



July 28, 2020

VIA Electronic Mail

Ms. Jessica Diez
Coastal Protection and Restoration Authority
150 Terrace Avenue
Baton Rouge, Louisiana 70802

Jessica.Diez@LA.GOV

Re: Phase I Environmental Site Assessment and Hazardous, Toxic, and Radioactive Waste Assessment
BS-0038 – Breton Land Bridge Marsh Creation (West) Project
Breton Basin, Plaquemines Parish, Louisiana
Providence Project No. 621-013

Dear Ms. Diez:

Providence Engineering and Environmental Group LLC (Providence) and Chenier Environmental Consulting, LLC (Chenier) (Project Team) are pleased to submit this Phase I Environmental Site Assessment (ESA) and Hazardous, Toxic, and Radioactive Waste (HTRW) Assessment report for the 647-acre Breton Land Bridge Marsh Creation (West) project area, described in the provided Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) BS-0038 Fact Sheet, in Region 2, Breton Basin, Plaquemines Parish, Louisiana (the Property). Based on the findings of the Phase I ESA, no evidence of recognized environmental conditions was identified in connection with the Property.

The Project Team appreciates the opportunity to provide environmental services to Coastal Protection and Restoration Authority. If you have questions, please contact me at (225) 766-7400.

Sincerely,

Aaron S. Bass, PhD
Chenier Environmental Consulting, LLC

JULY 2020

**COASTAL PROTECTION AND
RESTORATION AUTHORITY
BATON ROUGE, LOUISIANA**



**PHASE I
ENVIRONMENTAL
SITE ASSESSMENT**

**BRETON LAND BRIDGE (WEST)
MARSH CREATION PROJECT**

**BRETON BASIN
PLAQUEMINES PARISH,
LOUISIANA**



**Chenier Environmental
Consulting, LLC**

**4607 Bluebonnet Blvd., Suite A
Baton Rouge, Louisiana 70809**



PROVIDENCE

Prepared By:

**Providence Engineering and
Environmental Group LLC**

1201 Main Street
Baton Rouge, Louisiana 70802

(225) 766-7400

www.providenceeng.com

Project Number: 621-013

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
EXECUTIVE SUMMARY	ES-1
1.0 SUMMARY	1
2.0 INTRODUCTION	1
2.1 Purpose	1
2.2 Detailed Scope of Services	2
2.3 Reliance	2
2.4 Special Terms and Conditions	3
3.0 SITE DESCRIPTION	3
3.1 Location	3
3.2 Current Use of the Property	3
3.3 Current Uses of Adjoining Properties	3
4.0 SUPPORT DOCUMENTATION	4
4.1 Environmental Liens and Activity and Use Limitations	4
4.2 Specialized Knowledge	4
4.3 Owner, Property Manager, and Occupant Information	4
4.4 Reason for Conducting the Phase I ESA	4
4.5 User Questionnaire	5
5.0 RECORDS REVIEW	5
5.1 Standard Environmental Record Sources	5
5.2 Water Wells	5
5.3 Physical Setting Sources	5
5.4 Historical Use Information on the Property	6
5.4.1 Oil and/or Gas Production Well and Pipeline Search	8
5.4.2 Louisiana Department of Environmental Quality (LDEQ) Database Search	8
5.4.3 City Directories Search	9
5.5 Vapor Encroachment Analysis	9
6.0 SITE RECONNAISSANCE	9
6.1 Methodology and Limiting Conditions	9
6.2 General Site Setting	9
6.3 Site Observations	9
7.0 INTERVIEWS	10
8.0 FINDINGS	11
9.0 OPINION	11
9.1 <i>De Minimis</i> Conditions	12
9.2 RECs	12
9.3 CRECs	12
9.4 HRECs	12
9.5 Findings Not Eliciting Environmental Liability Concerns	12
9.6 Business Environmental Risk	12
10.0 DATA GAPS AND DATA FAILURES	13

TABLE OF CONTENTS *(continued)*

<u>Section</u>	<u>Page</u>
11.0 CONCLUSIONS	13
11.1 ASTM Standard Practice E 1527-13 Conclusions	13
11.2 Recommended Additional Investigation	13
12.0 DEVIATIONS.....	13
13.0 REFERENCES	13
14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	14
15.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS	15

LIST OF TABLES

<u>Table</u>	<u>Page</u>
3.3 Adjoining Property Use Summary.....	3
5.4 Historical Use and Development Summary	6
13.0 References	14

LIST OF FIGURES

<u>Figure</u>	
1	Site Location Map
2	Site Plan
3	Photo Key

LIST OF APPENDICES

<u>Appendix</u>	
A	Interview Documentation
B	GeoSearch Regulatory Database Report
C	Registered Water Well and Oil and Gas Well Information
D	Historical Topographic Maps
E	Historical Aerial Photographs
F	City Directories
G	Photographic Documentation

EXECUTIVE SUMMARY

On behalf of Coastal Protection and Restoration Authority (CPRA), Providence Engineering and Environmental Group LLC (Providence) and Chenier Environmental Consulting, LLC (Chenier) (Project Team) conducted a Phase I Environmental Site Assessment (ESA) of the 647-acre Breton Land Bridge Marsh Creation (West) project area in Region 2, Breton Basin, Plaquemines Parish, Louisiana (the Property). The Phase I ESA was performed in general conformance with the requirements of the U.S. Environmental Protection Agency (EPA) in the American Society for Testing and Materials (ASTM) Standard practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E1527-13 and the All Appropriate Inquiry Standard per the Code of Federal Regulations (CFR) at 40 CFR §312, with some exceptions as further described in Section 10.0. The intent of this Phase I ESA is to provide CPRA with information on potential liability concerns in connection with the Property.

This assessment has revealed no evidence of recognized environmental conditions in connection with the Property.

1.0 SUMMARY

On behalf of Coastal Protection and Restoration Authority (CPRA), Providence Engineering and Environmental Group LLC (Providence) and Chenier Environmental Consulting, LLC (Chenier) (Project Team) conducted a Phase I Environmental Site Assessment (ESA) of the 647-acre Breton Land Bridge Marsh Creation (West) project area in Region 2, Breton Basin, Plaquemines Parish, Louisiana (the Property). A Site Location Map is provided as **Figure 1**. This Phase I ESA report was completed to improve the understanding of the environmental conditions and to detail any continuing obligations, business risks, and any environmental redevelopment considerations specific to the Property.

The Project Team performed the following Phase I ESA in conformance with the requirements of the United States Environmental Protection Agency (EPA) in the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E1527-13 and the All Appropriate Inquiry (AAI) Standard [40 Code of Federal Regulations (CFR) §312] on the Property.

Based on our review of applicable federal and state regulatory agency records, historical records, interviews with persons knowledgeable about the Property, and site reconnaissance, the Project Team, through this assessment, has identified no evidence of a recognized environmental conditions (RECs) associated with the Property.

2.0 INTRODUCTION

2.1 Purpose

This Phase I ESA and Hazardous, Toxic and Radioactive Waste (HTRW) Assessment identifies, to the extent feasible, pursuant to the processes prescribed herein, RECs in connection with the Property in accordance with ASTM Standard Practice E1527-13, which was also used in this report as a guide to comply with Engineer Regulation (ER) 1165-2-132) for the HTRW assessment. The term REC indicates the presence or likely presence of any hazardous substances or petroleum products in, on, or at a Property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term HTRW is defined as "Except for dredged material and sediments beneath navigable waters proposed for dredging, for purposes of this guidance, HTRW includes any material listed as 'hazardous substance' under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq (CERCLA). (See 42 U.S.C. 9601(14).) Hazardous substances regulated under CERCLA include 'hazardous wastes' under Sec. 3001 of the Resource Conservation and Recovery Act, 42 U.S.C. 6921 et seq; 'hazardous substances' identified under Section 311 of the Clean Air Act, 33 U.S.C. 1321, 'toxic pollutants' designated under Section 307 of the Clean Water Act, 33 U.S.C. 1317, 'hazardous air pollutants' designated under Section 112 of the Clean Air Act 42 U.S.C. 7412; and 'imminently hazardous chemical substances or mixtures' on which EPA has taken action under Section 7 of the Toxic Substance Control Act, 15 U.S.C. 2606; these do not include petroleum or natural gas unless already included in the above categories. (See 42 U.S.C. 9601(14).)" RECs identified in this report will include any HTRW identified associated with the Property. A Phase I ESA reflects all appropriate inquiry into the previous ownership

and uses of the Property consistent with good commercial or customary practice to satisfy one of the requirements to qualify for the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This Phase I ESA considers business environmental risk. Business environmental risk is defined as a risk which can have a material environmental or environmentally-driven financial impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in ASTM Standard Practice E1527-13.

2.2 Detailed Scope of Services

The Project Team developed a scope of services consistent with ASTM Standard Practice E1527-13. The scope included a records review of state and federal regulatory agency databases that house environmental information relative to discerning the presence or absence of RECs. This review of records also included: (1) historical aerial photography; (2) soil survey information; (3) registered oil and gas well and pipeline data; (4) water well data; (5) United States Geological Survey (USGS) 7.5-minute topographic maps; (6) historical city directories; and (7) fire insurance maps. The Project Team interviewed personnel associated with the Property and personnel from the appropriate state regulatory agency relative to the environmental history of the Property. Additionally, the Project Team conducted a site reconnaissance of the Property and adjoining properties to identify potential areas of environmental concern ranging from mismanagement of hazardous substances to evidence of spills and/or contamination and to confirm information obtained from interviews and records reviews. Lastly, the Project Team prepared this report detailing the data discovered relative to the Property that would provide an opinion of the findings and conclusions relative to any future course of action.

2.3 Reliance

This report was prepared for, and made available for the use of, CPRA and/or their assignees. The contents herein may not be used or relied upon by any other person or entity without the express written consent and authorization of Providence; however, Providence can provide Reliance Letters allowing for such authorizations if required. Upon issuance of such Reliance Letters, all aspects of ASTM E1527-13 Continued Viability would need to be fulfilled by any subsequent user of this Phase I ESA and the subsequent user's designated Environmental Professional. This Phase I ESA is presumed to be valid and may be relied upon for one year from the start of the assessment, or until June 3, 2021.

If CPRA and/or their assignees do not begin operations at the Property within 180 days of the start of the assessment (after November 30, 2020), the following components of this Phase I ESA must be updated:

- Interviews with owners, operators, and occupants
- Searches for recorded environmental cleanup liens
- Reviews of federal, tribal, state, and local government records
- Visual inspections of the Property and of adjoining properties

- Declaration by the Environmental Professional responsible for the assessment or update as stated in Section 12.13 of ASTM E1527-13

If it is required that this Phase I ESA be relied upon by a user other than CPRA, and/or their assignees, and this reliance is required after 180 days of the start of this assessment (after November 30, 2020), in addition to satisfying the User's Responsibilities as stated in Section 6 of ASTM E1527-13, the above-listed components of this Phase I ESA must also be updated.

2.4 Special Terms and Conditions

The findings and conclusions of this report are not scientific certainties, but rather probabilities based on professional judgment concerning the significance of the data gathered during the assessment. The Project Team was unable to verify that the Property or adjoining land contains no hazardous substances, petroleum products, or other latent conditions beyond that observed during the assessment and review. The possibility always exists for contaminants to migrate through surface water, air, soil, or groundwater from various potential sources. The ability to accurately address the environmental risks associated with transport in these media was beyond the scope of this assessment. The opinions expressed by the Project Team with reference to the Property only pertain to the conditions that existed at the Property during the time in which the site reconnaissance was conducted and through the review of historical aerial photographs, historical topographic maps, environmental reports, and interviews.

3.0 SITE DESCRIPTION

3.1 Location

The Property consists of 647 acres of marsh, shallow ponds, and open water along the south side of Grand Lake in the Breton Basin, Plaquemines Parish, Louisiana. The Property is approximately 3.5 miles southwest of Delacroix and six miles east of the Mississippi River. The location of the Property is shown in **Figure 1**, and a Site Plan is provided as **Figure 2**.

3.2 Current Use of the Property

The Property consists of undeveloped intermediate marsh, shallow ponds, and open water that are being proposed for marsh creation and nourishment to increase land mass across the Breton Basin. The Property is used for commercial and recreational hunting and fishing.

3.3 Current Uses of Adjoining Properties

The Property is in a remote area of Plaquemines Parish accessible by boat or aircraft. The surrounding area is primarily used for oil and gas operations and commercial and recreational fishing and hunting. The uses of the adjoining and immediately surrounding properties are discussed in **Table 3.3**.

Table 3.3 – Adjoining Property Use Summary

Property	Use Description
North	Grand Lake and Alligator Pass followed by marsh.
South	Bayou Batola followed by access canals and Lake Batola interspersed with marsh.
East	Petit Lake and Bayou Long followed by Little Lake Batola, Shrimp Lagoon, and access interspersed with marsh.
West	Orange Bayou, access canals, and marsh.

4.0 SUPPORT DOCUMENTATION

4.1 Environmental Liens and Activity and Use Limitations

No environmental liens, engineering controls, institutional controls, or land use restrictions associated with the Property were identified based on the completed User Questionnaire (see **Appendix A**).

The Project Team’s scope of work for this investigation did not include obtaining and reviewing recorded land title information for environmental liens and activity and use limitations (AULs) recorded against or relating to the Property. Therefore, CPRA, as a User of the Phase I ESA, should engage a title company, real estate attorney, or title professional to undertake a review of such records for environmental liens and AULs recorded against or relating to the Property per the User responsibilities per ASTM E1527-13 Section 6.

4.2 Specialized Knowledge

CPRA provided The Project Team with a Project Fact Sheet that the Property is associated with. The Project Fact Sheet described the location of the project, project background, and project goals, and is provided in **Appendix A**. No other specialized knowledge or prior reports were provided or identified.

4.3 Owner, Property Manager, and Occupant Information

According to the CPRA, the Property is owned by several private landowners. The Property is undeveloped and unoccupied marshland.

4.4 Reason for Conducting the Phase I ESA

The Project Team conducted this Phase I ESA to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bonafide prospective purchaser limitations as described in ASTM E1527-13; to serve as an AAI in accordance with 40 CFR §312; to define potential sources or potential presence of any hazardous substance, pollutants and contaminants, petroleum and petroleum products, and controlled substances that are used, stored, treated, or disposed of at the Property and adjoining properties that may complicate the expansion, redevelopment, and reuse of the Property; and, to define any continuing or threatened future releases of hazardous substances at the Property.

4.5 User Questionnaire

A User Questionnaire was submitted to the User (CPRA) in accordance with the ASTM E1527-13 standard. Ms. Jessica Diez with CPRA compiled responses from the CPRA team assigned to the BS-0038 – Breton Land Bridge Marsh Creation (West) Project. CPRA has no knowledge of any liens, AULs, or any other environmental conditions on the Property.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

The Project Team contracted GeoSearch to research federal, state, and tribal environmental databases required by ASTM E1527-13 and additional environmental databases for information pertaining to the Property and the surrounding area (other properties within an additional approximate minimum search distance from the Property). A copy of the Database Report is provided as **Appendix B** and includes details concerning each searched database and the approximate minimum search distance for each record. No listings were identified for the Property or within a one-mile radius of the Property.

The Database Report also includes Unlocated Sites, which are sites listed in one or more databases that could not be precisely identified due to incomplete address/location information, and, therefore, it is not possible to obtain a full account of these sites. No Unlocated Sites were listed by GeoSearch.

5.2 Water Wells

A search for water wells, including public water supply wells, United States Geological Survey (USGS) water wells, Louisiana Department of Transportation and Development (LDOTD) registered water wells, and Louisiana Department of Natural Resources (LDNR) registered water wells was conducted as part of this report. Public water supply wells supply water to at least 25 people for a minimum of 60 days. USGS water well data includes groundwater data on springs, wells, and other sources of groundwater input into their national water resource information tracking system. LDNR maintains a database of all water wells registered in Louisiana. LDNR's database includes public and private drinking water supply wells, irrigation wells, livestock watering wells, and groundwater monitoring wells. Additional information on the registered water wells is provided in **Appendix C**.

The registered water well databases show no registered wells on the Property or within a half mile radius of the Property.

5.3 Physical Setting Sources

The most current USGS 7.5-Minute Series Topographic Map depicting the Property is the "Lake Batola, LA" Topographic Map dated 2012. The elevation of the property is approximately 1 foot above mean sea level (see **Appendix D**).

The Project Team reviewed the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) National Cooperative Soil Survey for the Property. According to the USDA NRCS Soil Survey, the soil types identified on the Property are Clovelly muck and Lafitte muck.

The Clovelly series consists of very deep, very poorly drained, very slowly permeable soils. These soils formed in moderately thick accumulations of herbaceous organic material overlying very fluid clayey alluvial sediments. These soils are on broad coastal marshes that are nearly continuously flooded with brackish water. Slope ranges from 0 to 0.2 percent.

The Lafitte series consists of very deep, very poorly drained, moderately rapidly permeable organic soils in the Gulf Coast Marsh (MLRA 151) and the Eastern Gulf Coast Flatwoods (MLRA 152A) Major Land Resource Areas. They formed in herbaceous plant remains over mineral sediments in intermediate and brackish marshes in the extreme lower Mississippi River Delta and coastal areas. Slopes are less than 1 percent.

5.4 Historical Use Information on the Property

A chronological summary of the historical use and development of the Property and surrounding area, including environmentally significant events, based on historical Aerial Photographs (**Appendix E**), and historical topographic maps (**Appendix D**) is provided in **Table 5.4**. Sanborn Maps were not available for the Property.

Table 5.4 – Historical Use and Development Summary

Year	Resource	Interpreted Use/Development
Property		
1892-1949	Topographic Maps	Undeveloped, appears to be intact coastal marsh
1952-1973	Topographic Maps and Aerial Photographs	Undeveloped marsh. Seismic survey equipment tracks are visible in 1956 on the eastern part of the property.
1978-2004	Topographic Maps and Aerial Photographs	Undeveloped marsh. Shoreline erosion and interior land loss are visible.
2005-2017	Topographic Maps and Aerial Photographs	Undeveloped marsh. Substantial land loss occurred between 2004 and 2005 with much of the interior marsh converting to open water.
Adjoining and Surrounding Properties to the North		
1892-1949	Topographic Maps	Grand Lake is to the north, the property appears to be undeveloped marsh.
1952-1973	Topographic Maps and Aerial Photographs	Grand Lake is to the north, land loss has caused an increase in open water. An oil and gas canal was dredged by 1973 south of Alligator Pass near the northeast part of the property.

COASTAL PROTECTION AND RESTORATION AUTHORITY

Year	Resource	Interpreted Use/Development
1978-2004	Topographic Maps and Aerial Photographs	Grand Lake is to the north, the rate of land loss appears to have increased during this timeframe.
2005-2017	Topographic Maps and Aerial Photographs	Undeveloped marsh. Much of the interior marsh has converted to open water. Hurricane Katrina affected the area in August 2005 and much of the interior marsh lost did not recover.
Adjoining and Surrounding Properties to the East		
1892-1949	Topographic Maps	The property to the east appears to be undeveloped marsh and Lake Petit.
1952-2004	Topographic Maps and Aerial Photographs	The property to the east appears to be undeveloped marsh and Lake Petit. Land loss has caused an increase in open water.
2005-2017	Topographic Maps and Aerial Photographs	The property to the east appears to be undeveloped marsh and Lake Petit. Land loss appears to have increased at a much faster rate. Much of the interior marsh has converted to open water. Hurricane Katrina affected the area in August 2005 and much of the interior marsh lost did not recover.
Adjoining and Surrounding Properties to the South		
1892-1949	Topographic Map	The property to the south appears to be undeveloped marsh.
1952-2004	Topographic Maps and Aerial Photographs	The property to the south appears to be undeveloped marsh. Land loss has caused an increase in open water. An oil and gas canal was dredged by 1973 and a well is depicted.
2005-2017	Topographic Maps and Aerial Photographs	The property to the south appears to be undeveloped marsh. The rate of land loss appears to have increased during this timeframe.
Adjoining and Surrounding Properties to the West		
1892-1939	Topographic Maps	The property to the west includes Orange Bayou then undeveloped marsh.
1949	Topographic Map	A canal is depicted northwest of the property. The canal runs north-south and cuts through Orange Bayou.
1952-1962	Topographic Maps and Aerial Photographs	No significant changes visible.

Year	Resource	Interpreted Use/Development
1970	Topographic Maps and Aerial Photographs	Three oil and gas canals and a smaller canal were dredged northwest of the property across Orange Bayou.
1971-2004	Topographic Maps and Aerial Photographs	Other than the canals dredged in the 1970s, the marsh west of the project has remained undeveloped. Interior land loss is visible during this timeframe.
2005-2017	Topographic Maps and Aerial Photographs	The rate of land loss appears to have increased during this timeframe.

5.4.1 Oil and/or Gas Production Well and Pipeline Search

The Project Team reviewed LDNR’s Strategic Online Natural Resources Information System (SONRIS), an online database that stores information on oil, gas, and groundwater wells, to assess the presence or absence of oil and/or gas production wells on the Property.

No oil and/ or gas wells were identified on the Property (**Figure 3**). Four wells were identified within a 0.5-mile buffer of the Property. None of the wells were listed as active and the nearest well location was over 500 feet to the north of the Property. Based on the location and status of these wells, they do not elicit environmental concern to the Property. Copies of the well information forms obtained from SONRIS are included in **Appendix C**.

A review of the United States Department of Transportation (USDOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) National Pipeline Mapping System (NPMS) did not identify gas transmission or hazardous liquid pipelines on the Property. A crude oil pipeline owned by Harvest Midstream is approximately 4.5 miles northwest of the Property and a natural gas pipeline owned by Gulf South Pipeline Company is approximately 0.8 mile east of the Property (**Figure 2**). The data base did not contain records of accidents (liquid) or incidents (gas) on or in the vicinity of the Property.

5.4.2 Louisiana Department of Environmental Quality (LDEQ) Database Search

The Project Team performed a search of the LDEQ’s Electronic Document Management System (EDMS) to determine if the Property had past or current compliance or enforcement actions on file with LDEQ.

No files related to the Property or surrounding properties were found.

5.4.3 City Directories Search

The Project Team researched local business directories, including city and telephone directories, as available, at the approximate five-year intervals. A copy of the City Directories provided by GeoSearch is in **Appendix F**.

The Property does not have a formal address. There are no facilities or roadways on or adjacent to the Property with addresses. The property is owned by several private landowners.

5.5 Vapor Encroachment Analysis

Vapor Encroachment is the presence or likely presence of vapors from chemicals of concern in the subsurface of the Property caused by the release of vapors on or near the Property. The Project Team evaluated the Property and adjoining properties for the potential for vapor encroachment to occur. No Vapor Encroachment Conditions (VECs) were identified in connection to the Property.

6.0 SITE RECONNAISSANCE

The Project Team conducted a site reconnaissance of the Property on June 16, 2020, to observe whether any visible areas of environmental concern were evident on the Property. Photographs of the Property taken during the site visit are included in **Appendix G (Photographs 1 through 29)**.

6.1 Methodology and Limiting Conditions

The Property was traversed by airboat and observed aerially using a drone. General observations would be made along the shoreline of the Property using the airboat while the drone provided an aerial view of the Property.

6.2 General Site Setting

The Property is undeveloped marsh, shallow ponds, and open water. The Property and adjoining properties are shown on the Site Plan, which is included as **Figure 2**.

6.3 Site Observations

Photographs taken during the June 16, 2020; site reconnaissance are provided in **Appendix G**. Notable observations are described below:

Item	Observed
ASTs (contents/size/containment)	
Emergency Generators (fuel tanks)	
USTs/Piping/Vents/ Fuel Islands	
Patched Pavement	
Vent Pipes/Grates/Stacks	
Strong, Pungent, Noxious Odors	
Pools of Liquid	

Item	Observed
Surface Waterbodies (discoloration/sheen)	X
Pits/Depressions	
Drums, Containers >5 gallons	
MSDS (location, contents)	
Transformer/Electrical Equipment	
Hydraulic Equipment	
Heating/Cooling System (type/service)	
Stained Soil / Pavement / Floor	
Floor Drains (discharge to where)	
Sumps, Cisterns, Catch Basins	
Stressed Vegetation	X
Trash Dumpsters/Piles/Compactors	
Dumping (debris/dirt/materials)	
Evidence of Fill/ Dirt Piles	
Incinerators / Burning Barrels / Vents	
Wastewater Treatment Systems (type/chemicals/discharge/service)	
Septic tank/Leach Field/Ponds	
Oil/Water Separators (size/service)	
Grease Traps (size/service)	
Leachate/Waste Seeps	
Effluent/Exterior Pipe Discharge	
Water Wells (type/depth/service)	
Pipeline Evidence (markers, etc.)	
Other Processes/Equipment (photo- processing, drycleaning, etc.)	

Surface Water / Bodies

The Property includes approximately 647 acres of primarily broken marsh, shallow ponds, and large areas of open water. Discoloration or surface sheen indicative of petroleum products was not observed during site reconnaissance.

Stressed Vegetation

Stressed vegetation including wiregrass (*Spartina patens*) and marshhay cordgrass (*Spartina alterniflora*) was observed throughout the Property. The primary stressors appear to include waterlogging due to prolonged inundation, deposition of debris by storm-induced high water, and shoreline erosion. No indications of hazardous material or petroleum products were observed.

7.0 INTERVIEWS

Mr. Michael Farizo (Land Manager, Delacroix Corporation) was contacted to coordinate access prior to the site reconnaissance. Mr. Farizo was not aware of any oil and gas wells on the Property. No environmental concerns were identified from the information provided by Mr. Farizo.

Mr. Mike Bengé, President of Delacroix Corporation, was provided with a copy of the Owner Questionnaire. The questionnaire had not been returned at the issuance of this report.

Ms. Jessica Diez and the CPRA Environmental Team completed the User Questionnaire to the best of their knowledge. The CPRA Team had no knowledge of any liens, AULs, or any other environmental conditions on the Property. No activity and use limitations (other than site access) were reported. Other contracted studies include bathymetric, topographic, and magnetometer surveys; cultural resource investigations; and oyster lease investigations. The CPRA team was aware of a Gulf South Pipeline Company pipeline and a High Point Gas Transmission, LLC gas line in the vicinity of the Property. These pipelines cross Delacroix Corporation property adjacent to Grand Lake. The CPRA team was not aware of indications of hazardous materials or petroleum product releases on the Property. The completed Questionnaire is provided in **Appendix A**.

The Project Team contacted Mr. Jeffrey Leonick with the LDEQ Southeast Regional Office for information on any reported spills or releases of hazardous materials or petroleum products in connection with the Property. Mr. Leonick was familiar with the Property and was not aware of any oil and gas wells, pipelines, or other infrastructure on the Property and stated that LDEQ has not issued any permits on the property. Furthermore, he was not aware of any spills or releases of hazardous materials or petroleum products on the Property.

8.0 FINDINGS

This assessment has revealed the following significant findings in association with the Property within the specified search radius:

Property

- The Property has been undeveloped marsh since at least the 1800s. (There is no evidence that the Property has ever been used for anything other than commercial/recreational fishing, trapping, and hunting).
- The Property includes approximately 647 acres of primarily broken marsh, shallow ponds, and large areas of open water.

Surrounding Properties

- Four plugged and abandoned oil/gas wells are located within 0.5 mile of the Property.
- A crude oil pipeline owned by Harvest Midstream is approximately 4.5 miles northwest of the Property and a natural gas pipeline owned by Gulf South Pipeline Company is approximately 0.8 mile east of the Property.

9.0 OPINION

The Project Team, through this Phase I ESA process, identified no evidence of known or suspected RECs associated with the Property.

A REC indicates the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. A controlled recognized environmental condition (CREC) is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority [for

example, as evidenced by the issuance of a No Further Action (NFA) letter or equivalent, or meeting risk-based criteria established by regulatory authority], with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. A historical recognized environmental condition (HREC) means a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority without subjecting the property to any required controls. RECs, CRECs, or HRECs are not intended to include *de minimis* conditions that generally do not present a material risk or harm to public health or the environment and would not likely be the subject of an enforcement action if discovered by the appropriate regulatory authority.

9.1 *De Minimis* Conditions

- No *De Minimis* conditions were noted within the Property.

9.2 RECs

- No RECs were identified in association with the Property.

9.3 CRECs

- No CRECs were identified in association with the Property.

9.4 HRECs

- No HRECs were identified in association with the Property.

9.5 Findings Not Eliciting Environmental Liability Concerns

The following findings do not represent evidence of a REC in connection to the Property based on the nature of the finding, no evidence of a release or spills of hazardous substances or petroleum hydrocarbons, and/or the separation distance from the Property:

- The Property has been undeveloped marsh since at least the 1800s. (There is no evidence that the Property has ever been used for anything other than commercial/recreational fishing, trapping, and hunting).
- The Property includes approximately 647 acres of primarily broken marsh, shallow ponds, and large areas of open water.
- Stressed vegetation including wiregrass and marshy cordgrass was observed throughout the Property.

9.6 Business Environmental Risk

- No business environmental risks were identified.

10.0 DATA GAPS AND DATA FAILURES

Historical information on the Property was available from 1892 (Topographic Maps) to 2017 (Aerial Photographs). Data gaps of greater than five years exist from 1892 to 1935, 1939 to 1949, 1956 to 1962, 1962 to 1970, 1983 to 1989, 1989 to 1998, and 1998 to 2004. These data gaps, however, do not constitute a data failure, as significant changes in land use or conditions did not appear to occur during these periods.

11.0 CONCLUSIONS

11.1 ASTM Standard Practice E 1527-13 Conclusions

The Project Team has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of 647 acres of marsh and open water along the south side of Grand Lake. Any exceptions to, or deletions from, this practice are described in Sections 10.0 and 12.0 of this report. This assessment has revealed no evidence of RECs in connection with the Property.

11.2 Recommended Additional Investigation

No further investigation is recommended.

12.0 DEVIATIONS

The Project Team conducted this Phase I ESA in conformance with the scope of ASTM Standard Practice E1527-13, with no noted deviations except as identified in Section 10.0.

13.0 REFERENCES

The following references were used in support of this Phase I ESA:

Table 13.0 – References

Source Type	Years Reviewed	Source
USGS Topo Maps	1892, 1935, 1939, 1949, 1962, 1973, 1992, 2012	USGS, GeoSearch
Aerial Photographs	1952, 1956, 1970, 1971, 1978, 1983, 1989, 1998, 2004, 2005, 2007, 2009, 2010, 2013, 2015, 2017	GeoSearch
City Directories	No coverage	GeoSearch
Sanborn Maps	No Coverage	GeoSearch
LDNR's SONRIS	N/A	http://www.sonris.com/
LDEQ's EDMS	N/A	http://edms.deq.louisiana.gov/app/doc/querydef.aspx
USDA NRCS Soil Survey	N/A	http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
USDOT PHMSA NPMS	N/A	https://www.npms.phmsa.dot.gov/default.aspx

14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR §312. We have the specific qualifications based on education, training, and experience to assess a Property of the nature, history, and setting of the Property. We have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR §312.

Aaron S. Bass is an Environmental Scientist with over 24 years of experience in the environmental industry and has performed numerous Phase I ESAs on rural, residential, commercial, industrial, and oil and gas producing properties throughout Louisiana, Texas, Alabama, and Mississippi. He has a BS Degree in Business Administration and a MS and PhD Degrees in Oceanography and Coastal Sciences.

Jessica Keasler is an Environmental Professional with over 13 years of experience in the environmental industry and has performed and reviewed numerous Phase I ESAs. She has a Bachelor of Science Degree in Environmental Sciences and a Master of Science Degree in Environmental Studies.

15.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

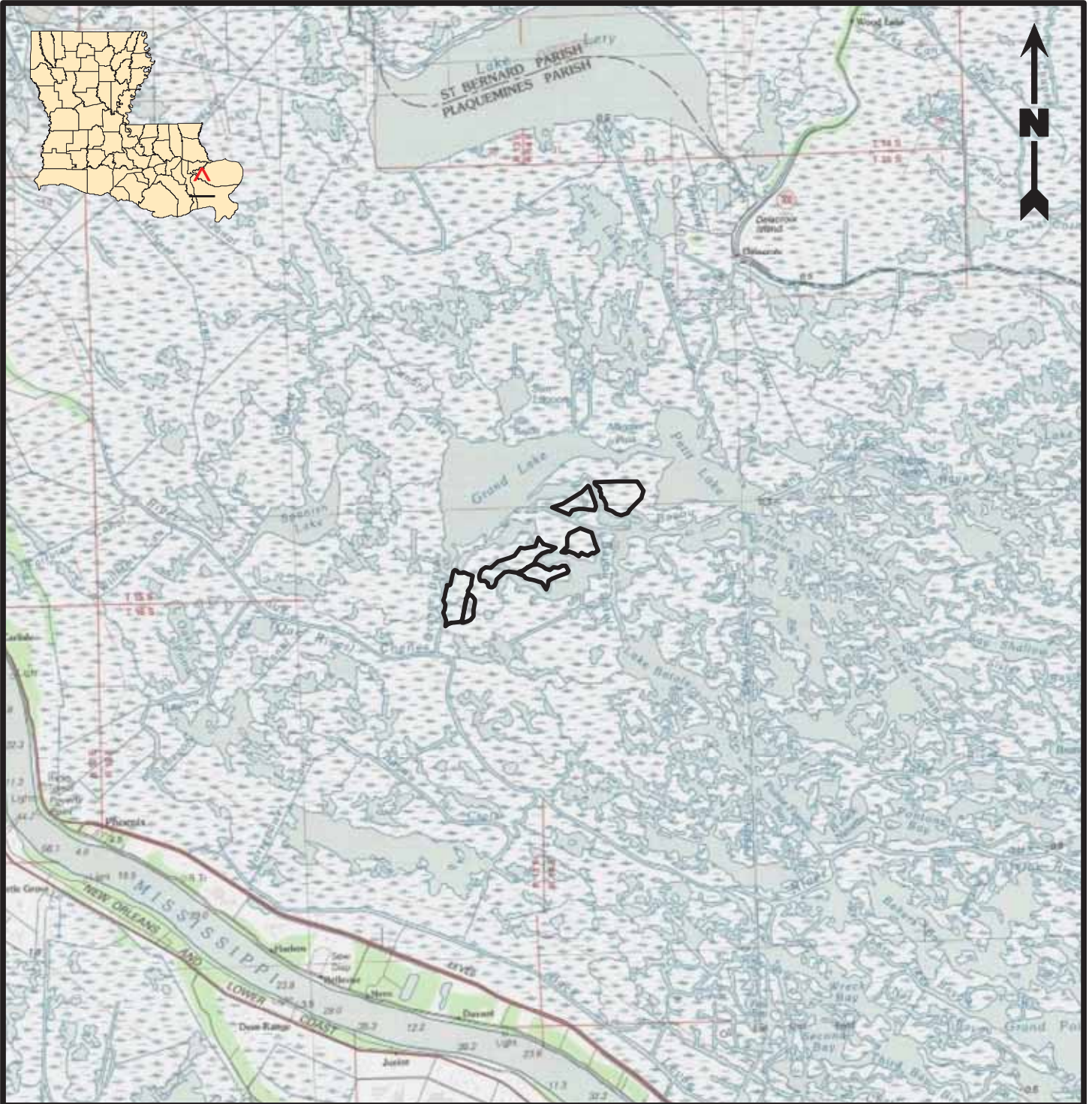


Aaron S. Bass, PhD
Principal, Chenier Environmental Consulting, LLC



Jessica R. Keasler
Site Evaluation and Remediation Services Director

FIGURE 1
SITE LOCATION MAP



Legend

 Project Boundary (647 Acres)

Reference

Base map comprised of United States Geological Survey (USGS) 100K topographic map, "Black Bay, LA".

Site Location Map
Phase I Environmental Site Assessment and Hazardous, Toxic, and Radioactive Waste Assessment
 Breton Basin, Plaquemines Parish, Louisiana

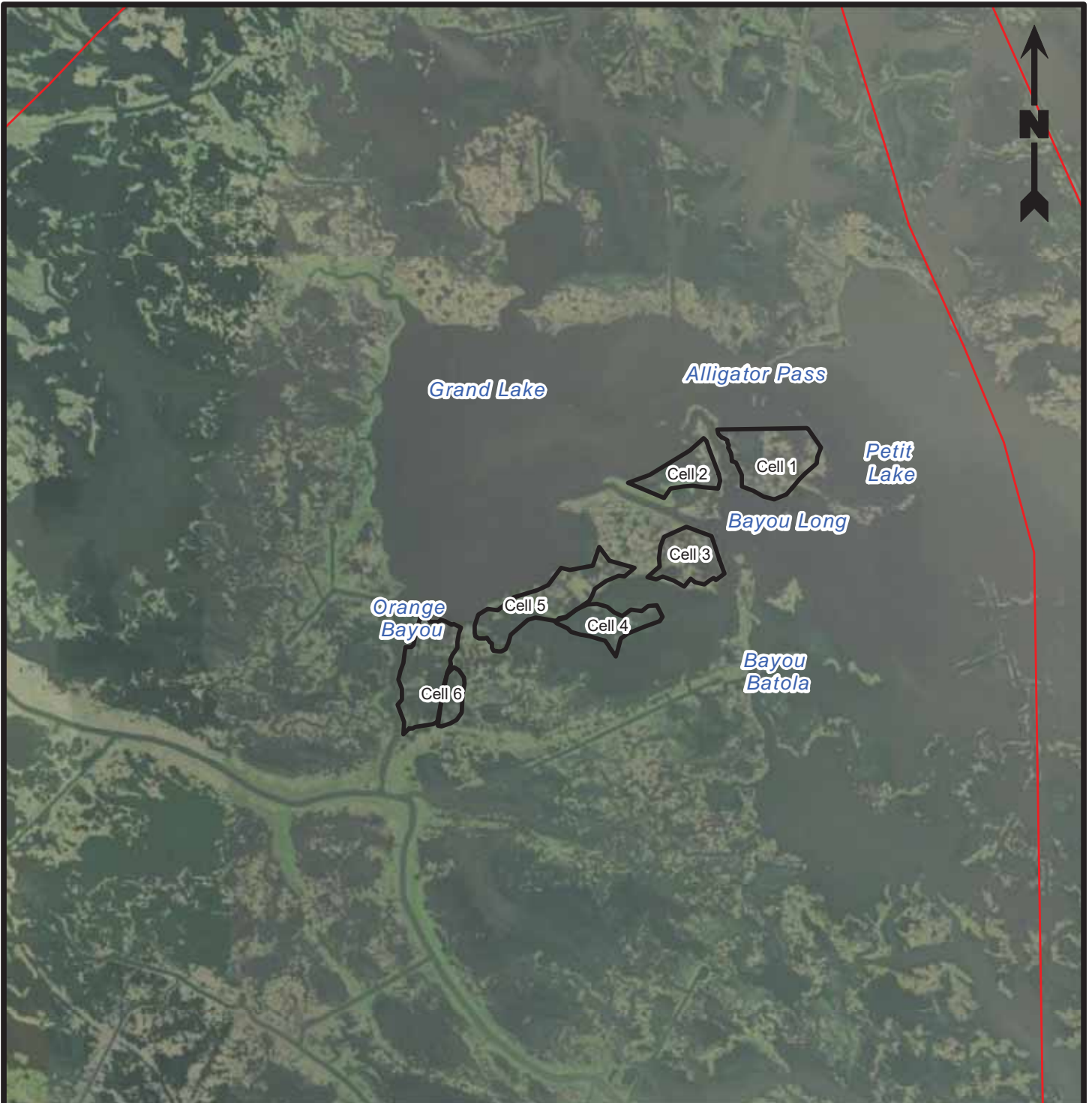
Coastal Protection and Restoration Authority
 BS-0038 - Breton Land Bridge Marsh Creation (West) Project

Drawn By	SRM	7/13/2020
Checked By	TDJ	7/13/2020
Approved By	AH	7/13/2020





Project Number	621-013
Drawing Number	621-013-A001
1	Figure

FIGURE 2
SITE PLAN



Legend

-  Project Boundary (647 Acres)
-  Pipelines

Reference

Base map comprised of ESRI's World Imagery exported 6/25/2020.

Site Plan

Phase I Environmental Site Assessment and Hazardous, Toxic, and Radioactive Waste Assessment
Breton Basin, Plaquemines Parish, Louisiana

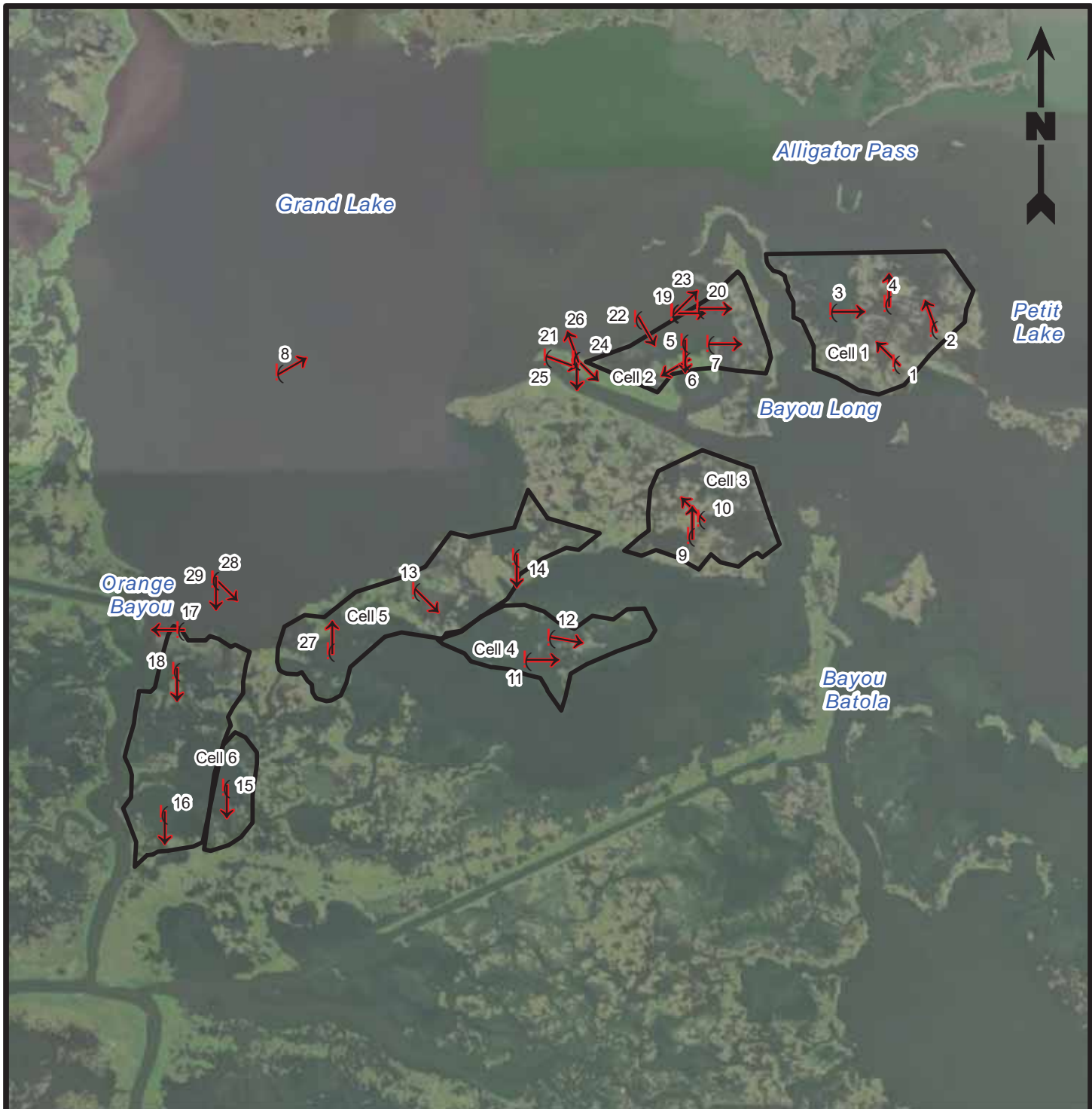
Coastal Protection and Restoration Authority
BS-0038 - Breton Land Bridge Marsh Creation (West) Project

Drawn By	SRM	7/17/2020
Checked By	TDJ	7/17/2020
Approved By	AH	7/17/2020



Project Number	621-013	2 Figure
Drawing Number	621-013-A002	

FIGURE 3



Legend

- Project Boundary (647 Acres)
- Pipelines
- Photo Direction
- Photo Location

Reference

Base map comprised of ESRI's World Imagery exported 6/25/2020.

Photo Location
Phase I Environmental Site Assessment and Hazardous, Toxic, and Radioactive Waste Assessment
 Breton Basin, Plaquemines Parish, Louisiana

Coastal Protection and Restoration Authority
 BS-0038 - Breton Land Bridge Marsh Creation (West) Project

	Drawn By SRM 7/17/2020 Checked By TDJ 7/17/2020 Approved By AH 7/17/2020	3 Figure
	Project Number 621-013 Drawing Number 621-013-A004	

APPENDIX A
INTERVIEW DOCUMENTATION

BRETON LANDBRIDGE MARSH CREATION WEST (BS-38)

PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE

DATE OF COMPLETION: 6/26/2020

USER/USER REPRESENTATIVE NAME/ RELATION: Jessica Diez

ADDRESS: 150 Terrace Ave. Baton Rouge LA 70802
STREET CITY STATE ZIP

PHONE: 225-342-1477 EMAIL: jessica.diez@la.gov

QUESTIONNAIRE:

1. Are there any environmental liens filed or recorded against the subject property? (Y/N) If yes, please explain. None known.

2. Are there any activity and use limitations that are in place on the subject property or that have been filed or recorded against the subject property? (Y/N) If yes, please explain. Delacroix Corporation must be contacted before accessing their property. Please contact Mike Farizo, Land Manager for Delacroix Corp. at #504-583-8192. Please notify all mentioned landowners at least 48 hours in advance.

3. Do you have any specialized knowledge or experience related to the subject property or nearby properties? (Y/N) If yes, please explain. Delacroix Corporation is highly sensitive to acces of their property during alligator egg season (May-July) and duck hunting season (Nov.-Jan.). Please notify Delacroix before entering their property.

CPRAs has contracted out data collection for bathymetric, topographic and magnetometer surveys, cultural resource investigations and oyster lease investigations in the project area. There is a Gulf South Pipeline gas line and High Point Gas Transmission, LLC gas line in the area. These pipelines cross Delacroix property adjacent to Grand Lake.

4. Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional identify conditions indicative of releases or threatened releases? (Y/N) If yes, please explain.

None known.

5. Does the purchase price reasonably reflect the fair market value of the property? If not, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (Y/N)

N/A

6. Based on your knowledge and experience related to the subject property, are there any obvious indicators that point to the presence or likely presence of releases at the property?(Y/N)

None known.



Breton Landbridge Marsh Creation (West) River aux Chenes to Grand Lake (BS-38)

Project Status

Approved Date: 2019 **Project Area:** 423 acres
Approved Funds: \$3.83 M **Total Est. Cost:** \$37.5 M
Net Benefit After 20 Years: 372 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 28

Location

This project is located in Region 2, Breton Basin, Plaquemines Parish.

Problems

Historically, this area was nourished by the freshwater delivered by the Mississippi River until the creation of the levees along the lower river. In 1991, the Caernarvon Freshwater Diversion began delivering freshwater to the marshes in the area. The major cause of wetland loss has been from storm activity (i.e. Hurricane Betsy and Katrina), causing both storm-induced scouring and salt water intrusion. Altered hydrology and oil/gas development have exacerbated this loss. High subsidence rates range from 2.1-3.5 ft/century. Natural lakes and bays increase in size due to coalescence with marsh lost to water and increased wave fetch. The 1984 to 2016 USGS loss rate is -1.76%/yr for the extended boundary area.



Many areas of once healthy marsh platforms in Breton Sound have converted to open water. Continued marsh loss in this area will affect the overall ecosystem functions within sound.

Restoration Strategy

The project goals are to restore 423 acres of marshes and bank lines along the south side of Grand Lake. There will be 326 acres of marsh creation and 97 acres of marsh nourishment, respectively, via confined disposal in four disposal areas of sediment dredged from Grand Lake.

Three disposal areas will be fronted by constructing a lakeside berm. The berm would be constructed with a combination of bucket dredge and marsh buggies. The lakeside slope of the berm would be planted with appropriate vegetation. The non-lakeside portions of the dikes will be gapped no later than three years post construction (i.e., the lakeshore berm would not be gapped). Data will be acquired from 224 additional acres to allow flexibility for an analysis of alternate features.

The overall landbridge concept incorporates marsh and shoreline restoration in a west-to-east configuration across the basin to be completed in two to three phases. This overall, long-range, restoration goal would create/nourish 1,000 to 2,000 acres of intermediate marsh across 7 miles of the Breton Basin from River aux Chenes to Bayou Terre aux Bouefs.

Progress to Date

This project was approved for Phase I Engineering and Design in February 2019.

This project is on Priority Project List (PPL) 28.

For more information, please contact:



Federal Sponsor:

National Marine Fisheries Service
 Baton Rouge, LA
 (225) 389-0508




Local Sponsor:

Coastal Protection and Restoration Authority
 Baton Rouge, LA
 (225) 342-4733



Breton Landbridge Marsh Creation (West) (BS-38)

	Confined Disposal Marsh Creation & Nourishment *
	Project Boundary
*denotes proposed features	



Map Produced by:
 U.S. Department of the Interior
 U.S. Geological Survey
 Wetland and Aquatic Research Center
 Coastal and Ocean Restoration Branch
 Baton Rouge, La.

Background Imagery:
 2017 NAIP Photography
 Map Date: February 20, 2019
 Map ID: USGS-NWRC 2019-11-0007
 Data accurate as of: February 14, 2019

APPENDIX B
GEOSEARCH REGULATORY DATABASE REPORT

E RecSearch Report

[GeoLens by GeoSearch](#)

Target Property:

***Breton Landbridge Marsh Creation (West)
Parish, Louisiana***

Prepared For:

Providence Engineering-Baton Rouge

Order #: 147750

Job #: 355220

Project #: 621-013

Date: 06/03/2020

Table of Contents

<i>Target Property Summary</i>	1
<i>Database Summary</i>	2
<i>Database Radius Summary</i>	6
<i>Radius Map</i>	10
<i>Ortho Map</i>	12
<i>Topographic Map</i>	13
<i>Unlocated Sites Summary</i>	17
<i>Environmental Records Definitions</i>	18
<i>Unlocatable Report</i>	See Attachment
<i>Zip Report</i>	See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR § 312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR § 312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Target Property Summary

Target Property Information

Breton Landbridge Marsh Creation (West)
Louisiana

Coordinates

Area centroid (-89.839967, 29.7053049)
0 feet above sea level

USGS Quadrangle

Lake Batola, LA

Geographic Coverage Information

County/Parish: Plaquemines (LA)

ZipCode(s):

Braithwaite LA: 70040

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSLA	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR06	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR06	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR06	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSLA	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR06	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR06	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR06	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMCLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		0	0	

Database Summary

STATE (LA) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SITES WITH CONTROLS	IC	0	0	TP/AP
NO LONGER REPORTED UNDERGROUND STORAGE TANKS	NLRUST	0	0	0.2500
UNDERGROUND STORAGE TANKS	UST	0	0	0.2500
APPROVED HURRICANE DEBRIS DUMP SITES	ADS	0	0	0.5000
HISTORICAL LEAKING UNDERGROUND STORAGE TANKS	HLUST	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
SOLID WASTE LANDFILLS	SWLF	0	0	0.5000
VOLUNTARY REMEDIATION PROGRAM SITES	VRP	0	0	0.5000
CONFIRMED AND POTENTIAL SITES INVENTORY	CPI	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
ASBESTOS DEMOLITION AND RENOVATION NOTIFICATION PROJECTS	ASBESTOS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
LISTING OF LOUISIANA DEQ LIENS	LIENS	0	0	TP/AP
SPILLS LISTING	SPILLS	0	0	TP/AP
WASTE TIRE GENERATOR LIST	WASTETIRE	0	0	TP/AP
DRYCLEANING FACILITIES	DCR	0	0	0.2500
RECYCLING FACILITIES	RCY	0	0	0.5000
WASTE PITS	WP	0	0	0.5000
SUB-TOTAL		0	0	

Database Summary

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR06	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR06	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		0	0	

Database Radius Summary

FEDERAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	0.0200	0	NS	NS	NS	NS	NS	0
ECHOR06	0.0200	0	NS	NS	NS	NS	NS	0
ERNSLA	0.0200	0	NS	NS	NS	NS	NS	0
FRSLA	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR06	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	0.0200	0	NS	NS	NS	NS	NS	0
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDES06	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR06	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	0.0200	0	NS	NS	NS	NS	NS	0
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR06	0.1250	0	0	NS	NS	NS	NS	0
RCRANGR06	0.1250	0	0	NS	NS	NS	NS	0
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	0.5000	0	0	0	0	NS	NS	0
DNPL	0.5000	0	0	0	0	NS	NS	0
NLRRCRAT	0.5000	0	0	0	0	NS	NS	0

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	0.5000	0	0	0	0	NS	NS	0
SEMS	0.5000	0	0	0	0	NS	NS	0
SEMSARCH	0.5000	0	0	0	0	NS	NS	0
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	1.0000	0	0	0	0	0	NS	0
NMS	1.0000	0	0	0	0	0	NS	0
NPL	1.0000	0	0	0	0	0	NS	0
PNPL	1.0000	0	0	0	0	0	NS	0
RCRAC	1.0000	0	0	0	0	0	NS	0
RCRASUBC	1.0000	0	0	0	0	0	NS	0
RODS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

STATE (LA) LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ASBESTOS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
IC	0.0200	0	NS	NS	NS	NS	NS	0
LIENS	0.0200	0	NS	NS	NS	NS	NS	0
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
WASTETIRE	0.0200	0	NS	NS	NS	NS	NS	0
DCR	0.2500	0	0	0	NS	NS	NS	0
NLRUST	0.2500	0	0	0	NS	NS	NS	0
UST	0.2500	0	0	0	NS	NS	NS	0
ADS	0.5000	0	0	0	0	NS	NS	0
HLUST	0.5000	0	0	0	0	NS	NS	0
LUST	0.5000	0	0	0	0	NS	NS	0
RCY	0.5000	0	0	0	0	NS	NS	0
SWLF	0.5000	0	0	0	0	NS	NS	0
VRP	0.5000	0	0	0	0	NS	NS	0
WP	0.5000	0	0	0	0	NS	NS	0
CPI	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

TRIBAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR06	0.2500	0	0	0	NS	NS	NS	0
LUSTR06	0.5000	0	0	0	0	NS	NS	0
ODINDIAN	0.5000	0	0	0	0	NS	NS	0
INDIANRES	1.0000	0	0	0	0	0	NS	0

SUB-TOTAL		0	0	0	0	0	0	0
------------------	--	----------	----------	----------	----------	----------	----------	----------

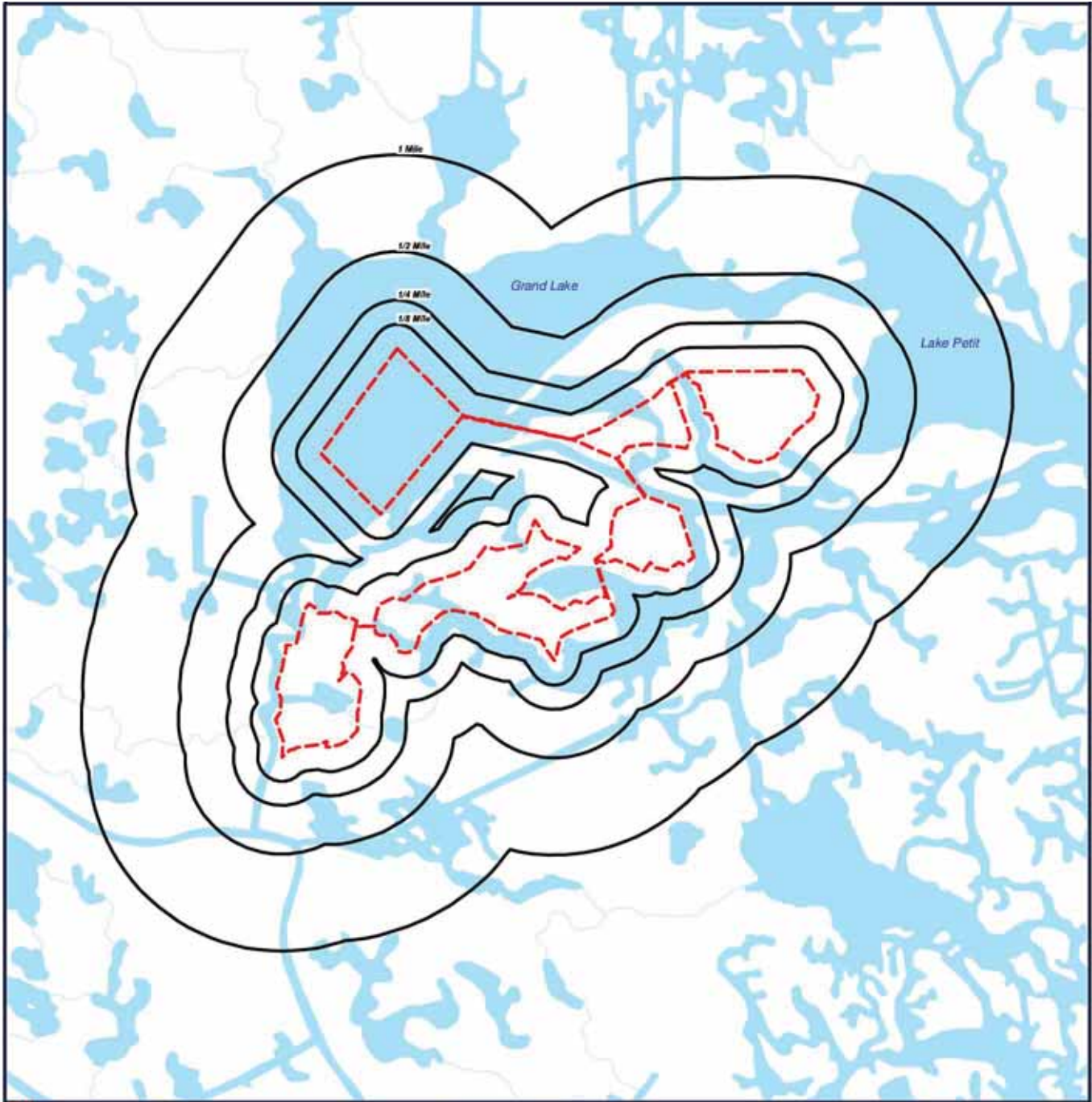
TOTAL		0	0	0	0	0	0	0
--------------	--	----------	----------	----------	----------	----------	----------	----------

NOTES:

NS = NOT SEARCHED

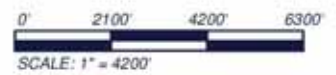
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1

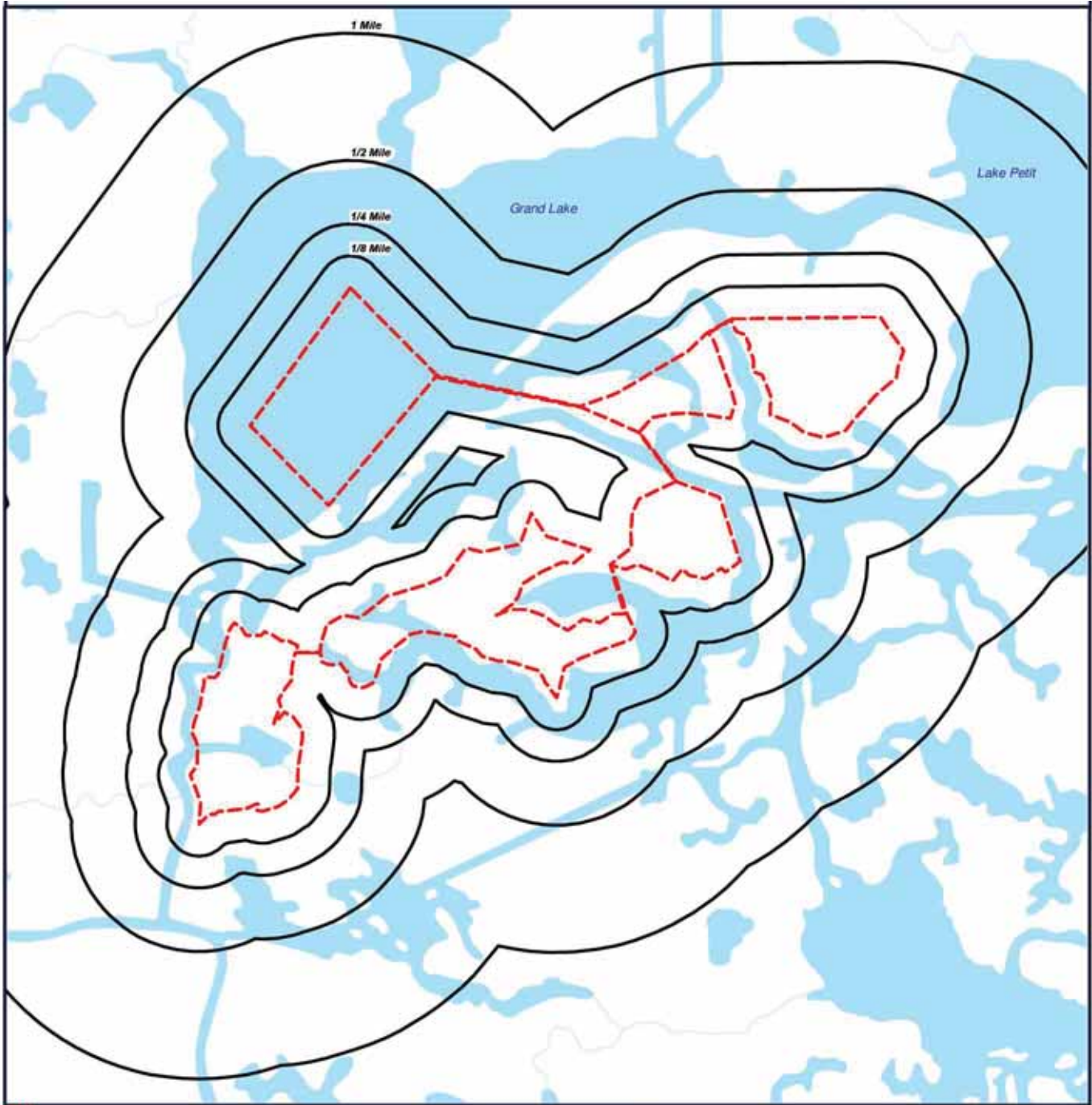


 Target Property (TP)

**Breton Landbridge
Marsh
Creation (West)
County, Louisiana**



Radius Map 2

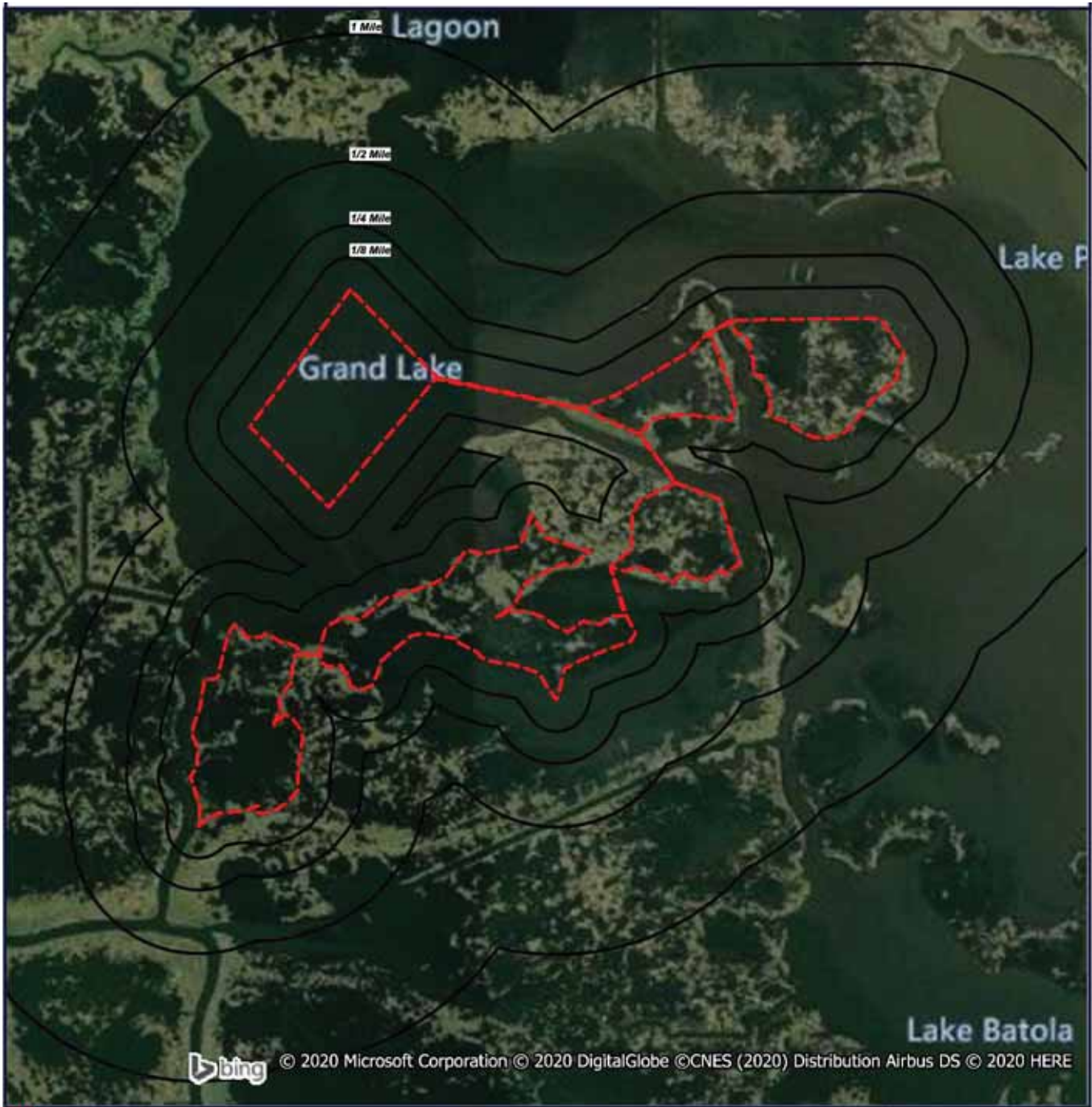


 Target Property (TP)

**Breton Landbridge
Marsh
Creation (West)
County, Louisiana**



Ortho Map

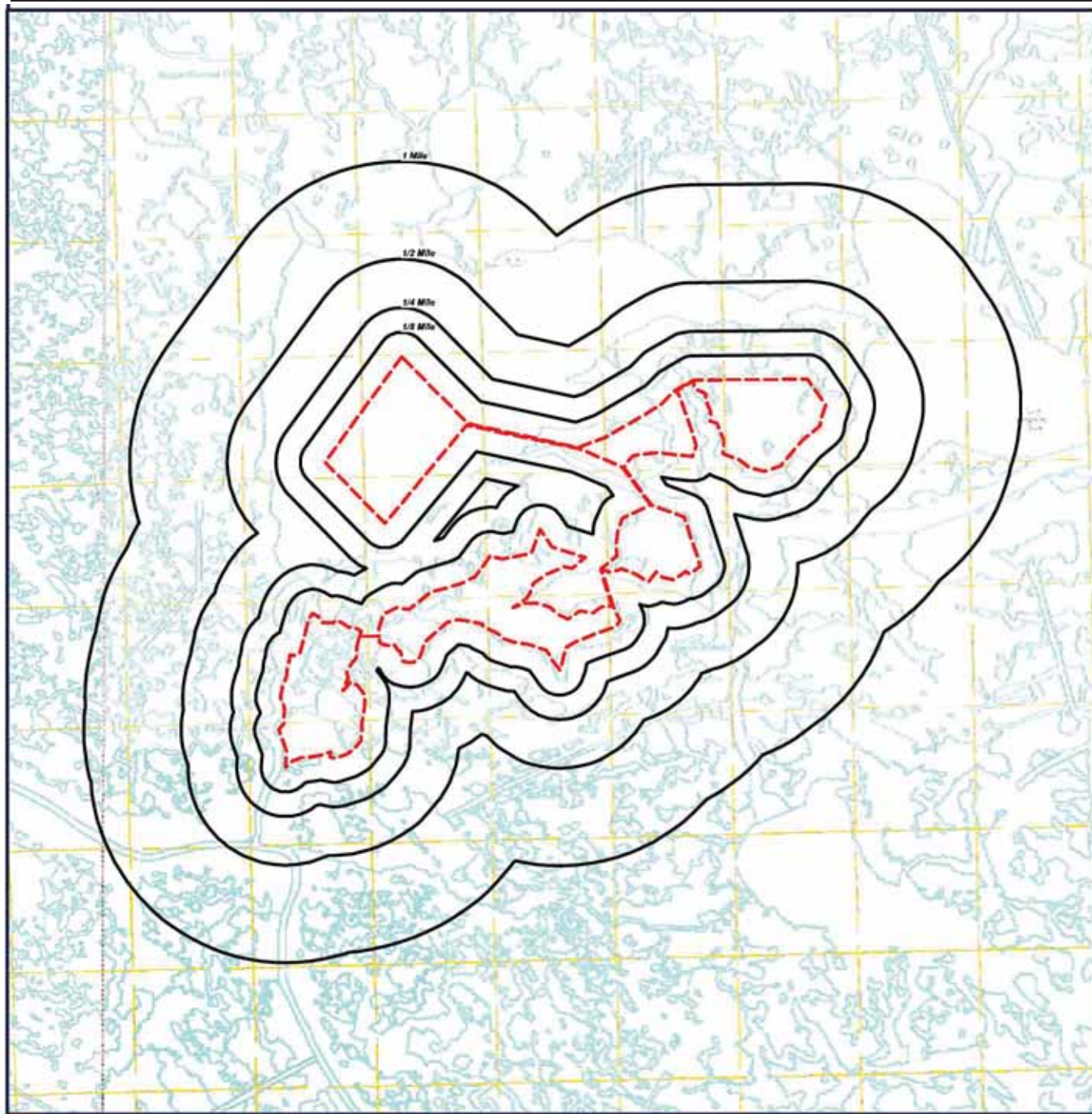



 Target Property (TP)

Quadrangle(s): Lake
Batola
Breton Landbridge
Marsh
Creation (West)
County, Louisiana



Topographic Map



 Target Property (TP)

Quadrangle(s): Lake
Batola
Source: USGS,
07/25/2012
**Breton Landbridge
Marsh
Creation (West)
County, Louisiana**



0' 2100' 4200' 6300'
SCALE: 1" = 4200'

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 0 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

No Records Found.

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

Environmental Records Definitions - FEDERAL

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

Environmental Records Definitions - FEDERAL

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR06 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSLA Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSLA Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRS06 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Environmental Records Definitions - FEDERAL

Department of Transportation located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Environmental Records Definitions - FEDERAL

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDES06 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR06 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 6 states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

Environmental Records Definitions - FEDERAL

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information:
<https://pfasproject.com/pfas-contamination-site-tracker/>

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

Environmental Records Definitions - FEDERAL

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR06 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA region 6 includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

RCRANGR06 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Environmental Records Definitions - FEDERAL

Region 6 includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

Environmental Records Definitions - FEDERAL

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

Environmental Records Definitions - FEDERAL

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

Environmental Records Definitions - FEDERAL

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. **DISCLAIMER:** This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

Environmental Records Definitions - FEDERAL

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

Environmental Records Definitions - FEDERAL

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

Environmental Records Definitions - STATE (LA)

ASBESTOS

Asbestos Demolition and Renovation Notification Projects

VERSION DATE: 08/13/19

This listing of Asbestos Demolition and Renovation Projects is provided by the Louisiana Department of Environmental Quality (DEQ). In accordance with the DEQ Air Quality Regulations, LAC 33:III.5151.F.1.f, any contractor performing removal of asbestos containing material that involves Regulated Asbestos Containing Material (see definition in LAC 33:III.5151.B) must become licensed by the Louisiana State Licensing Board for Contractors.

CDL

Clandestine Drug Laboratory Locations

VERSION DATE: 01/30/18

This list of Clandestine Methamphetamine Labs is provided by the Louisiana Department of Environmental Quality. These residential real properties have been reported as potentially contaminated.

IC

Sites With Controls

VERSION DATE: 03/02/20

This site listing is maintained by the Louisiana Department of Environmental Quality's Remediation Division. Institutional controls (IC) are administrative and/or legal measures in place to safeguard the public and the environment from potential contamination. In certain circumstances, local zoning or ordinances can serve as an IC. This listing may also include locations where Engineering Controls are in effect, such as a cap, barrier, or other engineering device to prevent access, exposure, or continued migration of contamination.

LIENS

Listing of Louisiana DEQ Liens

VERSION DATE: 03/13/18

A listing of liens filed against properties by the Remediation Services Division of the Louisiana Department of Environmental Quality.

SPILLS

Spills Listing

VERSION DATE: 10/10/19

The Louisiana Department of Environmental Quality provides this database. Information includes releases of hazardous or potential hazardous chemical/materials into the environment.

WASTETIRE

Waste Tire Generator List

VERSION DATE: 02/03/20

This listing of registered waste tire generators is maintained by the Louisiana Department of Environmental Quality.

Environmental Records Definitions - STATE (LA)

DCR Drycleaning Facilities

VERSION DATE: 03/18/20

This listing of drycleaning facilities was provided by the Louisiana Department of Environmental Quality.

NLRUST No Longer Reported Underground Storage Tanks

VERSION DATE: 02/01/04

This Underground Storage Tank listing originates from the no longer active PEL filing system of the Louisiana Department of Environmental Quality.

UST Underground Storage Tanks

VERSION DATE: 04/28/20

The Underground Storage Tank database includes a listing of registered underground storage tanks maintained by the Louisiana Department of Environmental Quality.

ADS Approved Hurricane Debris Dump Sites

VERSION DATE: 10/28/19

This Louisiana Department of Environmental Quality listing of hurricane debris sites contains the temporary and the permitted landfills in the state that can currently accept hurricane debris (C&D, chipping, grinding, burning, staging, woodwaste). These landfills include Type I (Non-hazardous Industrial), Type II (Municipal) and Type III (Construction and Demolition Debris and Wood Waste).

HLUST Historical Leaking Underground Storage Tanks

VERSION DATE: 03/26/99

The Historical Leaking Underground Storage Tank database provides descriptive leaking facility reports from the Louisiana Department of Environmental Quality's Underground Storage Tanks Case History System. This database has not been updated since 1999. Please refer to LUST database as source of current data.

LUST Leaking Underground Storage Tanks

VERSION DATE: 04/01/20

This database contains facilities with reported leaking underground storage tanks and is maintained by the by the Louisiana Department of Environmental Quality.

RCY Recycling Facilities

VERSION DATE: 02/12/20

Environmental Records Definitions - STATE (LA)

This listing of recycling facilities is maintained by the Louisiana Department of Environmental Quality.

SWLF Solid Waste Landfills

VERSION DATE: 03/27/20

This Louisiana Department of Environmental Quality solid waste facility listing includes type I, II, and III landfills. A type I facility is used for the disposal of industrial solid waste. A type II facility is used for the disposal of residential or commercial solid waste. A type III facility is defined in LAC 33:VII.115 as a facility used for disposing or processing of construction/demolition debris or wood waste, composting organic waste to produce a usable material, or separating recyclable wastes. Residential, commercial, or industrial solid waste must not be disposed in a type III facility.

VRP Voluntary Remediation Program Sites

VERSION DATE: 03/02/20

The Louisiana Department of Environmental Quality's Voluntary Remediation Program (VRP) provides a mechanism by which property owners (or potential owners) or others can clean up contaminated properties and receive a release of liability for further cleanup of historical contamination at a site. This release of liability flows to future owners of the property as well.

WP Waste Pits

VERSION DATE: 01/01/99

This listing is from a 1999 Louisiana Oil Spill Coordinator's Office (LOSCO) study, which identified statewide abandoned non-hazardous waste pits and facilities that have the potential to initiate an oil spill.

CPI Confirmed and Potential Sites Inventory

VERSION DATE: 04/01/20

The Inactive and Abandoned Sites Division of the Louisiana Department of Environmental Quality maintains the confirmed and potential sites inventory. This listing contains state-equivalent CERCLIS hazardous wastes sites.

Environmental Records Definitions - TRIBAL

USTR06 Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/01/20

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

LUSTR06 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/01/20

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX C

REGISTERED WATER WELL AND OIL AND GAS WELL INFORMATION

GeoPlus Water Well Report

[GeoLens by GeoSearch](#)

Target Property:
Breton Landbridge Marsh Creation (West)
Parish, Louisiana

Prepared For:
Providence Engineering-Baton Rouge

Order #: 147750
Job #: 355218
Project #: 621-013
Date: 06/03/2020

Table of Contents

Target Property Summary	1
Database Radius Summary	2
Water Well Map	4
Environmental Records Definitions	8

Disclaimer

The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Target Property Summary

Target Property Information

Breton Landbridge Marsh Creation (West)
Louisiana

Coordinates
Area centroid (-89.839967, 29.7053049)
0 feet above sea level

USGS Quadrangle
Lake Batola, LA

Geographic Coverage Information

County/Parish: Plaquemines (LA)
ZipCode(s):
Braithwaite LA: 70040

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

STATE (LA) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	0	0	0	NS	NS	0

SUB-TOTAL		0	0	0	0	0	0	0
-----------	--	---	---	---	---	---	---	---

TOTAL		0	0	0	0	0	0	0
-------	--	---	---	---	---	---	---	---

NOTES:

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 0 ft.

No Records Found.

Environmental Records Definitions - FEDERAL

NWIS

United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

Environmental Records Definitions - STATE (LA)

WW

Louisiana Water Well Registry

VERSION DATE: 04/13/20

The Statewide Water Well Registration data file is maintained by the Louisiana Department of Natural Resources, Office of Conservation (DNR). This database includes wells registered with the Louisiana Department of Transportation and Development (DOTD), along with the Louisiana District of the United States Geological Survey, prior to March 1, 2010 and wells registered with the DNR after March 1, 2010. The information has been carefully prepared from the best available sources of data. It is intended for general informational purposes only and should not be considered authoritative for navigational, engineering, other site-specific uses, or any other uses. The DNR does not warrant or guarantee its accuracy, nor does DNR assume any responsibility or liability for any reliance thereon.

GeoPlus Oil & Gas Report

[GeoLens by GeoSearch](#)

Target Property:

**Breton Landbridge Marsh Creation (West)
Parish, Louisiana**

Prepared For:

Providence Engineering-Baton Rouge

Order #: 147750

Job #: 355219

Project #: 621-013

Date: 06/03/2020

Table of Contents

<i>Target Property Summary</i>	1
<i>Database Radius Summary</i>	2
<i>Oil & Gas Map</i>	3
<i>Located Sites Summary</i>	4
<i>Site Summary By Database</i>	5
<i>Oil & Gas Well Report</i>	6
<i>Environmental Records Definitions</i>	7

Disclaimer

The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Target Property Summary

Target Property Information

Breton Landbridge Marsh Creation (West)
Louisiana

Coordinates

Area centroid (-89.839967, 29.7053049)

USGS Quadrangle

Lake Batola, LA

Geographic Coverage Information

County/Parish: Plaquemines (LA)

ZipCode(s):

Braithwaite LA: 70040

Database Radius Summary

STATE (LA) LISTING

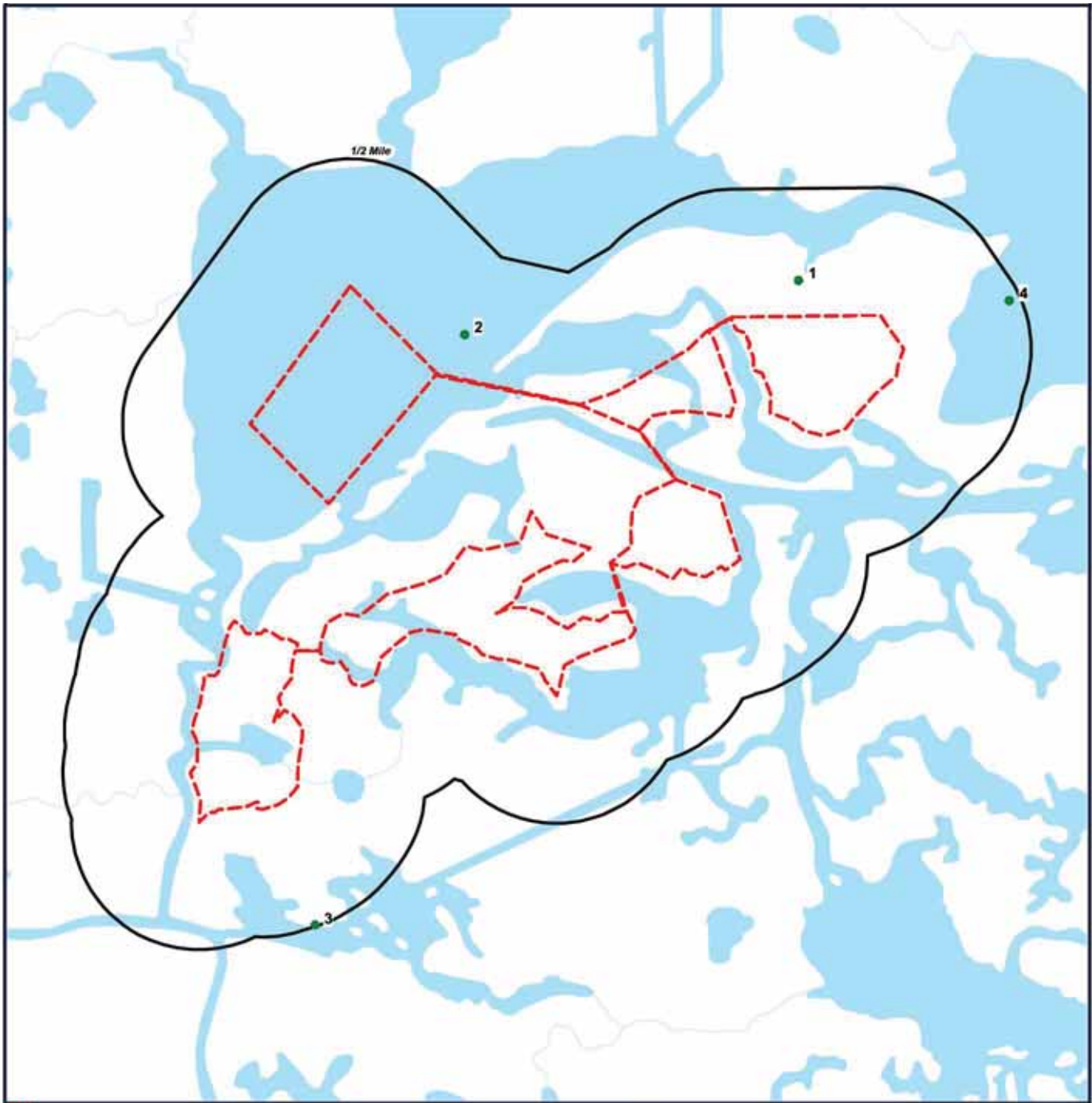
Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	2	2	NS	NS	4
SUB-TOTAL		0	0	2	2	0	0	4
TOTAL		0	0	2	2	0	0	4



NOTES:

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



 Target Property (TP)
 Well Location

*Breton Landbridge
Marsh
Creation (West)
County, Louisiana*



0' 1600' 3200' 4800'
SCALE: 1" = 3200'

Located Sites Summary

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address
1	OG	137760	0.171 mi. N (903 ft.)	DELACROIX CORP	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040
2	OG	226318	0.203 mi. NNE (1072 ft.)	DELACROIX CORP	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040
3	OG	33011	0.463 mi. SSE (2445 ft.)	DELACROIX CORPORATION	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040
4	OG	175971	0.469 mi. ENE (2476 ft.)	BH 12000 RA SUA;SL 8565	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040

Site Summary By Database

Map ID#	Database Name	Site ID#	Elevation	Distance From Site	Site Name	Address
1	OG	137760	0 ft.	0.171 mi. N (903 ft.)	DELACROIX CORP	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040
2	OG	226318	0 ft.	0.203 mi. NNE (1072 ft.)	DELACROIX CORP	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040
3	OG	33011	0 ft.	0.463 mi. SSE (2445 ft.)	DELACROIX CORPORATION	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040
4	OG	175971	0 ft.	0.469 mi. ENE (2476 ft.)	BH 12000 RA SUA;SL 8565	PLAQUEMINES COUNTY, BRAITHWAITE, LA 70040

Oil & Gas Well Report

MAP ID	API #	WELL NAME AND NUMBER	WELL TYPE	PERMIT DATE	SPUD DATE	COMP. DATE	T.D.	STR	LATITUDE	LONGITUDE
1	17075212650000	DELACROIX CORP	NO PRODUCT SPECIFIED	09/29/71	12/17/71	02/02/72	11450	T15S S29 R14	29.7192	-89.8201
2	17075239670000	DELACROIX CORP	NO PRODUCT SPECIFIED	08/17/01	01/16/02	NR	18570	T15S S25 R13	29.7161	-89.8419
3	17075001360000	DELACROIX CORPORATION	NO PRODUCT SPECIFIED	03/01/47	03/12/47	05/23/47	11701	T16S S1 R13	29.6826	-89.8517
4	17075229110000	BH 12000 RA SUA;SL 8565	GAS	06/26/81	07/22/81	04/21/82	12182	T15S S29 R14	29.7180	-89.8063

Environmental Records Definitions - STATE (LA)

OG

Oil and Gas Wells

VERSION DATE: 03/25/20

This database contains over 230,000 permitted oil and gas wells and is maintained by the Louisiana Department of Natural Resources, Office of Conservation. The information has been carefully prepared from the best available sources of data. It is intended for general informational purposes only and should not be considered authoritative for navigational, engineering, other site-specific uses, or any other uses. The Louisiana Department of Natural Resources (DNR) does not warrant or guarantee its accuracy, nor does DNR assume any responsibility or liability for any reliance thereon.

APPENDIX D
HISTORICAL TOPOGRAPHIC MAPS

Historical Topographic Maps

[NEW: GeoLens by Geosearch](#)

Target Property:

Breton Landbridge Marsh Creation (West)

, , Louisiana

Prepared For:

Providence Engineering-Baton Rouge

Order #: 147750

Job #: 355216

Project #: 621-013

Date: 6/5/2020

Target Property Summary

Breton Landbridge Marsh Creation (West)

, , **Louisiana**

USGS Quadrangle: **Lake Batola**

Target Property Geometry: **Area**

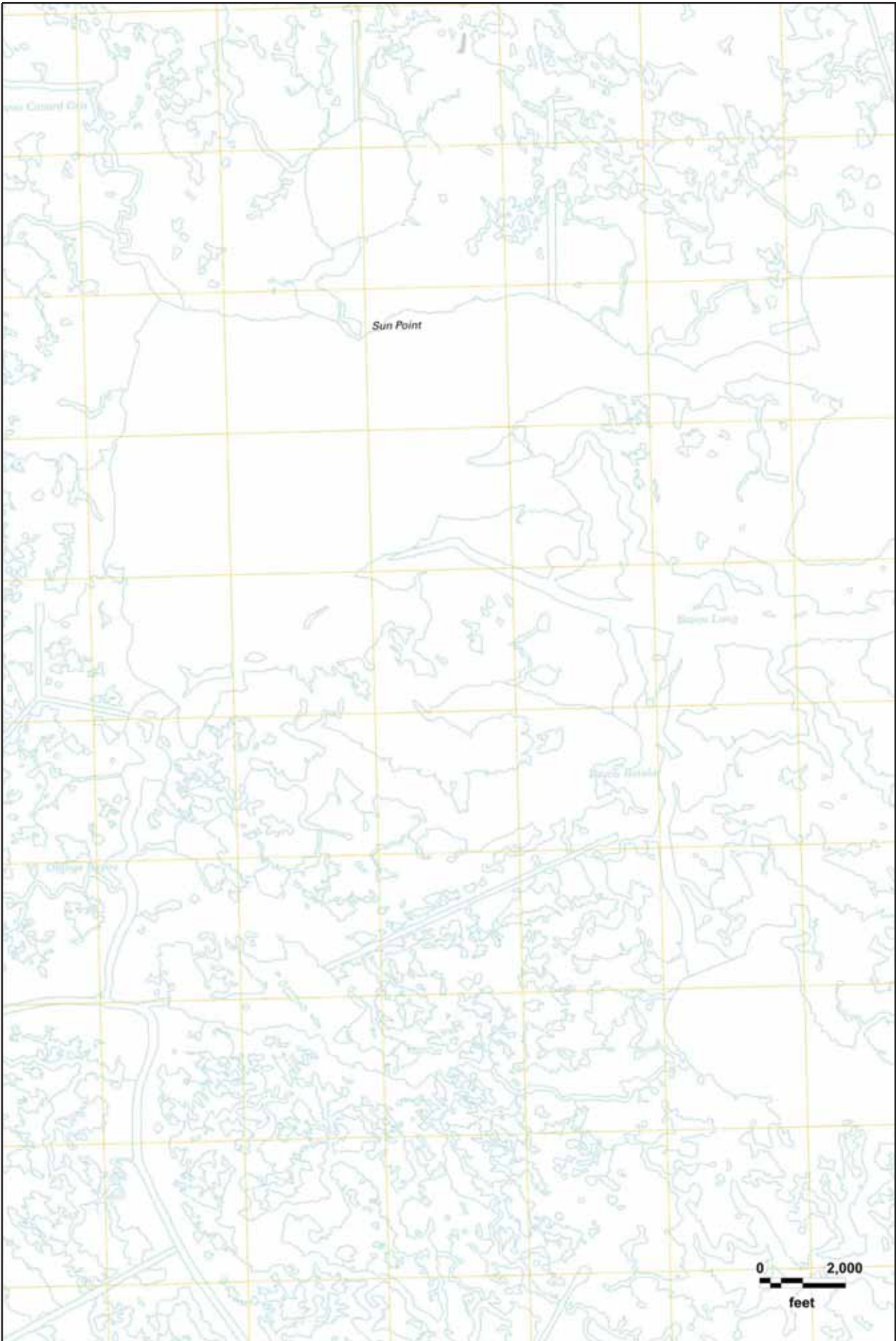
Target Property Longitude(s)/Latitude(s):

(-89.849451000, 29.718446000), (-89.843791000, 29.713466000), (-89.834434000, 29.711698000),
(-89.832101000, 29.712431000), (-89.827410000, 29.714824000), (-89.826169000, 29.715881000),
(-89.824555000, 29.716700000), (-89.814800000, 29.716786000), (-89.813286000, 29.714867000),
(-89.813658000, 29.713897000), (-89.813758000, 29.713337000), (-89.815222000, 29.712280000),
(-89.816711000, 29.710771000), (-89.817059000, 29.710361000), (-89.818474000, 29.709952000),
(-89.819764000, 29.710210000), (-89.820807000, 29.710857000), (-89.822023000, 29.711245000),
(-89.821998000, 29.712323000), (-89.822544000, 29.713509000), (-89.823115000, 29.713660000),
(-89.823090000, 29.714285000), (-89.823122000, 29.714457000), (-89.823419000, 29.714964000),
(-89.823333000, 29.715158000), (-89.823531000, 29.715481000), (-89.823506000, 29.715675000),
(-89.823742000, 29.715805000), (-89.824028000, 29.715902000), (-89.824214000, 29.715956000),
(-89.824363000, 29.716171000), (-89.824487000, 29.716322000), (-89.824536000, 29.716645000),
(-89.826050000, 29.715869000), (-89.825827000, 29.715654000), (-89.825579000, 29.715136000),
(-89.824636000, 29.712798000), (-89.824313000, 29.711849000), (-89.824623000, 29.711041000),
(-89.825914000, 29.711170000), (-89.827428000, 29.711342000), (-89.828297000, 29.711299000),
(-89.829736000, 29.711084000), (-89.830543000, 29.710232000), (-89.828137000, 29.707446000),
(-89.825333000, 29.706541000), (-89.823992000, 29.702919000), (-89.824911000, 29.702315000),
(-89.825233000, 29.702509000), (-89.826251000, 29.701927000), (-89.827269000, 29.702100000),
(-89.827740000, 29.702488000), (-89.828410000, 29.701776000), (-89.829403000, 29.702294000),
(-89.830719000, 29.702725000), (-89.831479000, 29.702456000), (-89.832409000, 29.702693000),
(-89.831410000, 29.699960000), (-89.830833000, 29.698919000), (-89.831156000, 29.698461000),
(-89.832806000, 29.697960000), (-89.834122000, 29.697507000), (-89.834656000, 29.697313000),
(-89.835475000, 29.696892000), (-89.835698000, 29.696008000), (-89.835785000, 29.695653000),
(-89.835983000, 29.695168000), (-89.836554000, 29.695868000), (-89.836740000, 29.696084000),
(-89.836778000, 29.696192000), (-89.837125000, 29.696698000), (-89.838776000, 29.697151000),
(-89.839719000, 29.697270000), (-89.839769000, 29.697248000), (-89.840873000, 29.697550000),
(-89.841245000, 29.697927000), (-89.842111000, 29.698278000), (-89.842422000, 29.698412000),
(-89.842676000, 29.698617000), (-89.842558000, 29.698650000), (-89.844655000, 29.698951000),
(-89.845562000, 29.698768000), (-89.847448000, 29.697351000), (-89.847708000, 29.696564000),
(-89.848012000, 29.695992000), (-89.848484000, 29.695787000), (-89.848788000, 29.695755000),
(-89.849347000, 29.695879000), (-89.849520000, 29.696159000), (-89.849558000, 29.696558000),
(-89.849800000, 29.696714000), (-89.850098000, 29.697119000), (-89.850277000, 29.697049000),
(-89.850935000, 29.697081000), (-89.851344000, 29.697254000), (-89.851419000, 29.697706000),
(-89.853057000, 29.697717000), (-89.853193000, 29.697232000), (-89.853305000, 29.696639000),

Topographic Map Summary

<i>Date</i>	<i>Quadrangle</i>	<i>Scale</i>
2012	LAKE BATOLA, LA	1" = 2000'
1973 MINOR REVISION 1992	LAKE BATOLA, LA	1" = 2000'
1973	LAKE BATOLA, LA	1" = 2000'
1962	POINTE A LA HACHE, LA	1" = 5208'
1949	POINTE A LA HACHE, LA	1" = 5208'
1939	POINTE A LA HACHE, LA	1" = 5208'
1935	LAKE BATOLA, LA	1" = 2640'
1892	POINTE A LA HACHE, LA	1" = 5208'

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



Breton Landbridge Marsh Creation (West)
LAKE BATOLA, LA (2012)





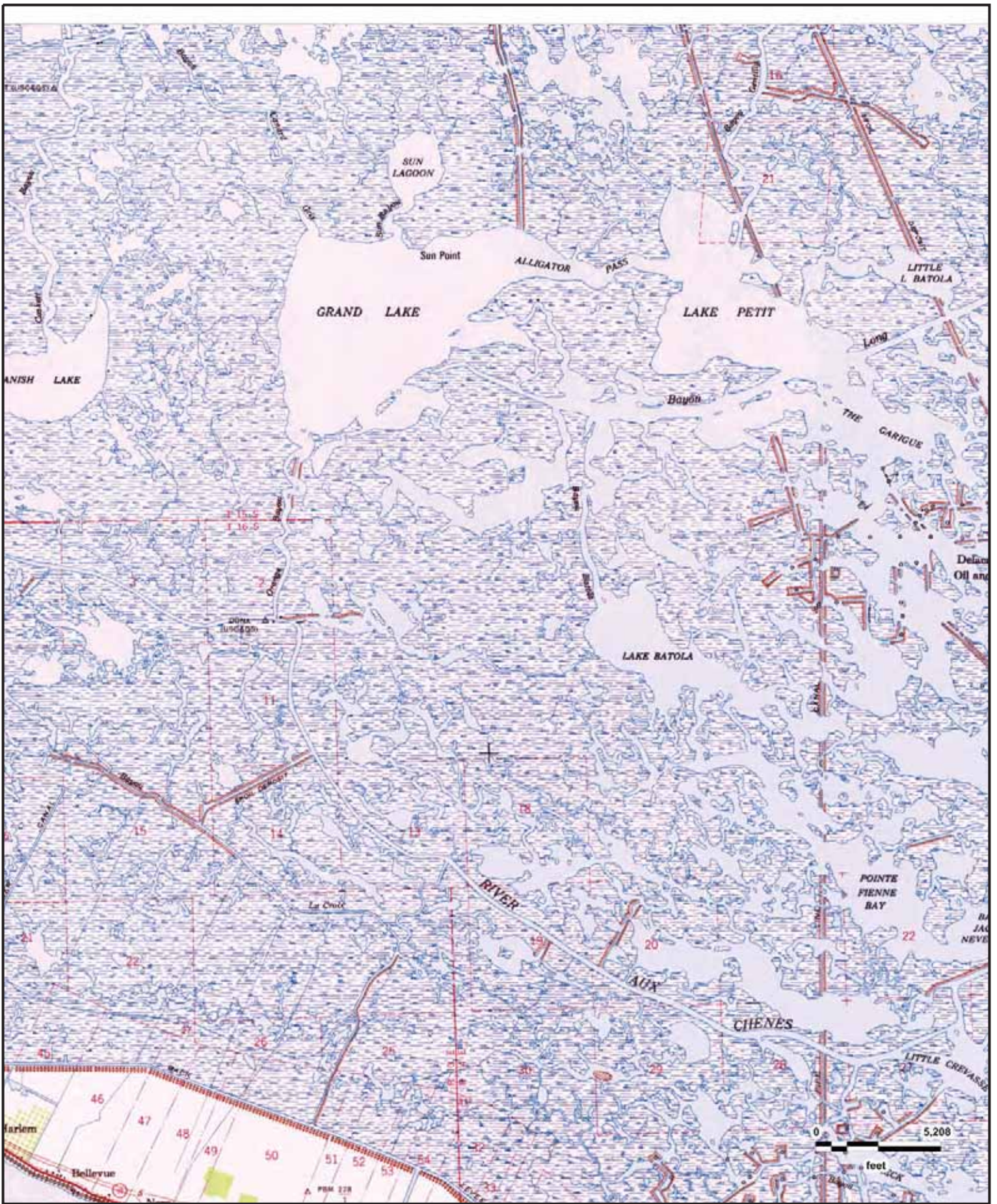
Breton Landbridge Marsh Creation (West)
LAKE BATOLA, LA (1992)





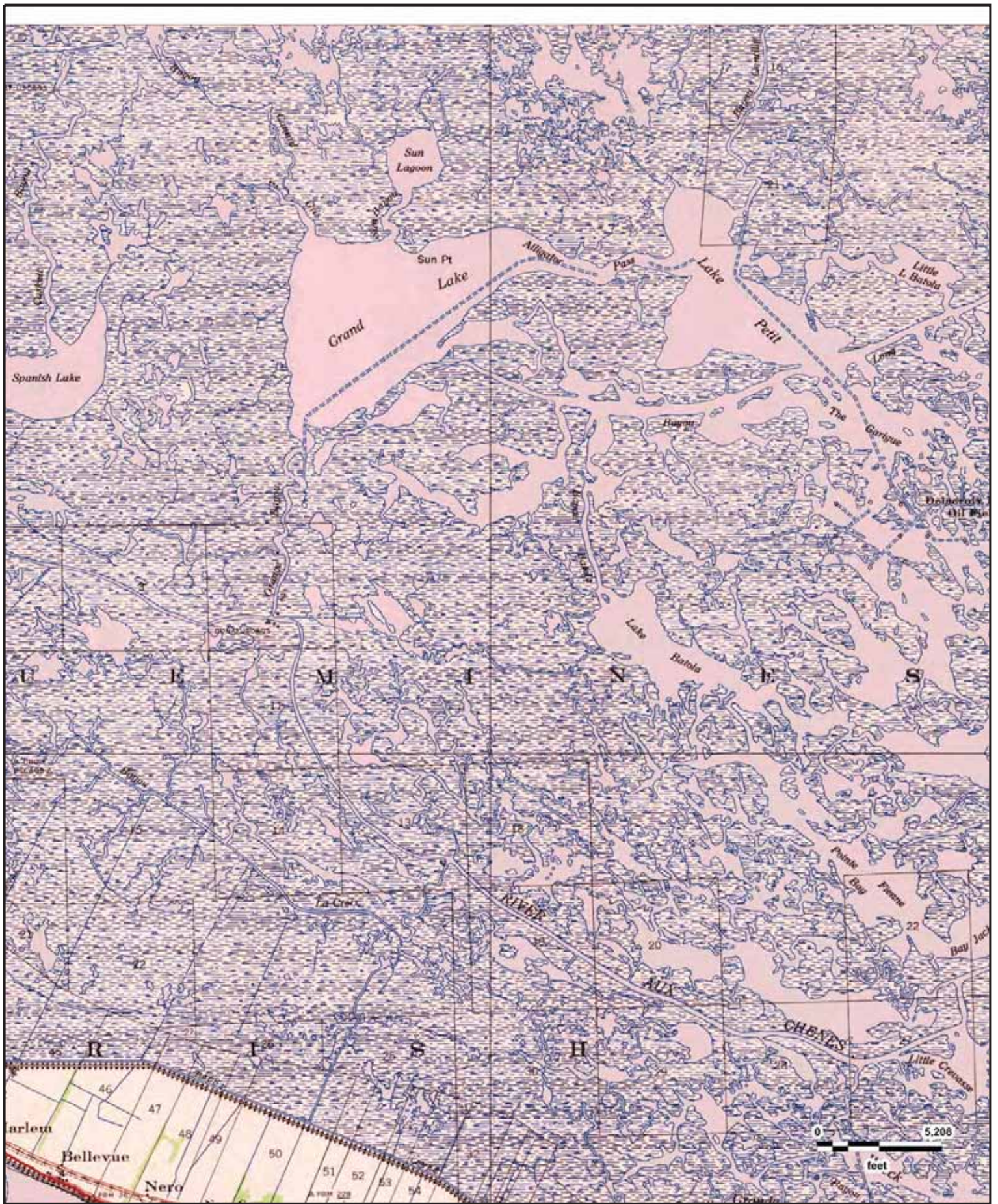
Breton Landbridge Marsh Creation (West)
LAKE BATOLA, LA (1973)





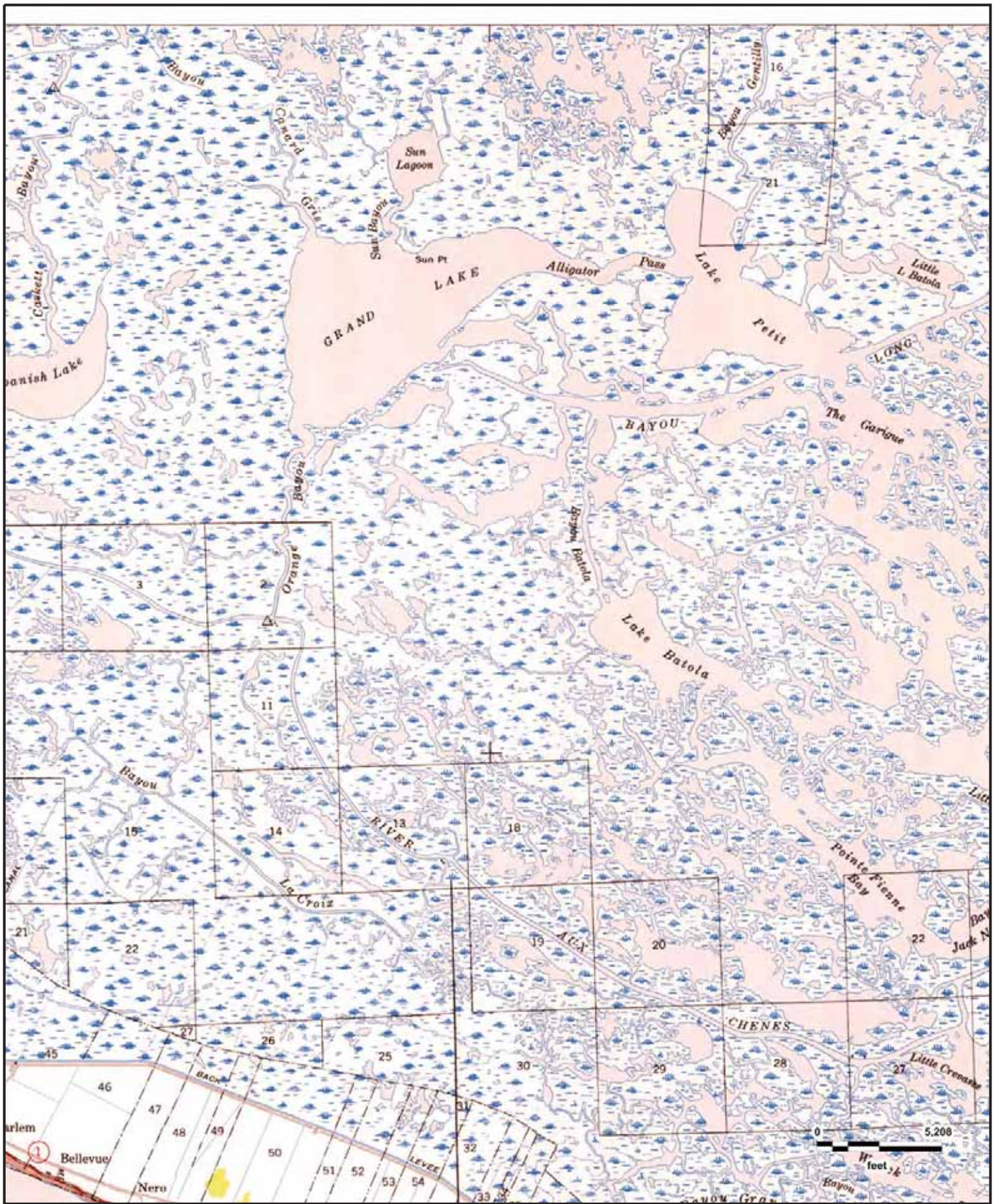
Breton Landbridge Marsh Creation (West)
 POINTE A LA HACHE, LA (1962)





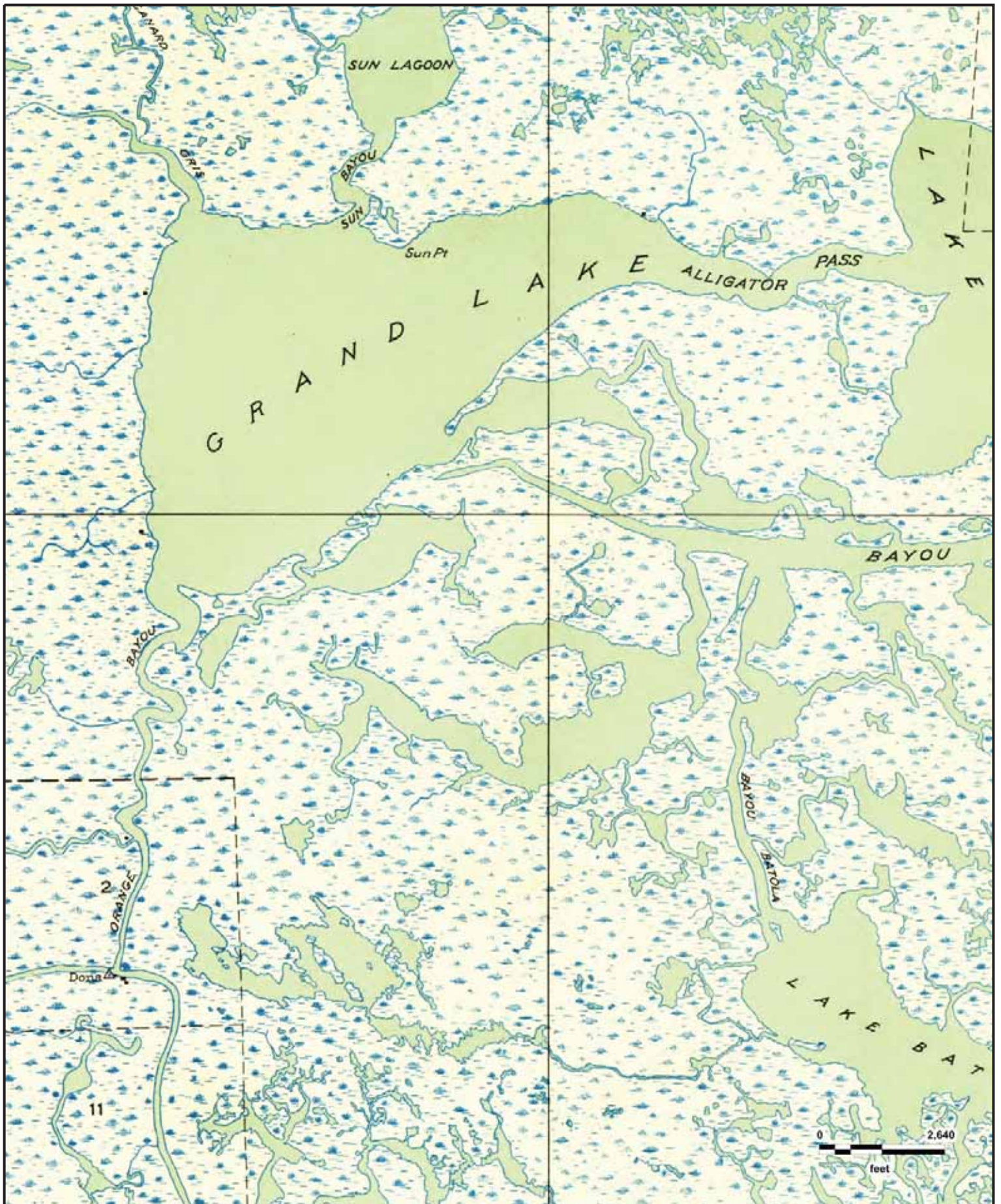
Breton Landbridge Marsh Creation (West)
 POINTE A LA HACHE, LA (1949)





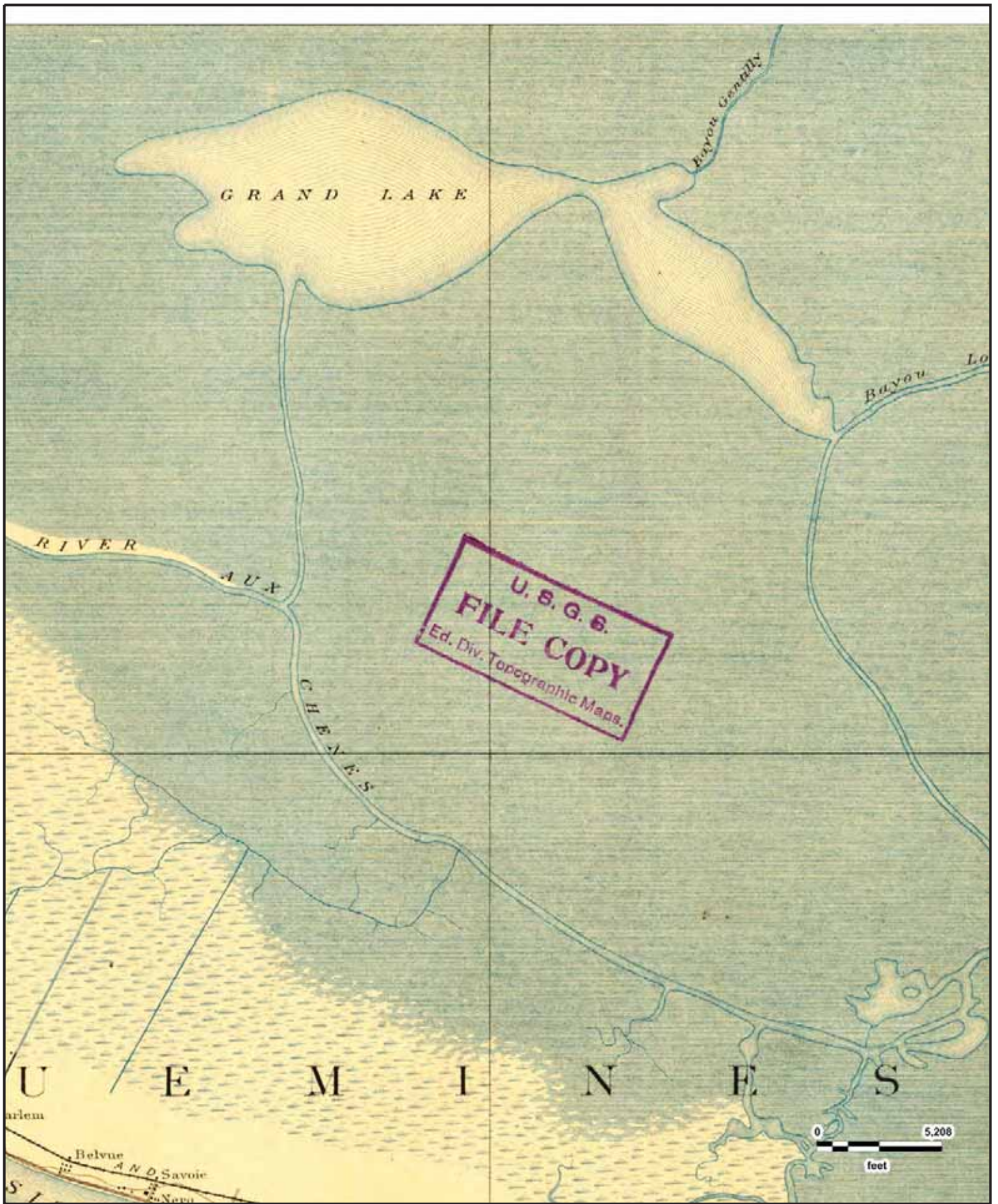
Breton Landbridge Marsh Creation (West)
 POINTE A LA HACHE, LA (1939)





Breton Landbridge Marsh Creation (West)
LAKE BATOLA, LA (1935)





Breton Landbridge Marsh Creation (West)
POINTE A LA HACHE, LA (1892)



APPENDIX E
HISTORICAL AERIAL PHOTOGRAPHS

Historical Aerial Photographs

[NEW: GeoLens by Geosearch](#)

Target Property:

Breton Landbridge Marsh Creation (West)

, , Louisiana

Prepared For:

Providence Engineering-Baton Rouge

Order #: 147750

Job #: 355217

Project #: 621-013

Date: 6/11/2020

Target Property Summary

Breton Landbridge Marsh Creation (West)

, , Louisiana

USGS Quadrangle: **Lake Batola**

Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

(-89.849451000, 29.718446000), (-89.843791000, 29.713466000), (-89.834434000, 29.711698000),
(-89.832101000, 29.712431000), (-89.827410000, 29.714824000), (-89.826169000, 29.715881000),
(-89.824555000, 29.716700000), (-89.814800000, 29.716786000), (-89.813286000, 29.714867000),
(-89.813658000, 29.713897000), (-89.813758000, 29.713337000), (-89.815222000, 29.712280000),
(-89.816711000, 29.710771000), (-89.817059000, 29.710361000), (-89.818474000, 29.709952000),
(-89.819764000, 29.710210000), (-89.820807000, 29.710857000), (-89.822023000, 29.711245000),
(-89.821998000, 29.712323000), (-89.822544000, 29.713509000), (-89.823115000, 29.713660000),
(-89.823090000, 29.714285000), (-89.823122000, 29.714457000), (-89.823419000, 29.714964000),
(-89.823333000, 29.715158000), (-89.823531000, 29.715481000), (-89.823506000, 29.715675000),
(-89.823742000, 29.715805000), (-89.824028000, 29.715902000), (-89.824214000, 29.715956000),
(-89.824363000, 29.716171000), (-89.824487000, 29.716322000), (-89.824536000, 29.716645000),
(-89.826050000, 29.715869000), (-89.825827000, 29.715654000), (-89.825579000, 29.715136000),
(-89.824636000, 29.712798000), (-89.824313000, 29.711849000), (-89.824623000, 29.711041000),
(-89.825914000, 29.711170000), (-89.827428000, 29.711342000), (-89.828297000, 29.711299000),
(-89.829736000, 29.711084000), (-89.830543000, 29.710232000), (-89.828137000, 29.707446000),
(-89.825333000, 29.706541000), (-89.823992000, 29.702919000), (-89.824911000, 29.702315000),
(-89.825233000, 29.702509000), (-89.826251000, 29.701927000), (-89.827269000, 29.702100000),
(-89.827740000, 29.702488000), (-89.828410000, 29.701776000), (-89.829403000, 29.702294000),
(-89.830719000, 29.702725000), (-89.831479000, 29.702456000), (-89.832409000, 29.702693000),
(-89.831410000, 29.699960000), (-89.830833000, 29.698919000), (-89.831156000, 29.698461000),
(-89.832806000, 29.697960000), (-89.834122000, 29.697507000), (-89.834656000, 29.697313000),
(-89.835475000, 29.696892000), (-89.835698000, 29.696008000), (-89.835785000, 29.695653000),
(-89.835983000, 29.695168000), (-89.836554000, 29.695868000), (-89.836740000, 29.696084000),
(-89.836778000, 29.696192000), (-89.837125000, 29.696698000), (-89.838776000, 29.697151000),
(-89.839719000, 29.697270000), (-89.839769000, 29.697248000), (-89.840873000, 29.697550000),
(-89.841245000, 29.697927000), (-89.842111000, 29.698278000), (-89.842422000, 29.698412000),
(-89.842676000, 29.698617000), (-89.842558000, 29.698650000), (-89.844655000, 29.698951000),
(-89.845562000, 29.698768000), (-89.847448000, 29.697351000), (-89.847708000, 29.696564000),
(-89.848012000, 29.695992000), (-89.848484000, 29.695787000), (-89.848788000, 29.695755000),
(-89.849347000, 29.695879000), (-89.849520000, 29.696159000), (-89.849558000, 29.696558000),
(-89.849800000, 29.696714000), (-89.850098000, 29.697119000), (-89.850277000, 29.697049000),
(-89.850935000, 29.697081000), (-89.851344000, 29.697254000), (-89.851419000, 29.697706000),
(-89.853057000, 29.697717000), (-89.853193000, 29.697232000), (-89.853305000, 29.696639000),

Aerial Research Summary

<i>Date</i>	<i>Source</i>	<i>Scale</i>	<i>Frame</i>
2017	USDA	1" = 1200'	N/A
2015	USDA	1" = 1200'	N/A
2013	USDA	1" = 1200'	N/A
2010	USDA	1" = 1200'	N/A
2009	USDA	1" = 1200'	N/A
2007	USDA	1" = 1200'	N/A
10/27/2005	USGS	1" = 1200'	N/A
01/21/2004	USGS	1" = 1200'	N/A
01/24/1998	USGS	1" = 1200'	N/A
10/26/1989	USGS	1" = 1200'	1394-53
10/27/1983	USGS	1" = 1200'	757-35
03/27/1978	USGS	1" = 1200'	3-16
10/11/1971	USGS	1" = 1200'	1-93
10/31/1970	NASA	1" = 1200'	60-18
02/12/1956	AMS	1" = 1200'	89
02/23/1956	AMS	1" = 1200'	154
02/05/1952	ASCS	1" = 1200'	V3-139

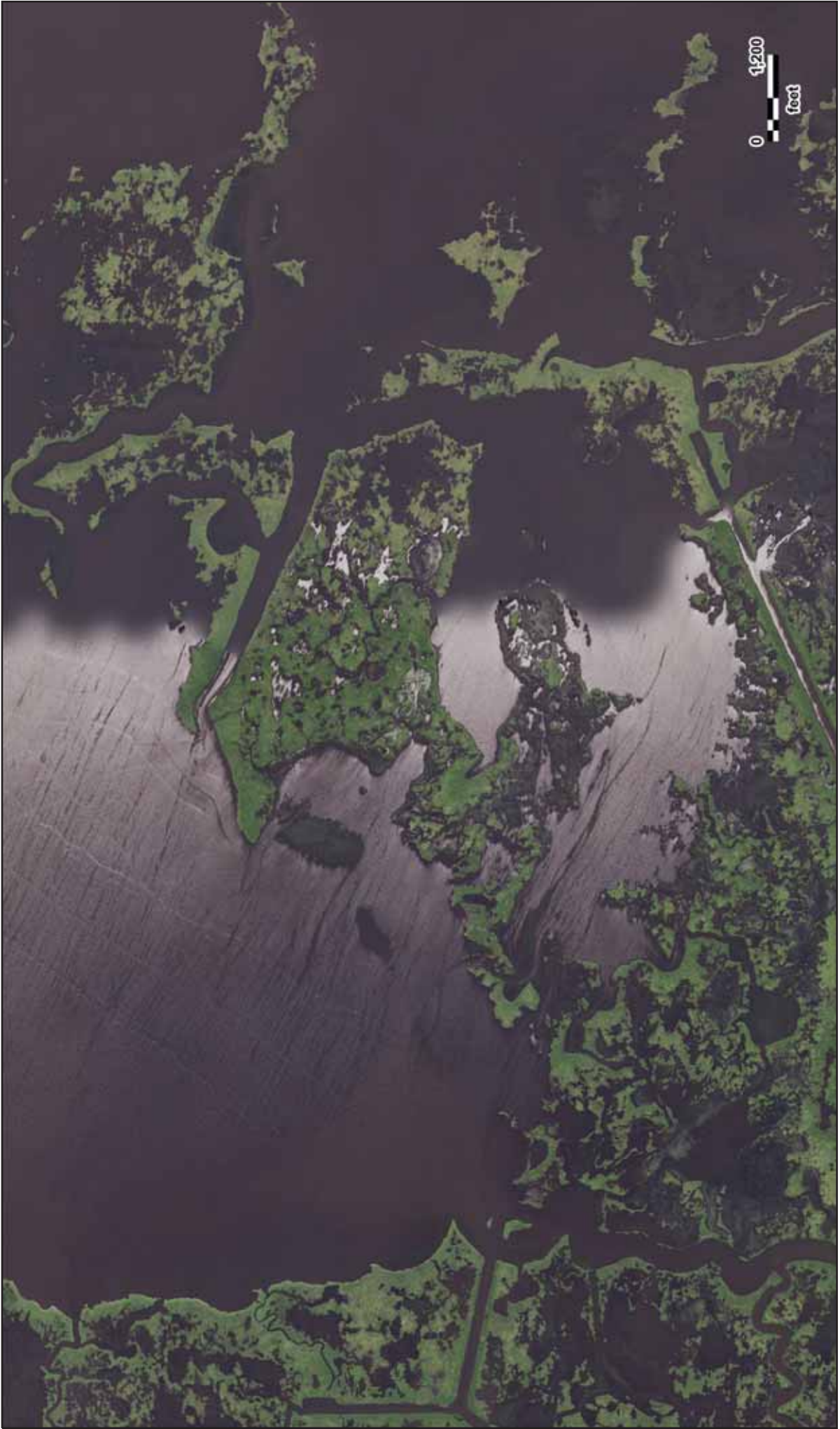
Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



Breton Landbridge Marsh Creation (West)
USDA
2017



JOB #: 395217 - 06/11/2020



0 1,200
feet



JOB #: 356217 - 06/11/2020

Breton Landbridge Marsh Creation (West)
USDA
2015

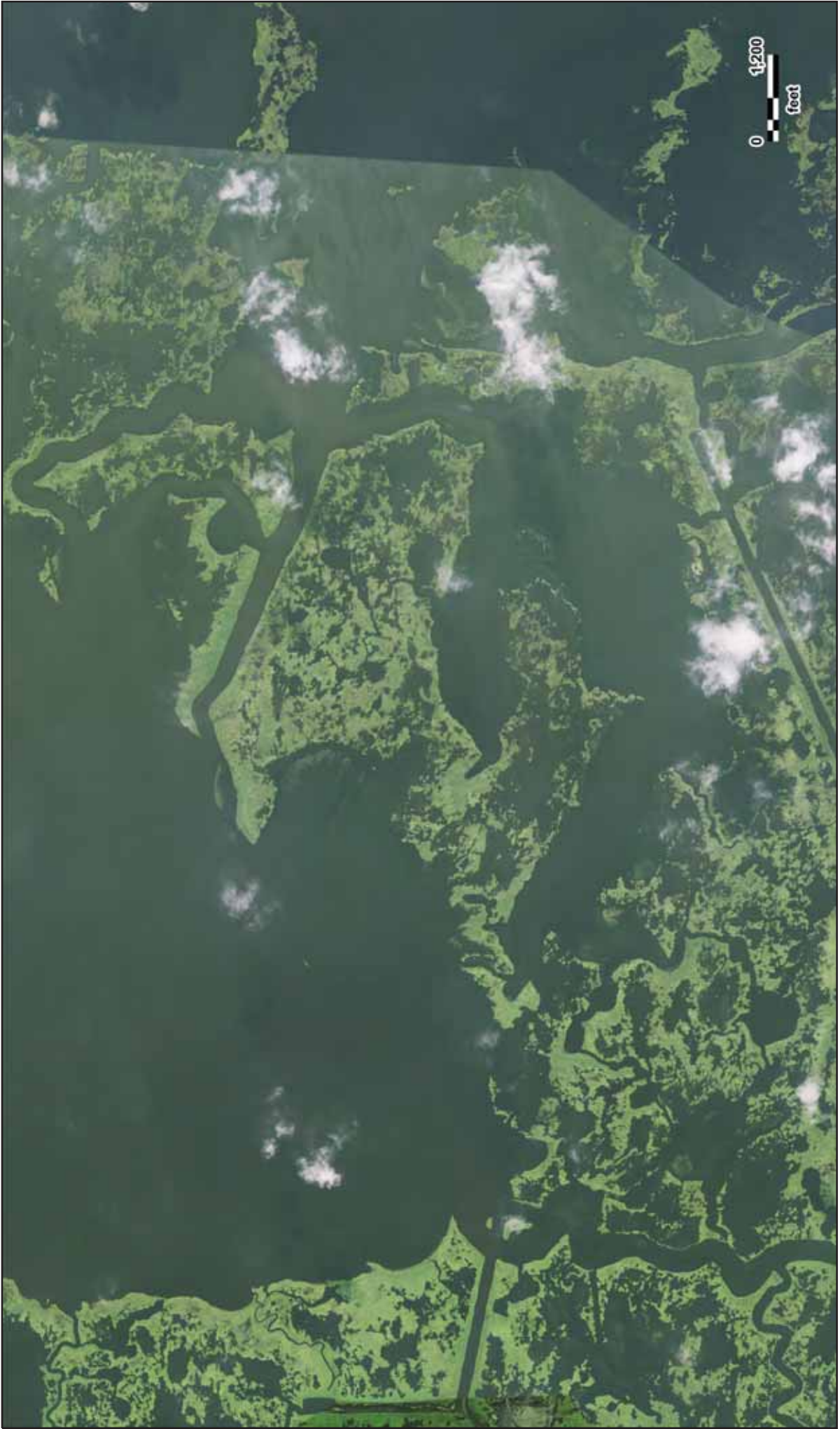
GeoSearch



JOB #: 395217 - 06/11/2020

Breton Landbridge Marsh Creation (West)
USDA
2013

GeoSearch



JOB #: 395217 - 06/11/2020

Breton Landbridge Marsh Creation (West)
USDA
2010

GeoSearch



0 1,200
feet



JOB #: 395217 - 06/11/2020

Breton Landbridge Marsh Creation (West)
USDA
2009

GeoSearch



Breton Landbridge Marsh Creation (West)
USDA
2007



JOB #: 395217 - 06/11/2020



Breton Landbridge Marsh Creation (West)
USGS
10/27/2005



JOB #: 395217 - 06112020



Breton Landbridge Marsh Creation (West)
USGS
01/21/2004



JOB #: 395217 - 06112020



Breton Landbridge Marsh Creation (West)
USGS
01/24/1998



JOB #: 395217 - 06/11/2020



Breton Landbridge Marsh Creation (West)
USGS
10/26/1989



JOB #: 395217 - 06112020



Breton Landbridge Marsh Creation (West)
USGS
10/27/1983

GeoSearch



JOB #: 355217 - 06/11/2020



Breton Landbridge Marsh Creation (West)
USGS
03/27/1978





Breton Landbridge Marsh Creation (West)
USGS
10/11/1971



JOB #: 356217 - 06/11/2020



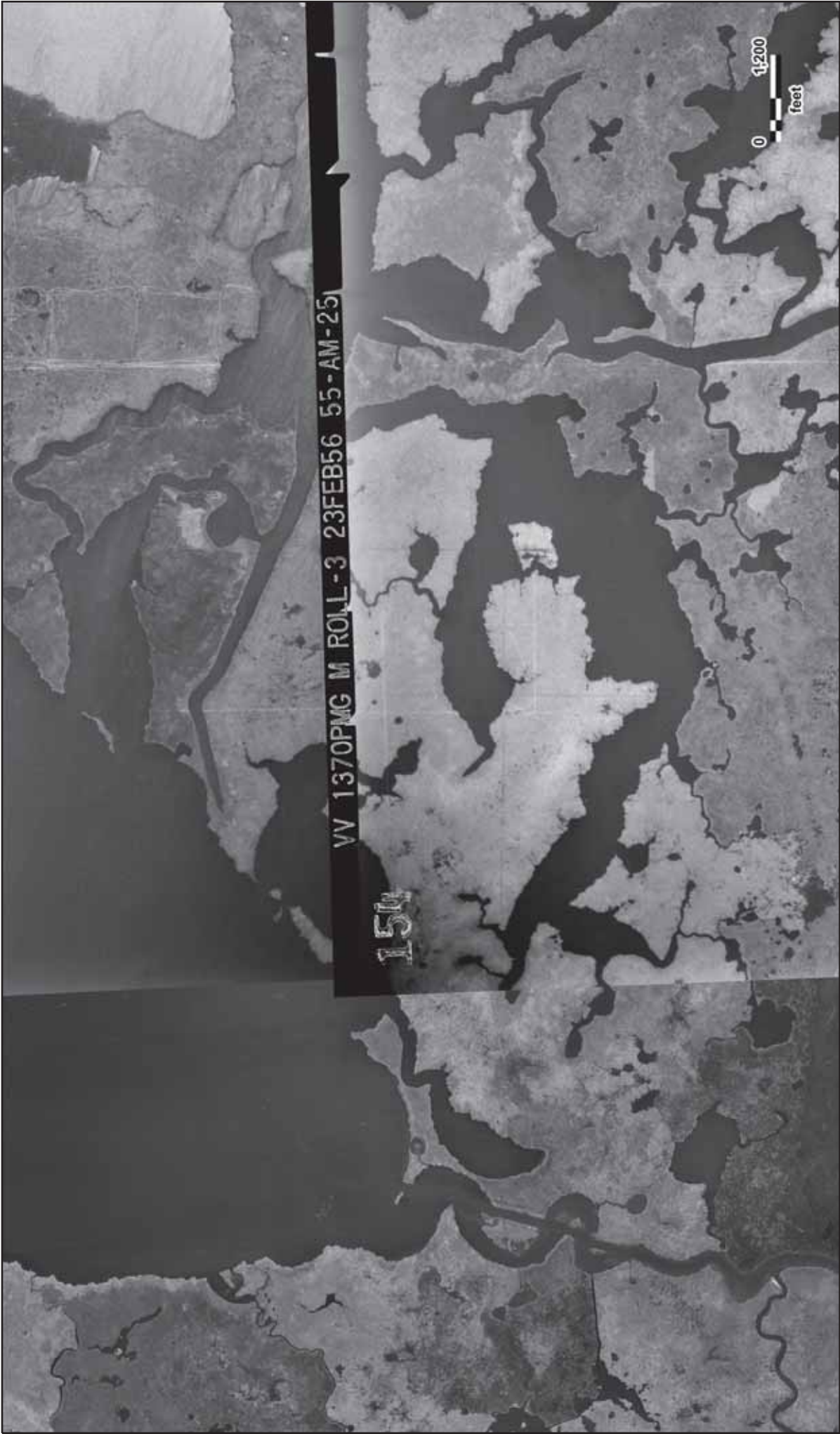
Bretton Landbridge Marsh Creation (West)
NASA
10/31/1970



JOB #: 395217 - 06112020



Breton Landbridge Marsh Creation (West)
AMS
02/12/1956



JOB #: 355217 - 06/11/2020

Breton Landbridge Marsh Creation (West)
AMS
02/23/1956

GeoSearch



Breton Landbridge Marsh Creation (West)
ASCS
02/05/1992



JOB #: 395217 - 06/1/2020

APPENDIX F
CITY DIRECTORIES



City Directory Standard Report

Target Property:

*Delacroix Hwy,
St Bernard, LA 70085*

Prepared For:

Providence Engineering-Baton Rouge

Order #: 147750

Project #: 621-013

Date: 6/2/2020

City Directory Standard Report

Delacroix Hwy, St Bernard, LA 70085

INFOUSA

SOUTH CENTRAL 2019

DELACROIX HWY

5413	THEDELACROIXLODGE
5817	MELERINE CLINTON
5817	MONES KIMBERLY
5933	SERIGNE BOAT LAUNCH
6013	AVENEL GERALDINE
6111	ALPHONSO LOUISE
6111	LUCAS MARIE
6115	GROSCH BRIAN
6131	DIETZ FREDERICK
6201	GALLARDO LESLIE
6205	PATINGO TRESSA
6205	PAYNE JACK 3D
6205	SWEETWATER GUIDE SVC & MARINA
6301	CAMPO MERLIN SR
6305	MAINS R
6405	CAMPO NICHOLAS
6421	MORALES ELWOOD JR
6517	HUTZLER JOSEPH JR
6601	MELERINE JOSHUA
6601	MORALES CLINTON JR
6621	MORALES ELWOOD
6625	MORALES CURTIS
6625	X [END OF LISTINGS]

INFOUSA

SOUTH CENTRAL 2014

DELACROIX HWY

5933	SERIGNE BOAT LAUNCH
6013	AVENEL ALBERT JR
6025	MELERINE MARIE
6115	GROSCH BRIAN
6131	DIETZ FREDERICK

City Directory Standard Report

Delacroix Hwy, St Bernard, LA 70085

6201	GALLARDO LESLIE
6205	BERRY CINDY
6205	PAYNE JACK 3D
6205	SWEETWATER GUIDE SVC
6301	CAMPO MERLIN SR
6405	CAMPO NICHOLAS
6421	MORALES ELWOOD JR
6601	MELERINE JOSHUA
6601	MORALES CLINTON JR
6621	MORALES ELWOOD JR
6625	MORALES CURTIS
6625	X [END OF LISTINGS]

INFOUSA

SOUTH CENTRAL 2008

DELACROIX HWY

5717	DEAN'S SEAFOOD
5933	SERIGNE BOAT LAUNCH
6115	GROSCH BRIAN
6131	DIETZ FREDERICK
6621	MORALES ELWOOD & SUZIE
6621	X [END OF LISTINGS]

INFOUSA

SOUTH CENTRAL 2002

DELACROIX HWY

5934	SERIGNE'S BOAT LAUNCH
6017	SERIGNE O'NEIL
6030	MELERINE WEESHE
6033	SERIGNE ADAM
6037	LOWE LARRY
6101A	HAMILTON CARL B
6101A	WARREN GERALD M
6101B	DELUZAIN ANDY & BENNY
6115	GROSCH BRIAN
6131	DIETZ FRED
6143	ALFONSO JOSEPH JR

City Directory Standard Report

Delacroix Hwy, St Bernard, LA 70085

6147	LEE DAVID & CARLA
6201	GALLARDO JULIETTE & JOHNNY
6213	LICALI PETER J
6217	CAMPO LEROY J
6221	LEE MARK SR
6301	CAMPO MERLIN
6313	RATHE RICHARD
6323	ALPHONSO ERNEST
6323	ALPHONSO ERNEST
6326	GARRITY ROBERT T
6327	MONTELONGO EDWARD
6335	MORALES PHILLIP
6401	CAMBRE JACK R
6405	CAMPO THOMAS H
6409	PEREZ ALLEN & MARGARET M
6417	ESTAVES RICKY
6421	MORALES ELWOOD
6428	MAYEAUX CHESTER
6510	DEAS ANTHONY
6513	MENHENNETT ERIC
6514	ROGERS C E
6621	MORALES ELWOOD & RETHA
6626	CURTIS & FORD SEAFOOD
6626	MORALES RODNEY M
6627	GRECO JUDY
6700	MURPHY DONNIE
6705	HEIER THOMAS J
6705	LOVELL KATHY
6705	MCDONALD JOE
6705	METZLER JOSEPH A
6705	PUGLIA ANTHONY
6705	X [END OF LISTINGS]

Comment: Listed in St Bernard. No coverage available for St Bernard prior to 2002 at the time of this report.

APPENDIX G
PHOTOGRAPHIC DOCUMENTATION

Site Name: Breton Landbridge Marsh Creation (West)
Site Location: Breton Basin, Plaquemines Parish, LA
Date: June 16, 2020

Photograph #1

Comments:

Representative view of shoreline and shallow open water in Cell 1.



Photograph #2

Comments:

Representative view of marsh and shoreline in Cell 1.



Photograph #3

Comments:

Representative view of the marsh on the east side of the Property in Cell 2.



Photograph #4

Comments:

Representative view of the marsh and shoreline on the east side of the Property in Cell 2



Photograph #5

Comments:

Representative view of the shallow open water area in Cell 2.



Photograph #6

Comments:

Representative view of the marsh and shoreline in Cell 2.



Photograph #7

Comments:

Representative view of the broken marsh and shoreline in Cell 2.



Photograph #8

Comments:

View of Grand Lake northwest of the Property.



Photograph #9

Comments:

Representative view of the marsh and shallow open water in Cell 3.



Photograph #10

Comments:

Representative view of the marsh and shallow open water in Cell 3.



Photograph #11

Comments:

Representative view of the submerged aquatic vegetation and open water in Cell 4.



Photograph #12

Comments:

Representative view of the marsh and shallow open water habitat in Cell 4.



Photograph #13

Comments:

Representative view of the broken marsh and shallow open water habitat in Cell 5.



Photograph #14

Comments:

Representative view of the broken marsh habitat in Cell 5.



Photograph #15

Comments:

Representative view of the open water found in the southwest portion of Cell 6.



Photograph #16

Comments:

Representative of the shallow open water and submerged aquatic vegetation in the southern portion of Cell 6.



Photograph #17

Comments:

Representative view of the broken marsh habitat found in the northern section of Cell 6.



Photograph #18

Comments:

Representative view of the marsh habitat of the northern section of Cell 6.



Photograph #19

Comments:

View of Cell 1 facing east.



Photograph #20

Comments:

View of the northern side of Cell 1 facing east.



Photograph #21

Comments:

View of Cell 2 facing southeast.



Photograph #22

Comments:

View of the western side of Cell 2 facing southeast.



Photograph #23

Comments:

View of the eastern side
Cell 2 facing northeast.



Photograph #24

Comments:

View of Cell 3 facing
south.



Photograph #25

Comments:

View of Cell 3 facing southeast.



Photograph #26

Comments:

View of Grand Lake facing northwest.



Photograph #27

Comments:

View of Cell 4 facing north.



Photograph #28

Comments:

View of Cell 5 on the Property facing west.



Photograph #29

Comments:

View of the northern side of Cell 6 facing south.

