Federal law dictates that any disturbance to WOTUS must be permitted through the appropriate agencies. If any potential impacts are proposed, we can assist you with permitting options and support to complete the process. As part of the permitting process, we will conduct a preliminary review of state and federal agency records pertaining to Section 7 (Federal Endangered Species Act) and Section 106 (National Historic Preservation Act). If deemed necessary, we can assist you with targeted species surveys and cultural investigations to satisfy the requirements of the Nationwide Permit (NWP), Individual Permit (IP), or General Permit conditions.

Section 404 of the Clean Water Act regulates the discharge of dredge and fill materials into waters of the United States (lakes, rivers, ponds, streams, etc.), including wetlands. Waters of the United States include territorial seas, navigable coastal and inland lakes, rivers, perennial streams, intermittent streams, and wetlands. The EPA and the U.S. Army Corps of Engineers jointly administer the Section 404 program. Section 401 of the Clean Water Act grants each state the authority to approve, condition, or deny any Federal permits that could result in a discharge to State waters. Mitigation and stormwater management plans will be a condition of permits issued for the Site. Buffers may be required adjacent to streams and water bodies. In general, the mitigation requirements and thresholds for Louisiana are 0.5 acre or more of wetland/WOTUS impacts. The mitigation credits may be estimated by linear feet (LF) and acreage, state specific calculation worksheets, or other methods utilized in that state or USACE district.

For impacts to 0.5-acre or more of wetlands/WOTUS, an IP may be required. An IP may also be required to authorize impacts if wetlands and/or streams are located in a floodplain. An IP requires a habitat analysis, alternative site analysis, project justification, plans to avoid and minimize impacts, and a proposed mitigation plan. Depending on the habitat analysis and the extent of impacts, and Environmental Impact Statement may be required by the USACE. An IP allows for a public comment period and the timeline ranges from 4 to 18 months to obtain depending on the conditions that may arise during the USACE review and public comment period.

5.0 WATERSHED CLASSIFICATION/BUFFER REQUIREMENTS

5.1 State Riparian Buffer Requirements

According to the Louisiana Department of Environmental Quality (LDEQ), the PSA occurs in the East Central Louisiana Coast Watershed. To ECS' knowledge, there are no known state-mandated riparian buffer requirements to warrant the protection of adjacent wetlands and riparian areas beyond the limits of construction. However, it is recommended by LDEQ that best management practices outlined in LDEQ's Stormwater Construction General Permit guidelines be employed during construction activities to limit downstream translocation of sediment into adjacent wetlands and riparian areas.



5.2 Local Buffer Requirements

ECS contacted the Lafourche Parish Planning Department to determine if mandatory vegetative buffers and/or riparian buffers are required for streams, wetlands, or other waters in Lafourche Parish. According to the St. James Parish Planning Department, there are no additional riparian buffer requirements in addition to the state recommended practices for general construction and stormwater management.

ECS recommends consultation with a civil engineer to determine if mandatory vegetative buffers and/or regulated development (impervious surfaces) setbacks are required for the site in addition to those mentioned above.

6.0 CONCLUSIONS

Six potentially jurisdictional wetland areas totaling approximately 21.3 acres and four potentially jurisdictional streams totaling approximately 6,099 LF were identified and delineated within the PSA. The locations and boundaries of the potentially jurisdictional Waters are illustrated on the attached Potential Waters of the U.S. Delineation Map (Appendix I, Figure 7).

The findings summarized in this report represent our best professional judgment concerning the presence of potential jurisdictional aquatic resources in the PSA at the time of the study. These findings are only to be considered preliminary and are for planning purposes only, as they have not yet been verified by the regulatory agencies and are, therefore, subject to change pending their review. ECS cannot guarantee that field conditions and/or WOTUS boundaries will not change over time.

Prior to conducting construction-related activities onsite, ECS recommends requesting a Jurisdictional Determination from the USACE for verification of these results to satisfy the requirements of Section 404 of The Clean Water Act (33 U.S.C. 1344). No earth-disturbing activities should be conducted within the PSA until a USACE Determination has been issued.



Appendix I: Figures

Legend

 Project Study Area



Client:



Project:

SOUTH LAFOURCHE
AIRPORT SOUTH SITE

AIRPORT ROAD,
GALLIANO,
LAFOURCHE PARRISH,
LOUISIANA

Title:

**SITE
LOCATION
MAP**

LAFOURCHE PARRISH



Drawn By:

ZJW

Scale:

1" = 1 miles

Approved By:

PMS

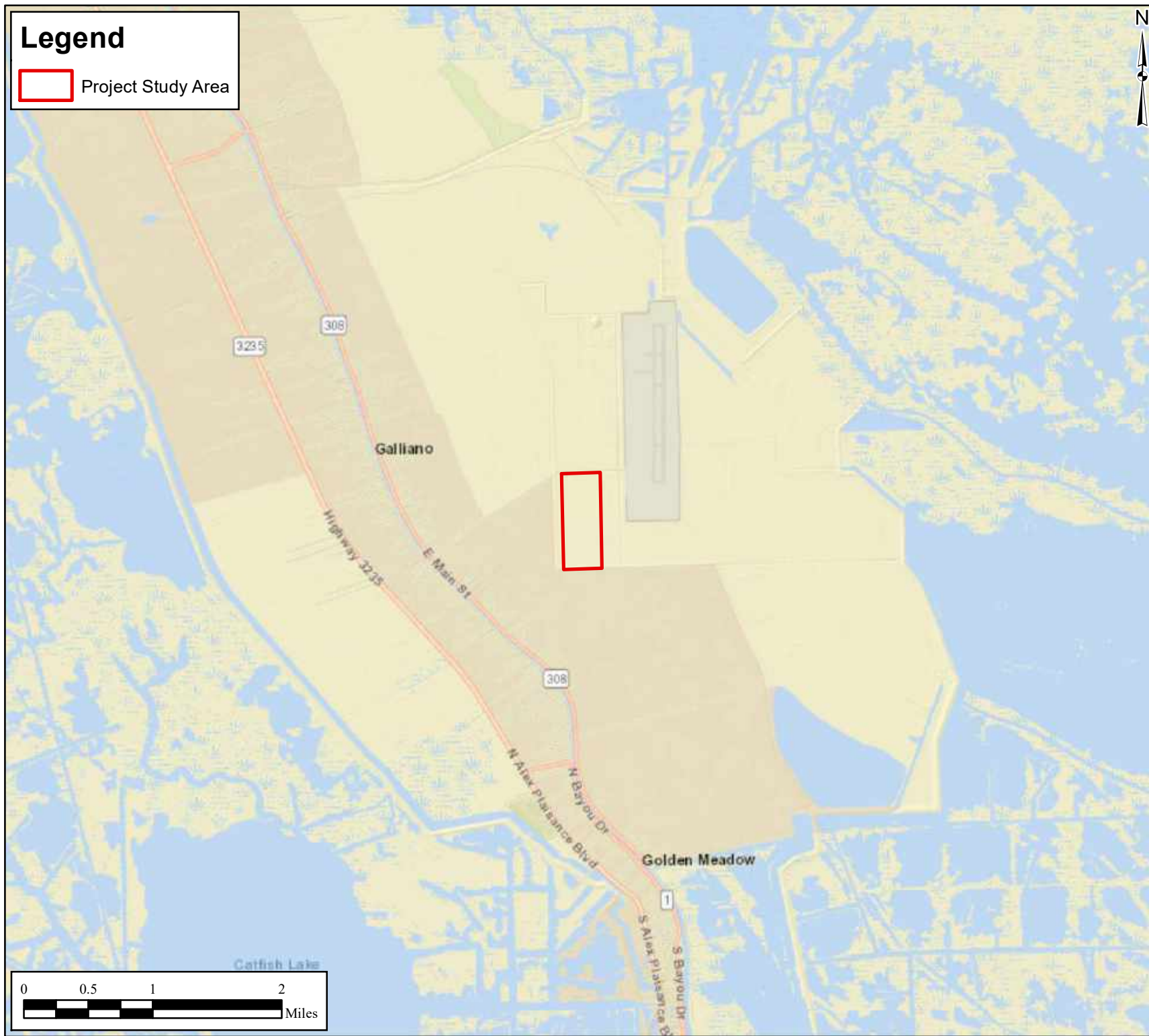
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11/13/2023


ECS Project No.

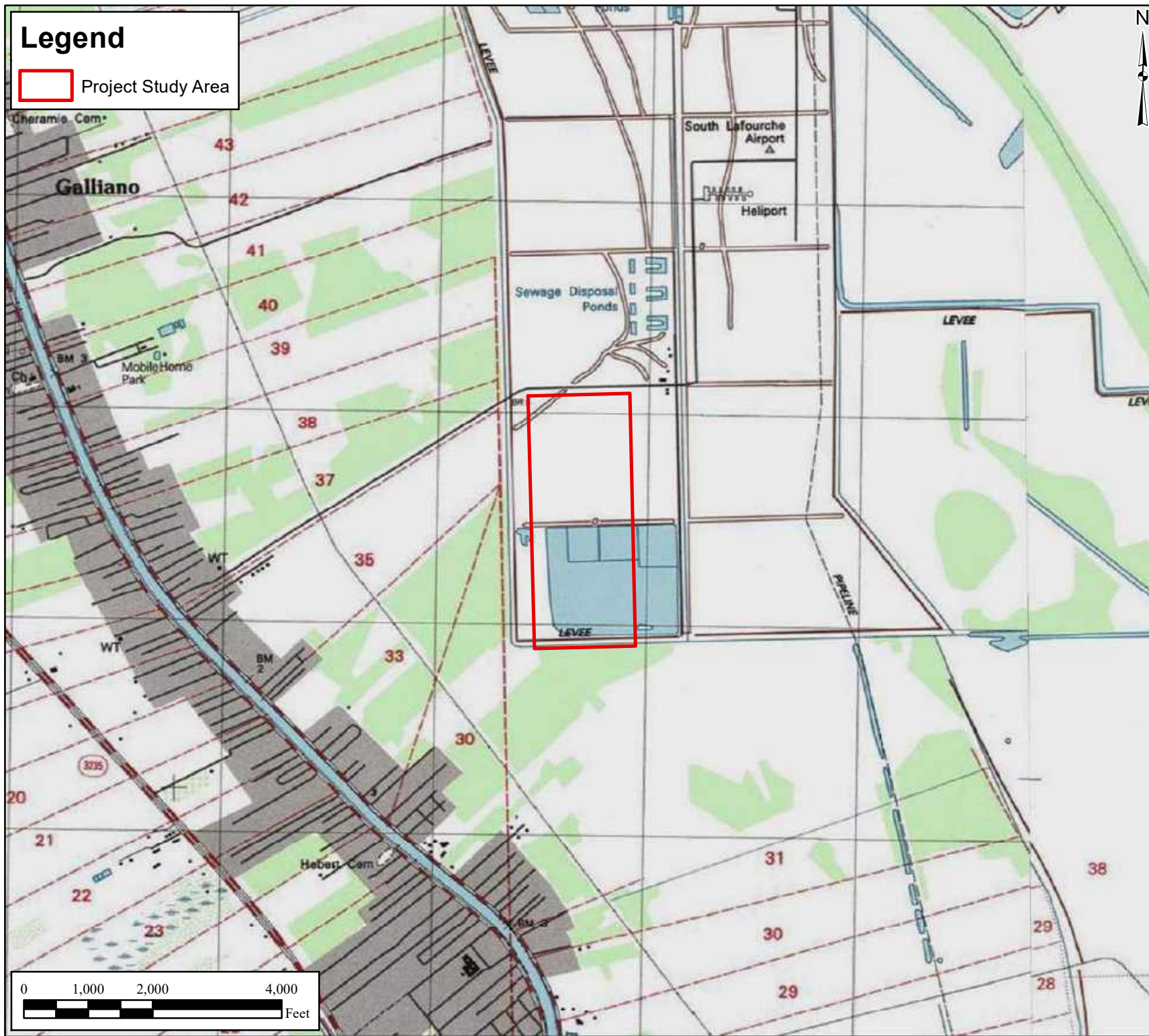
49: 21691

FIGURE 1



Legend

 Project Study Area



Client:
SLEC
South Louisiana Economic Council
Assumption • Lafayette • St. Mary • Terrebonne

Project:
SOUTH LAFOURCHE AIRPORT SOUTH SITE

AIRPORT ROAD, GALLIANO, LAFOURCHE PARRISH, LOUISIANA

Title: **USGS TOPOGRAPHIC MAP**

GOLDEN MEADOW, LA QUADRANGLE
DATED: 1980




Drawn By: ZJW
Scale: 1" = 2,000'

Approved By: PMS
Date: 11/13/2023


ECS Project No.
49: 21691


FIGURE 2

Legend

 Project Study Area

Soil Map Units

 Ra - Rita muck

 W - Water



Client:



Project:

SOUTH LAFOURCHE
AIRPORT SOUTH SITE

AIRPORT ROAD,
GALLIANO,
LAFOURCHE PARRISH,
LOUISIANA

Title:

**USDA-NRCS
SOIL-SURVEY
MAP**

**SPATIAL SURVEY
DATED: 09/11/2019**

PROJECT STUDY AREA



Drawn By:

ZJW

Scale:

1" = 1,000'

Approved By:

PMS

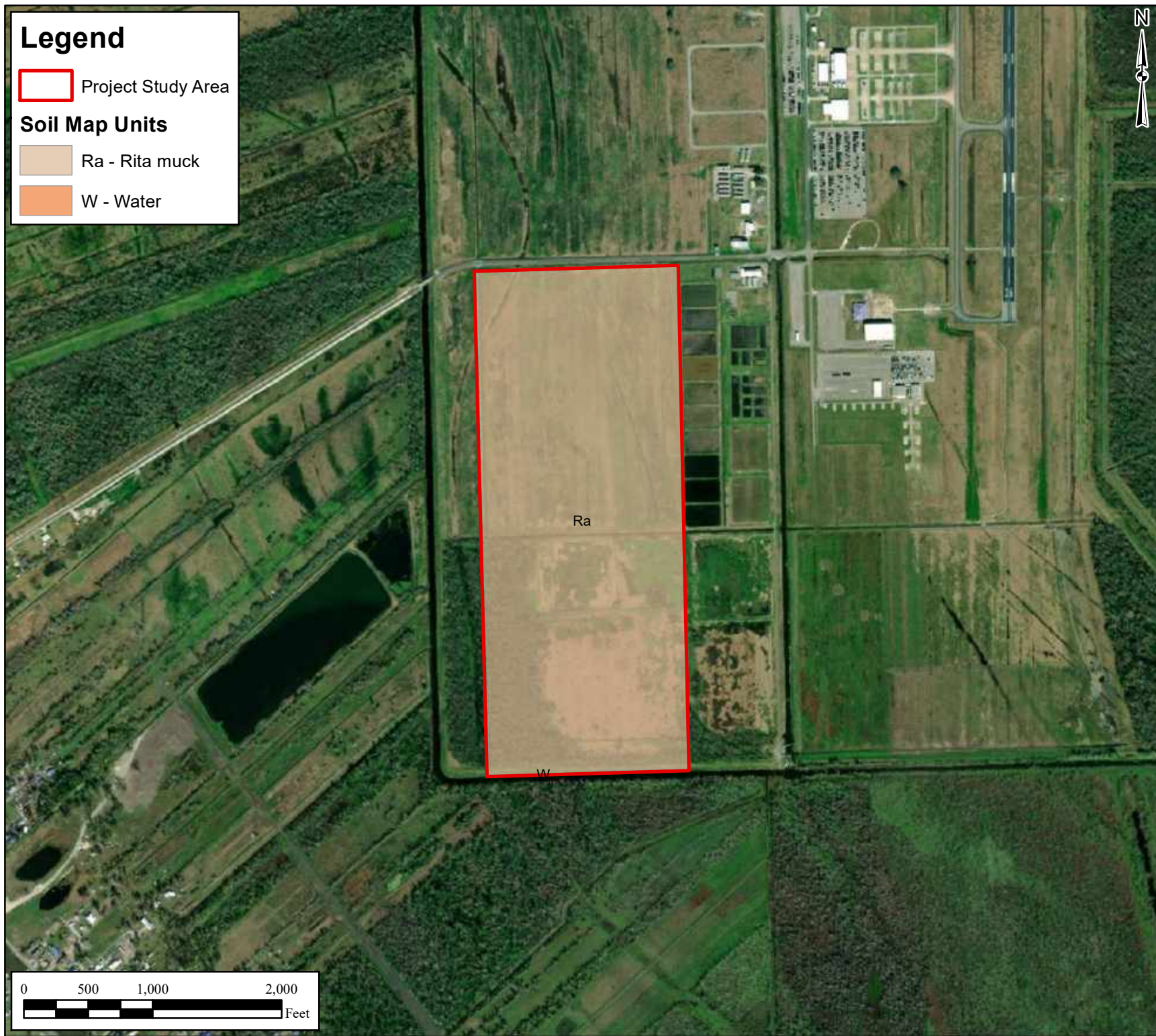
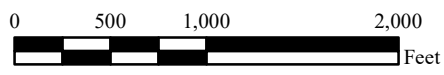
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11/13/2023


ECS Project No.

49: 21691





FIGURE 3

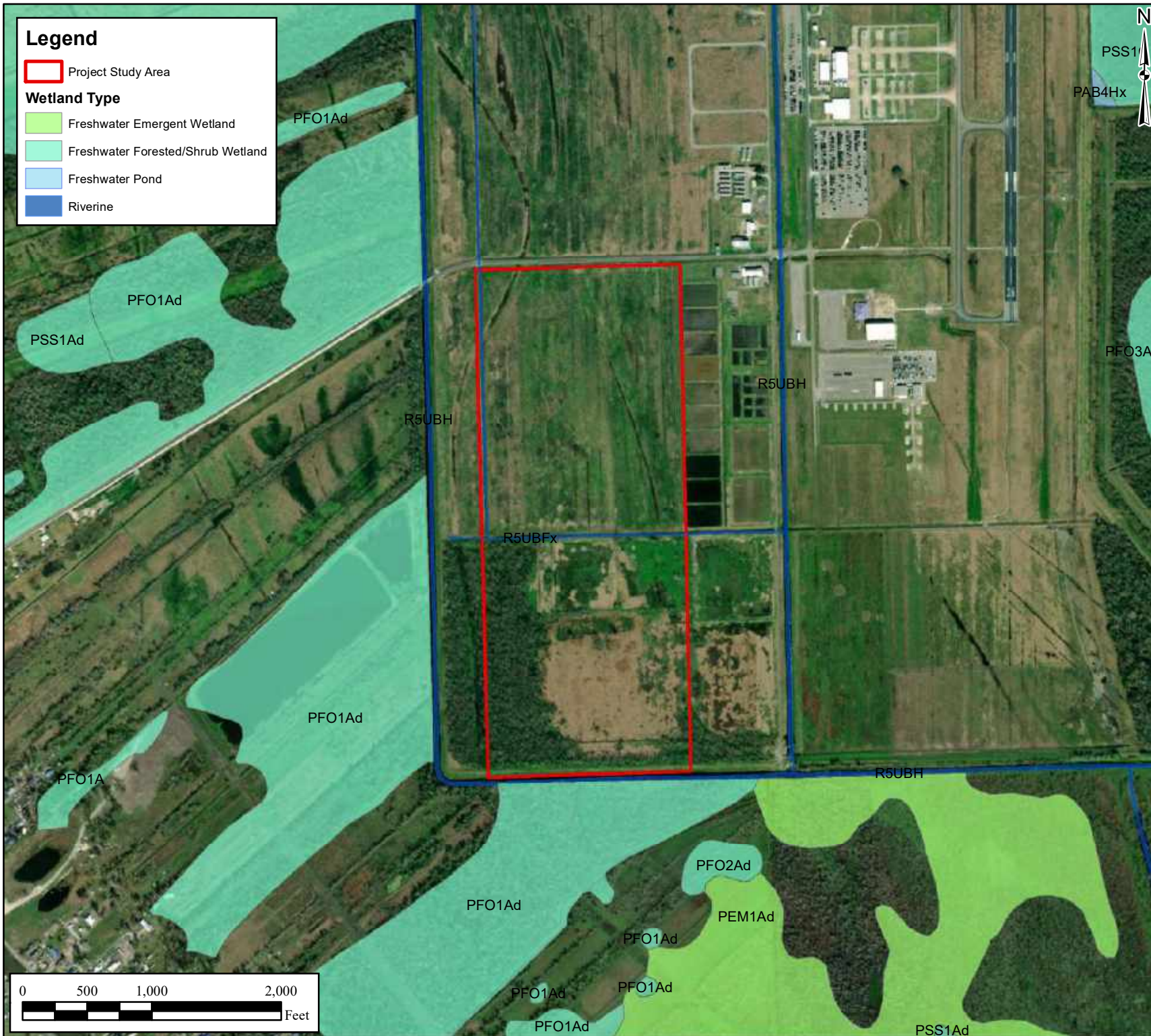


Legend

 Project Study Area

Wetland Type

-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Riverine



Client:

SLEC
 South Louisiana Economic Council
Assessment • Logistics • St. Mary • Transportation

Project:

SOUTH LAFOURCHE AIRPORT SOUTH SITE

AIRPORT ROAD, GALLIANO, LAFOURCHE PARRISH, LOUISIANA

Title:

USFWS NATIONAL WETLAND INVENTORY MAP

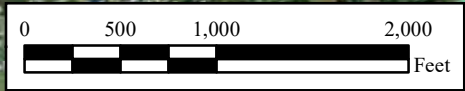


Drawn By:	Scale:
ZJW	1" = 1,000'

Approved By:	Date:
PMS	11/13/2023

ECS Project No.
49: 21691

FIGURE 4











Legend

 Project Study Area

Flood Hazard Zones

Zone Type

-  1% Annual Chance Flood Hazard
-  Regulatory Floodway
-  Special Floodway
-  Area of Undetermined Flood Hazard
-  0.2% Annual Chance Flood Hazard
-  Future Conditions 1% Annual Chance Flood Hazard
-  Area with Reduced Risk Due to Levee
-  Area with Risk Due to Levee



Client:



Project:

SOUTH LAFOURCHE AIRPORT SOUTH SITE

AIRPORT ROAD,
GALLIANO,
LAFOURCHE PARRISH,
LOUISIANA

Title:

FEMA
FLOOD HAZARD
ZONE MAP

PROJECT STUDY AREA



Drawn By: ZJW Scale: 1" = 2,000'

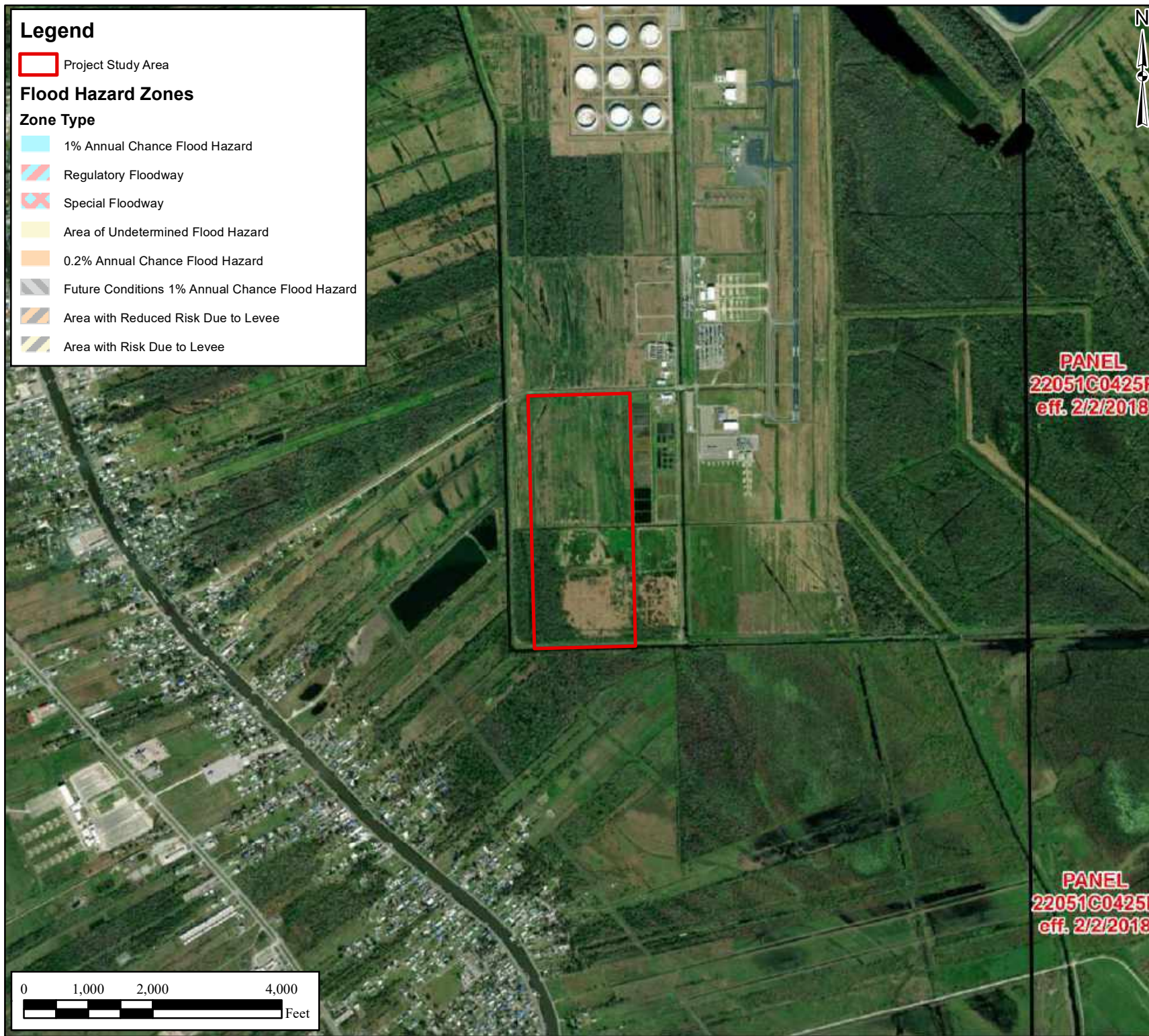
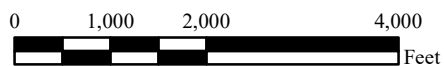
Approved By: PMS Date: 11/13/2023

ECS Project No.
49: 21691


FIGURE 5

**PANEL
22051C0425F
eff. 2/2/2018**

**PANEL
22051C0425F
eff. 2/2/2018**





Legend

 Project Study Area

LiDAR Elevation Data

Value

 High : 4.12136

 Low : -24.687



Client:



Project:

SOUTH LAFOURCHE
AIRPORT SOUTH SITE

AIRPORT ROAD,
GALLIANO,
LAFOURCHE PARRISH,
LOUISIANA

Title:

**NOAA LIDAR
ELEVATION
MAP**

PROJECT STUDY AREA



Drawn By:

ZJW

Scale:

1" = 600'

Approved By:

PMS

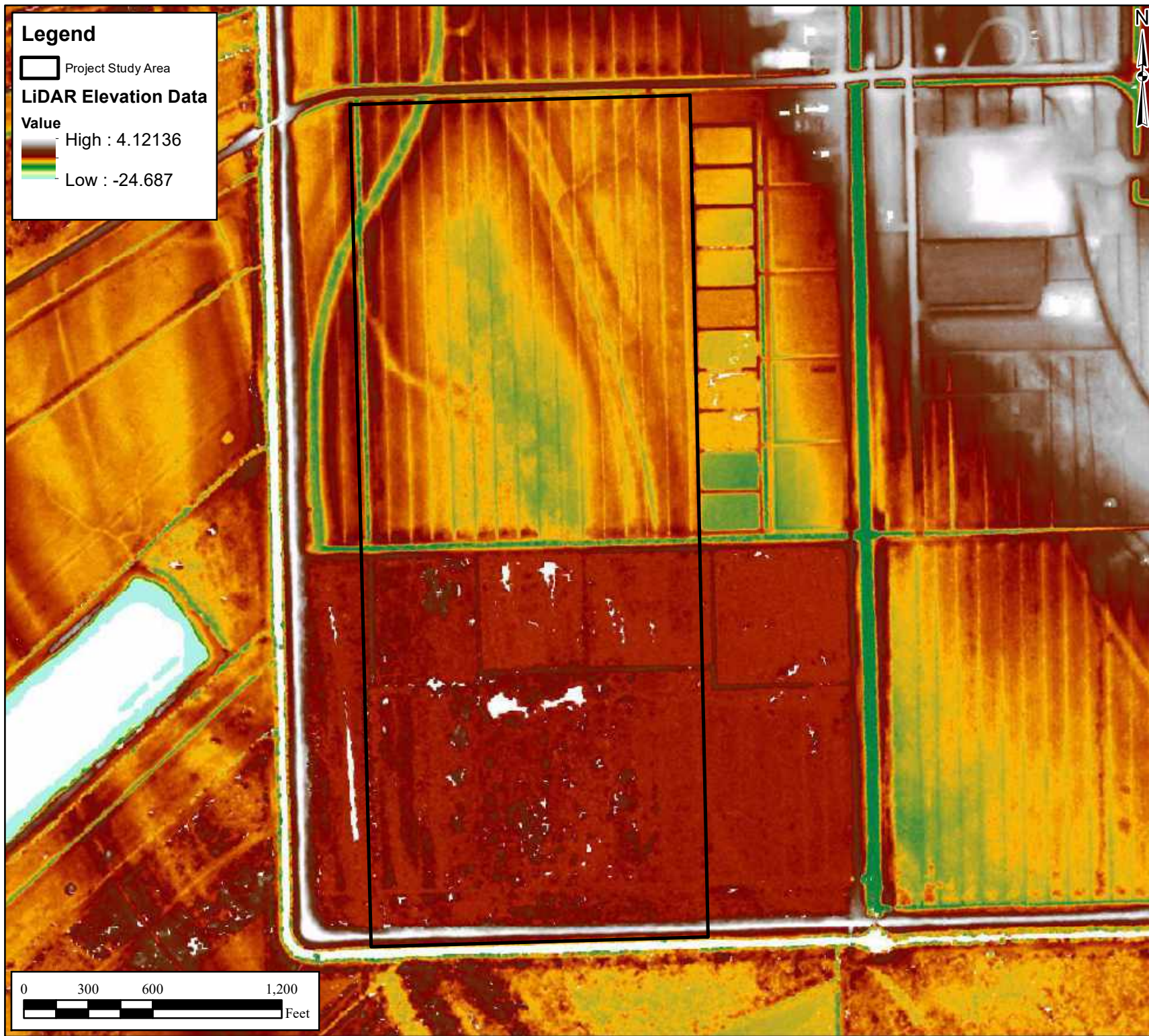
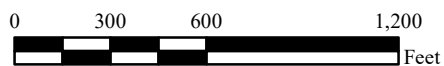
Date:

11/13/2023

ECS Project No.

49: 21691

FIGURE 6





Client:



Project:

SOUTH LAFOURCHE AIRPORT SOUTH SITE
AIRPORT ROAD, GALLIANO, LAFOURCHE PARRISH, LOUISIANA

Title:

POTENTIAL WATERS OF THE U.S. MAP

NOTES:

1. POTENTIALLY JURISDICTIONAL WATERS OF THE U.S. WERE OBSERVED BY ECS ON NOVEMBER 15, 2023.
2. FINDINGS DEPICTED ON THIS MAP HAVE NOT BEEN VERIFIED BY THE USACE OR LDEQ AND ARE SUBJECT TO CHANGE.
3. THIS MAP SHOULD BE USED FOR PRELIMINARY PLANNING PURPOSES.

Drawn By:	Scale:
BMB	1" = 1,000'

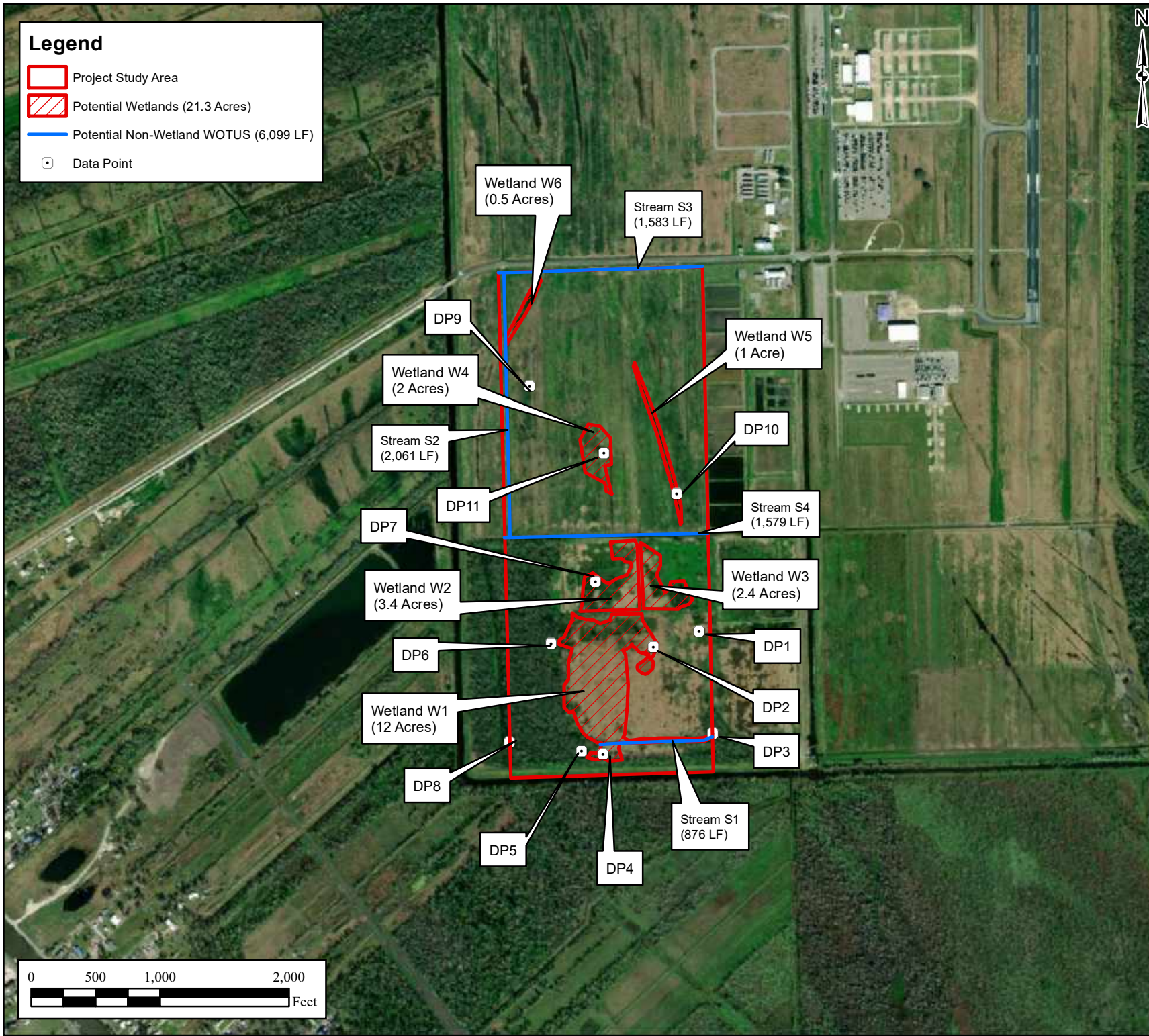
Approved By:	Date:
PMS	11/30/2023

ECS Project No.
49: 21691

FIGURE 7

Legend

- Project Study Area
- Potential Wetlands (21.3 Acres)
- Potential Non-Wetland WOTUS (6,099 LF)
- Data Point



Appendix II: Photographic Log



1 - Soil profile at DP1.



2 - Overview of DP1, facing north.



3 - Overview of DP1, facing east.



4 - Over south.



5 - Overview of DP1, facing west.



6 - Soil profile at DP2.



7 - Overview of DP2, facing north.



8 - Overview of DP2, facing east.



9 - Overview of DP2, facing south.



10 - Overview of DP2, facing west.



11 - Soil profile at DP3



12 - Overview of DP3, facing north.



13 - Overview of DP3, facing east.



14 - Overview of DP3, facing south.



15 - Overview of DP3, facing west.



16 - Soil profile at DP4.



17 - Overview of DP4, facing north.



18 - Overview of DP4, facing east.



19 - Overview of DP4, facing south.



20 - Overview of DP4, facing west.



21 - Soil profile at DP5.



22 - Overview of DP5, facing north.



23 - Overview of DP5, facing east.



24 - Overview of DP5, facing south.



25 - Overview of DP5, facing west.



26 - Soil profile at DP6.



27 - Overview of DP6, facing north.



28 - Overview of DP6, facing east.



29 - Overview of DP6, facing south.



30 - Overview of DP6, facing west.



31 - Soil profile at DP7.



32 - Overview of DP7, facing north.



33 - Overview of DP7, facing east.



34 - Overview of DP7, facing south.



35 - Overview of DP7, facing west.



36 - Soil profile at DP8.



37 - Overview of DP8, facing north.



38 - Overview of DP8, facing East.



39 - Overview of DP8, facing south.



40 - Overview of DP8, facing west.



41 - Soil profile at DP9.



42 - Overview of DP9, facing north.



43 - Overview of DP9, facing east.



44 - Overview of DP9, facing south.



45 - Overview of DP9, facing west.



46 - Soil profile at DP10.



47 - Overview of DP10, facing north.



48 - Overview of DP10, facing east.



49 - Overview of dp10, facing south.



50 - Overview of DP10, facing west.



51 - Soil profile DP11.



52 - Overview of DP11, facing north.



53 - Overview of DP11, facing east.



54 - Overview of DP11, facing south.



55 - Overview of DP11, facing west.



56 - Overview of Stream S1 facing west.



57 - Overview of Stream S1 and wetland area facing east.



58 - Overview of Stream S1 and wetland area facing west.



59 - Dead smartweed within Stream S1.



60 - Overview of levee and canal to the south, facing east.



61 - Overview of levee and canal to the south, facing west.



62 - Overview of northern portion of Wetland W1 facing southwest.



63 - Overview of northern portion of Wetland W1 facing south.



64 - Overview of northern portion of Wetland W1 facing southeast.



65 - Overview of southern portion of Wetland W3 facing east.



66 - Overview of southern portion of Wetland W3 facing northeast.



67 - Overview of southern portion of Wetland W3 facing north.



68 - Overview of southern portion of Wetland W2 facing northwest.



69 - Overview of Stream S4 facing east.



70 - Overview of Stream S4 and S2 confluence facing west.



71 - Overview of Stream S2 facing north.



72 - Overview of Stream S4 facing east and offsite.



73 - Overview of Stream S4 facing west.

Appendix III: USACE Wetland Data Forms and Stream Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP1
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'32.20"N Long: 90°16'9.86"W Datum: NAD83
 Soil Map Unit Name Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? No
Hydric soil present? <u>No</u>	
Indicators of wetland hydrology present? <u>No</u>	

Remarks:
 Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Moss Trim Lines (B16)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:	Wetland Hydrology Present? No
Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:3455, N:3456, E:3457, S:3458, W:3459
 FAC-Neutral test - 2:0

VEGETATION -- Use scientific names of plants.

Sampling Point: DP1

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Juncus effusus</i>	50	Y	OBL
2	<i>Ambrosia trifida</i>	50	Y	FAC
3	<i>Alternanthera philoxeroides</i>	35	Y	OBL
4	<i>Persicaria hydropiperoides</i>	20	N	OBL
5				
6				
7				
8				
9				
10				
11				
12				
		<u>155</u> = Total Cover		
50% of total cover: <u>77.5</u>		20% of total cover: <u>31</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>105</u>	x 1 =	<u>105</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>50</u>	x 3 =	<u>150</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>155</u> (A)		<u>255</u> (B)

Prevalence Index = B/A = 1.65

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	7.5 YR 2/5	60	7.5 YR 4/6	40	C	M	Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? No</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP2
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: _____ Long: _____ Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? Yes
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>Yes</u>	

Remarks:

Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks) _____	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface water present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water table present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos - Soil:3450, N:3461, E:3462, S:3463, W:3464
 FAC-Neutral test - 1:0

VEGETATION -- Use scientific names of plants.

Sampling Point: DP2

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Phragmites australis</i>	80	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
		<u>80</u> = Total Cover		
50% of total cover: <u>40</u>		20% of total cover: <u>16</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>80</u>	x 2 =	<u>160</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>80</u> (A)		<u>160</u> (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-5	10 YR 2/2	100					Loam	
5-11	10 YR 4/1	80	10 YR 3/6	20	C	M	Silty Clay	
11-16	10 YR 4/1	85	7.5 YR 3/6	15	C	PL	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? Yes</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP3
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): hardwoods Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'24.34"N Long: 90°16'9.60"W Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? No
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>No</u>	
Remarks: Regional Drought.	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:	Wetland Hydrology Present? No
Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:3465, N:3466, E:3467, S:3468, W:3469
 FAC-Neutral test - 3:1

VEGETATION -- Use scientific names of plants.

Sampling Point: DP3

Tree Stratum	(Plot size: 30)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Celtis laevigata</i>	45	Y	FACW
2	<i>Triadica sebifera</i>	35	Y	FAC
3				
4				
5				
6				
7				
8				
		80	= Total Cover	
50% of total cover: 40		20% of total cover: 16		

Sapling/Shrub Stratu	(Plot size: 30)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Celtis laevigata</i>	35	Y	FACW
2	<i>Sambucus nigra</i>	25	Y	FACW
3	<i>Triadica sebifera</i>	10	N	FAC
4	<i>Tilia americana</i>	8	N	FACU
5	<i>Acer rubrum</i>	4	N	FAC
6				
7				
8				
		82	= Total Cover	
50% of total cover: 41		20% of total cover: 16.4		

Herb stratum	(Plot size: 30)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Solidago altissima</i>	5	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
		5	= Total Cover	
50% of total cover: 2.5		20% of total cover: 1		

Woody vine stratum	(Plot size: 30)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Toxicodendron radicans</i>	3		FAC
2				
3				
4				
5				
		3	= Total Cover	
50% of total cover: 1.5		20% of total cover: 0.6		

Dominance Test Worksheet	
Number of Dominant Species that are OBL, FACW, or FAC:	4 (A)
Total Number of Dominant Species Across all Strata:	5 (B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80.00% (A/B)

Prevalence Index Worksheet	
Total % Cover of:	
OBL species	0 x 1 = 0
FACW species	105 x 2 = 210
FAC species	52 x 3 = 156
FACU species	13 x 4 = 52
UPL species	0 x 5 = 0
Column totals	170 (A) 418 (B)
Prevalence Index = B/A = 2.46	

Hydrophytic Vegetation Indicators:
 Rapid test for hydrophytic vegetation
 Dominance test is >50%
 Prevalence index is ≤3.0*
 Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.
Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall
Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10 YR 2/1	100					Silty Clay	
10-11	10 YR 4/2	80	10 YR 3/6	20	C	M	Silty Clay	
11-16	10 YR 4/1	50	7.5 YR 3/4	50	D	M	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**

- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Reduced Vertic(F18) **(outside MLRA 150A,B)**
- Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP4
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'22.35"N Long: 90°16'19.09"W Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? Yes
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>Yes</u>	

Remarks:
 Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Marl Deposits (B15) (LRR U) | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Water Marks (B1) | <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Moss Trim Lines (B16) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| | | <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U) |

Field Observations:

Surface water present? Yes No Depth (inches): _____
 Water table present? Yes No Depth (inches): _____
 Saturation present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:3476, N:3477, E:3478, S:3479, W:3480
 FAC-Neutral test - 1:0

VEGETATION -- Use scientific names of plants.

Sampling Point: DP4

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Alternanthera philoxeroides</i>	30	Y	OBL
2	<i>Carex cherokeensis</i>	8	N	FACW
3	<i>Phanopyrum gymnocarpon</i>	3	N	OBL
4				
5				
6				
7				
8				
9				
10				
11				
12				
		<u>41</u> = Total Cover		
50% of total cover: <u>20.5</u>		20% of total cover: <u>8.2</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>33</u>	x 1 =	<u>33</u>
FACW species	<u>8</u>	x 2 =	<u>16</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>41</u>	(A)	<u>49</u> (B)

Prevalence Index = B/A = 1.2

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-3	10 YR 2/2	100					Silty Loam	
4-12	10 YR 4/1	80	7.5 YR 4/6	20	C	PL	Sity Clay	
12-16	10 YR 4/1	90	7.5 YR 4/6	10	C	PL	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomolous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomolous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? Yes</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP5
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): hardwoods Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'23.99"N Long: 90°16'20.34"W Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? No
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>No</u>	

Remarks:

Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation present? (includes capillary fringe)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

**Wetland
Hydrology
Present? No**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos - Photos - Soil:3481, N:3482, E:3483, S:3484, W:3485
 FAC-Neutral test - 2:1

VEGETATION -- Use scientific names of plants.

Sampling Point: DP5

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Sambucus nigra</i>	40	Y	FACW
2	<i>Triadica sebifera</i>	15	Y	FAC
3	<i>Morus rubra</i>	15	Y	FACU
4	<i>Celtis laevigata</i>	8	N	FACW
5	<i>Acer rubrum</i>	5	N	FAC
6	<i>Quercus nigra</i>	5	N	FAC
7				
8				
		<u>88</u> = Total Cover		
50% of total cover: <u>44</u>		20% of total cover: <u>17.6</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Dichanthelium acuminatum</i>	15	Y	FAC
2	<i>Sambucus nigra</i>	8	Y	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
		<u>23</u> = Total Cover		
50% of total cover: <u>11.5</u>		20% of total cover: <u>4.6</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Rubus argutus</i>	35	Y	FAC
2				
3				
4				
5				
		<u>35</u> = Total Cover		
50% of total cover: <u>17.5</u>		20% of total cover: <u>7</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 83.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>56</u>	x 2 =	<u>112</u>
FAC species	<u>75</u>	x 3 =	<u>225</u>
FACU species	<u>15</u>	x 4 =	<u>60</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>146</u> (A)		<u>397</u> (B)

Prevalence Index = B/A = 2.72

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10 YR 2/2	100					Silty Loam	
6-12	10 YR 4/1	90	7.5 YR 4/6	10			Silty Clay	
12-16	10 YR 4/2	95	7.5 YR 4/6	5			Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic(F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP6
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): hardwoods Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'32.68"N Long: 90°16'23.19"W Datum: NAD83
 Soil Map Unit Name Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? No
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>No</u>	

Remarks:
 Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Marl Deposits (B15) (LRR U) | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Moss Trim Lines (B16) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | | <input type="checkbox"/> FAC-Neutral Test (D5) |
| | | <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U) |

Field Observations:

Surface water present? Yes No Depth (inches): _____
 Water table present? Yes No Depth (inches): _____
 Saturation present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:, N:3488 , E:3490 , S:3491, W:3492
 FAC-Neutral test - 2:2

VEGETATION -- Use scientific names of plants.

Sampling Point: DP6

<u>Tree Stratum</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Triadica sebifera</i>	25	Y	FAC
2	<i>Salix nigra</i>	15	Y	OBL
3	<i>Celtis laevigata</i>	8	N	FACW
4				
5				
6				
7				
8				
		48 = Total Cover		
50% of total cover: <u>24</u>		20% of total cover: <u>9.6</u>		

<u>Sapling/Shrub Stratu</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Sambucus nigra</i>	40	Y	FACW
2	<i>Triadica sebifera</i>	30	Y	FAC
3	<i>Celtis laevigata</i>	5	N	FACW
4				
5				
6				
7				
8				
		75 = Total Cover		
50% of total cover: <u>37.5</u>		20% of total cover: <u>15</u>		

<u>Herb stratum</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Eupatorium capillifolium</i>	5	Y	FACU
2	<i>Ligusticum canadense</i>	3	Y	FAC
3	<i>Solidago altissima</i>	2	Y	FACU
4				
5				
6				
7				
8				
9				
10				
11				
12				
		10 = Total Cover		
50% of total cover: <u>5</u>		20% of total cover: <u>2</u>		

<u>Woody vine stratum</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Rubus argutus</i>	25	Y	FAC
2				
3				
4				
5				
		25 = Total Cover		
50% of total cover: <u>12.5</u>		20% of total cover: <u>5</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 8 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 75.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	15	x 1 =	15
FACW species	53	x 2 =	106
FAC species	83	x 3 =	249
FACU species	7	x 4 =	28
UPL species	0	x 5 =	0
Column totals	158 (A)		398 (B)

Prevalence Index = B/A = 2.52

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10 YR 2/1	75	7.5 YR 4/6	15	C	M	Silty Loam	
8-16	10 YR 4/1	80	7.5 YR 4/6	20	C	PL	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? Yes</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP7
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: _____ Long: _____ Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? Yes
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>Yes</u>	

Remarks:
 Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks) _____
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:	Wetland Hydrology Present? Yes
Surface water present? Yes _____ No <u>X</u> Depth (inches): _____	
Water table present? Yes _____ No <u>X</u> Depth (inches): _____	
Saturation present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:3500, N:3501, E:3502, S:3503, W:3504
 FAC-Neutral test - 2:0

VEGETATION -- Use scientific names of plants.

Sampling Point: DP7

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Juncus effusus</i>	55	Y	OBL
2	<i>Alternanthera philoxeroides</i>	40	Y	OBL
3	<i>Cirsium horridulum</i>	15	N	FAC
4	<i>Persicaria punctata</i>	8	N	OBL
5	<i>Solidago altissima</i>	3	N	FACU
6				
7				
8				
9				
10				
11				
12				
		<u>121</u> = Total Cover		
50% of total cover: <u>60.5</u>		20% of total cover: <u>24.2</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>103</u>	x 1 =	<u>103</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>15</u>	x 3 =	<u>45</u>
FACU species	<u>3</u>	x 4 =	<u>12</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>121</u> (A)		<u>160</u> (B)

Prevalence Index = B/A = 1.32

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10 YR 2/4	100					Silty Loam	
6-16	10 YR 4/2	85	7.5 YR 4/6	15	C	PL	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? Yes</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP8
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): hardwoods Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'24.84"N Long: 90°16'26.74"W Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? No
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>No</u>	

Remarks:

Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface water present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water table present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos - Soil:3505, N:3506, E:3507, S:3508, W:3509
 FAC-Neutral test - 3:0

VEGETATION -- Use scientific names of plants.

Sampling Point: DP8

<u>Tree Stratum</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Salix nigra</i>	40	Y	OBL
2	<i>Triadica sebifera</i>	35	Y	FAC
3				
4				
5				
6				
7				
8				
		75	= Total Cover	
50% of total cover: <u>37.5</u>		20% of total cover: <u>15</u>		

<u>Sapling/Shrub Stratu</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Triadica sebifera</i>	15	Y	FAC
2	<i>Salix nigra</i>	8	Y	OBL
3	<i>Acer rubrum</i>	8	Y	FAC
4	<i>Quercus nigra</i>	6	N	FAC
5				
6				
7				
8				
		37	= Total Cover	
50% of total cover: <u>18.5</u>		20% of total cover: <u>7.4</u>		

<u>Herb stratum</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Carex cherokeensis</i>	25	Y	FACW
2	<i>Alternanthera philoxeroides</i>	20	Y	OBL
3	<i>Juncus effusus</i>	5	N	OBL
4				
5				
6				
7				
8				
9				
10				
11				
12				
		50	= Total Cover	
50% of total cover: <u>25</u>		20% of total cover: <u>10</u>		

<u>Woody vine stratum</u> (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>73</u>	x 1 =	<u>73</u>
FACW species	<u>25</u>	x 2 =	<u>50</u>
FAC species	<u>64</u>	x 3 =	<u>192</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>162</u>	(A)	<u>315</u> (B)

Prevalence Index = B/A = 1.94

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10 YR 4/1	100					Silty Loam	
6-16	10 YR 4/2	85	7.5 YR 4/6	15	C	PL	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? Yes</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP9
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°25'52.20"N Long: 90°16'24.49"W Datum: NAD83
 Soil Map Unit Name Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? No
Hydric soil present? <u>No</u>	
Indicators of wetland hydrology present? <u>No</u>	

Remarks:
 Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Marl Deposits (B15) (LRR U) | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Moss Trim Lines (B16) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | | <input type="checkbox"/> FAC-Neutral Test (D5) |
| | | <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U) |

Field Observations:

Surface water present? Yes No Depth (inches): _____
 Water table present? Yes No Depth (inches): _____
 Saturation present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:3510, N:3511, E:3512, S:3513, W:3514
 FAC-Neutral test - 0:2

VEGETATION -- Use scientific names of plants.

Sampling Point: DP9

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Paspalum notatum</i>	50	Y	FACU
2	<i>Cynodon dactylon</i>	50	Y	FACU
3	<i>Sorghum halepense</i>	25	N	FACU
4	<i>Rumex crispus</i>	20	N	FAC
5	<i>Solidago altissima</i>	8	N	FACU
6				
7				
8				
9				
10				
11				
12				
		<u>153</u> = Total Cover		
50% of total cover: <u>76.5</u>		20% of total cover: <u>30.6</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Passiflora edulis</i>	35	Y	FACU
2	<i>Ipomoea lacunosa</i>	30	Y	FAC
3	<i>Rubus argutus</i>	25	Y	FAC
4				
5				
		<u>90</u> = Total Cover		
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>20</u>	x 3 =	<u>60</u>
FACU species	<u>168</u>	x 4 =	<u>672</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>188</u> (A)		<u>732</u> (B)

Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **No**

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10 YR 2/2	100					Silty Loam	
10-16	10 YR 4/1	95	7.5 YR 4/6	5	C	M	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? No</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP10
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°58'25.75"N Long: 90°44'37.31"W Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? Yes
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>Yes</u>	

Remarks:
 Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:	Wetland Hydrology Present? Yes
Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Photos - Soil:3521, N:3522, E:3523, S:3524, W:3525
 FAC-Neutral test - 3:0

VEGETATION -- Use scientific names of plants.

Sampling Point: DP10

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Eleocharis obtusa</i>	35	Y	OBL
2	<i>Symphyotrichum subulatum</i>	35	Y	OBL
3	<i>Polygonum striatulum</i>	30	Y	FACW
4	<i>Paspalum urvillei</i>	20	N	FAC
5	<i>Rumex crispus</i>	15	N	FAC
6	<i>Alternanthera philoxeroides</i>	15	N	OBL
7	<i>Carex cherokeensis</i>	10	N	FACW
8	<i>Juncus effusus</i>	8	N	OBL
9	<i>Phyla nodiflora</i>	8	N	FAC
10				
11				
12				
		<u>176</u> = Total Cover		
50% of total cover: <u>88</u>		20% of total cover: <u>35.2</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>93</u>	x 1 =	<u>93</u>
FACW species	<u>40</u>	x 2 =	<u>80</u>
FAC species	<u>43</u>	x 3 =	<u>129</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>176</u> (A)		<u>302</u> (B)

Prevalence Index = B/A = 1.72

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10 YR 2/2	100					Silty Clay	
4-16	10 YR 4/1	90	7.5 YR 4/6	10	C	PL	Silty Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histisol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</p> <p><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</p> <p><input type="checkbox"/> Muck Presence (A8) (LRR U)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input checked="" type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) (LRR U)</p> <p><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</p> <p><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</p> <p><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</p> <p><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</p>	<p><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</p> <p><input type="checkbox"/> Reduced Vertic(F18) (outside MLRA 150A,B)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</p> <p><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p> <p style="font-size: small; margin-top: 10px;">*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p style="padding-left: 40px;">Depth (inches): _____</p>	<p>Hydric Soil Present? Yes</p>
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Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-07; the proponent agency is CECW-CO-R

Project/Site South Lafourche Airport South Site City/County: Galliano / S. Lafourche Sampling Date: 11/16/2023
 Applicant/Owner: South Louisiana Economic Council (SELC) State: LA Sampling Point: DP11
 Investigator(s): C. Schaeffer Section, Township, Range: Sec. 22, T 19, R 22
 Landform (hillslope, terrace, etc.): pasture Local relief (concave, convex, none): convex Slope (%): <1
 Subregion (LRR or MLRA) LRR-T Lat: 29°58'25.75"N Long: 90°44'37.31"W Datum: NAD83
 Soil Map Unit Nam Ra-Rita muck NWI Classification: N/A

Are climatic/hydrologic conditions of the site typical for this time of the year? **No**

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDING: -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? <u>Yes</u>	Is the Sampled Area within a Wetland? Yes
Hydric soil present? <u>Yes</u>	
Indicators of wetland hydrology present? <u>Yes</u>	

Remarks:

Regional Drought.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation present? (includes capillary fringe)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos - Soil:3553, N:3554, E:3555, S:3556, W:3557
 FAC-Neutral test - 1:1

VEGETATION -- Use scientific names of plants.

Sampling Point: DP11

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Sapling/Shrub Stratu	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Herb stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Alternanthera philoxeroides</i>	12	Y	OBL
2	<i>Rumex crispus</i>	10	Y	FAC
3	<i>Ipomoea cordatotriloba</i>	8	Y	FACU
4	<i>Ipomoea lacunosa</i>	7	N	FAC
5	<i>Paspalum notatum</i>	6	N	FACU
6	<i>Melochia corchorifolia</i>	6	N	FAC
7	<i>Cynodon dactylon</i>	5	N	FACU
8	<i>Symphytotrichum tenuifolium</i>	5	N	OBL
9				
10				
11				
12				
		<u>59</u> = Total Cover		
50% of total cover: <u>29.5</u>		20% of total cover: <u>11.8</u>		

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>17</u>	x 1 =	<u>17</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>23</u>	x 3 =	<u>69</u>
FACU species	<u>19</u>	x 4 =	<u>76</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>59</u> (A)		<u>162</u> (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Five Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10 YR 4/2	100					Silty Loam	
4-6	10 YR 4/6	100					Silty Loam	
6-9	10 YR 4/1	80	7.5 YR 4/6	20	C	PL	Silty Clay	
9-16	10 YR 4/1	90	7.5 YR 4/6	10	C	PL	Silty clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic(F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes

Remarks: