



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

Special Projects Branch
Mobile District, Regulatory Division

September 26, 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime
Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 598 U.S. 651 (2023),¹
SAM-2025-00643-BAL MFR #1 of #1²

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.³ AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.⁴ For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),⁵ the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015 regulatory regime and consistent with the Supreme Court’s decision in *Sackett*. This

¹ While the Supreme Court’s decision in *Sackett* had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

² When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, interstate water, or territorial seas that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).

³ 33 CFR 331.2.

⁴ Regulatory Guidance Letter 05-02.

⁵ USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

AJD did not rely on the 2023 “Revised Definition of ‘Waters of the United States,’” as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in Mississippi due to litigation.

1. SUMMARY OF CONCLUSIONS.

- a. The review area is comprised entirely of dry land (i.e., there are no waters such as streams, rivers, wetlands, lakes, ponds, tidal waters, ditches, and the like in the entire review area and there are no areas that have previously been determined to be jurisdictional under the Rivers and Harbors Act of 1899 Act in the review area).

Rationale: Review of the Jurisdictional Determination request packet from the applicant’s agent (Covington Civil & Engineering) provided wetland data forms from an onsite inspection of the property. The submitted forms indicated the property lacked wetland hydrology and hydric soils to classify the parcel as wetlands. In addition, the project manager reviewed digital elevation maps, USDA Soils Reports, topographic maps, historical photos, and the USFWS Wetlands Mapper. No evidence of wetlands or open waters were identified within the review area.

2. REFERENCES.

- a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).
- b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).
- c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)
- d. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023)

3. REVIEW AREA. The review area is a 0.1-acre parcel located on the eastern side of Menge Avenue in Pass Christian, Mississippi. The geographic coordinates for the center of the property are 30.336550 North and -89.21794 West. The Harrison County parcel number is 0412J-01-009.000, Section 20, Township 8 South, Range 12 West. The review area is bordered by Menge Avenue to the west, undeveloped property to the north and east, and a power substation to the south. The property has been undeveloped since at least 1952. The project area appears to have contained wetlands associated with Johnson Bayou at one time; however, the area

is now lacking hydrology indicators. A ditch is present along the western border that has no standing water or ordinary high water mark.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. N/A
5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS: N/A
6. SECTION 10 JURISDICTIONAL WATERS⁶: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.⁷ N/A
7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.
 - a. TNWs (a)(1): There are no TNWs within the proposed project area. N/A
 - b. Interstate Waters (a)(2): There are no Interstate Waters within the proposed project area. N/A
 - c. Other Waters (a)(3): N/A

⁶ 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

⁷ This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

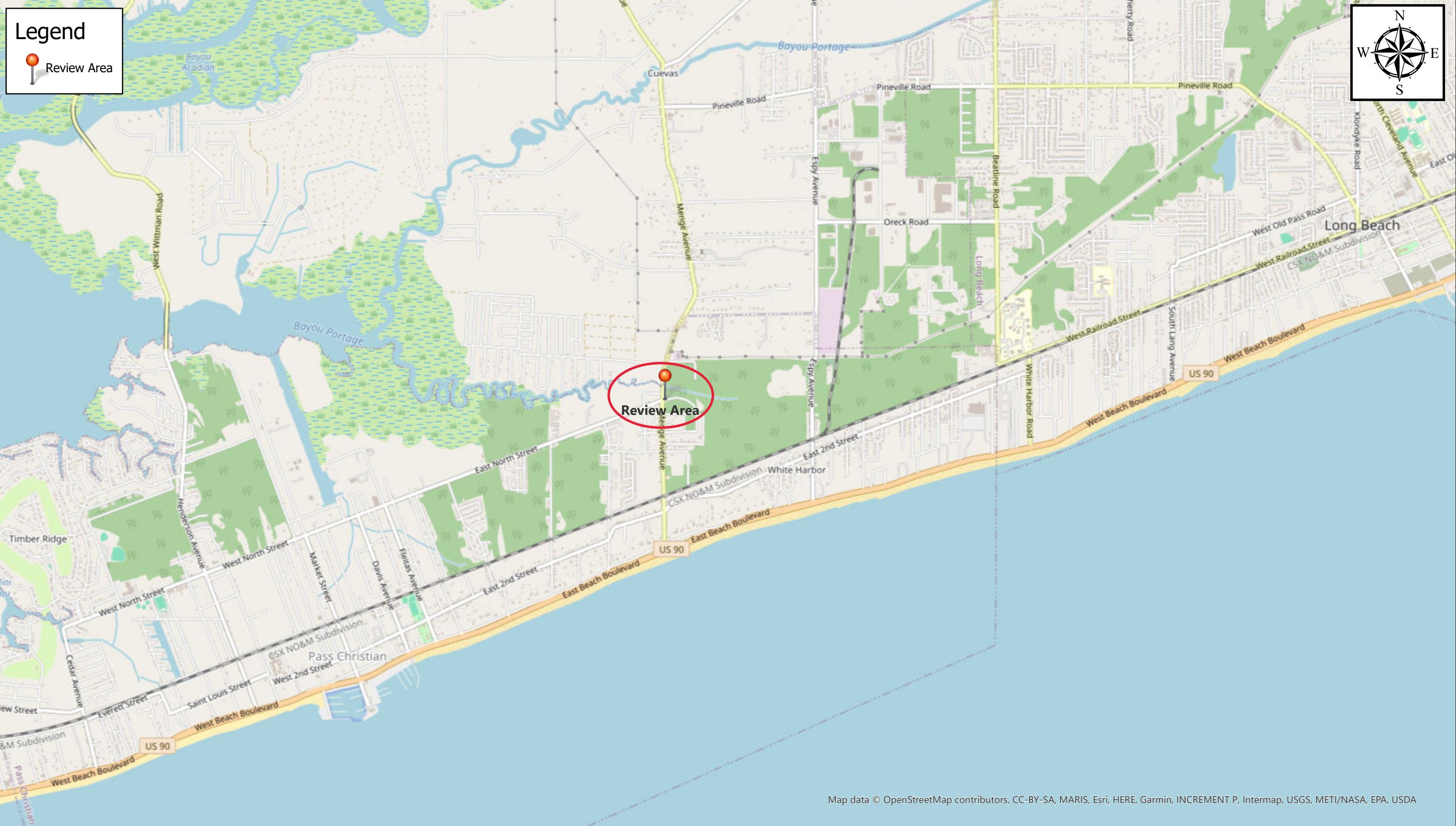
- d. Impoundments (a)(4): N/A
- e. Tributaries (a)(5): N/A
- f. The territorial seas (a)(6): N/A
- g. Adjacent wetlands (a)(7): N/A.

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified as “generally non-jurisdictional” in the preamble to the 1986 regulations (referred to as “preamble waters”).⁸ Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. N/A
- b. Describe aquatic resources and features within the review area identified as “generally not jurisdictional” in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance. N/A
- c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A
- d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. N/A
- e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in “*SWANCC*,” would have been jurisdictional based solely on the “Migratory Bird Rule.” Include the size of the aquatic resource or feature, and how it was determined to be an “isolated water” in accordance with *SWANCC*. N/A

⁸ 51 FR 41217, November 13, 1986.

- f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the pre-2015 regulatory regime consistent with the Supreme Court's decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water). N/A
9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.
 - a. Supplied application packet from applicant's agent (Covington Civil & Environmental) containing wetland delineation dated August 18, 2025
 - b. National Regulatory Viewer hill shade, digital elevation, Section 10, and HUC layers September 17, 2025
 - c. Google Earth historical images, September 18, 2025
 - d. USGS EROS Archive – Aerial Photography, September 18, 2025
 - e. USDA Web Soil Survey, September 17, 2025
 - f. U.S. Fish & Wildlife Service Wetland Mapper, September 17, 2025
10. OTHER SUPPORTING INFORMATION. N/A
11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.



SAM-2025-00643-BAL // Vicinity Map

A horizontal scale bar with a black segment and a white segment. The scale bar is labeled with 0, 0.5, 1, and 2 at its ends. The black segment is labeled "mi" below it.

Map Created by: Beverly Lowery
Date: 9/18/2025

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere



Figure 2: Aerial Imagery Map





Legend

Project Area

National Wetland Inventory

Freshwater Forested/Shrub Wetland

Service Layer Credits: Maxar, Microsoft, USFWS,
Harrison County Tax Assessor

Datum: NAD 1983
Spatial Reference: State Plane



Figure 3: National Wetlands Inventory Map



Legend

Project Area

Soil Units

Harleston fine sandy loam, 0 to 2 percent slopes

Service Layer Credits: Maxam, Microsoft, USDA,
Harrison County Tax Assessor

Datum: NAD 1983
Spatial Reference: State Plane



Figure 4: Soil Map



Figure 6: Wetland Delineation Map

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-10-20; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027

Requirement Control Symbol EXEMPT:

(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Lift Station

City/County: Gulfport--Biloxi/Harrison County Sampling Date: 2025-09-12

Applicant/Owner: City of Pass Christian

State: Mississippi Sampling Point: PC LS31-P5

Investigator(s): Laura Moncrief

Section, Township, Range: S20 T8S R12W

Landform (hillside, terrace, etc.): Coastal Plain

Local relief (concave, convex, none): None

Slope (%): 0

Subregion (LRR or MLRA): T 152A

Lat: 30.33650803

Long: -89.21796743

Datum: WGS 84

Soil Map Unit Name: HIA - Harleston fine sandy loam, 0 to 2 percent slopes

NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?

Yes No _____

Hydric Soil Present?

Yes No

Wetland Hydrology Present?

Yes No

Is the Sampled Area

within a Wetland?

Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1) Aquatic Fauna (B13)
- High Water Table (A2) Marl Deposits (B15) (LRR U)
- Saturation (A3) Hydrogen Sulfide Odor (C1)
- Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3)
- Sediment Deposits (B2) Presence of Reduced Iron (C4)
- Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6)
- Algal Mat or Crust (B4) Thin Muck Surface (C7)
- Iron Deposits (B5) Other (Explain in Remarks)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Sphagnum Moss (D8) (LRR T, U)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: PC LS31-P5

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Triadica sebifera</u>	30	✓	FAC
2. <u>Quercus nigra</u>	15	✓	FAC
3. <u>Pinus taeda</u>	10		FAC
4. <u>Magnolia grandiflora</u>	5		FAC
5.			
6.			
7.			
8.			
	60	=Total Cover	
50% of total cover: 30	20% of total cover: 12		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)			
1. <u>Triadica sebifera</u>	25	✓	FAC
2. <u>Ilex vomitoria</u>	5		FAC
3.			
4.			
5.			
6.			
7.			
8.			
	30	=Total Cover	
50% of total cover: 15	20% of total cover: 6		
Herb Stratum (Plot size: <u>30 ft r</u>)			
1. <u>Imperata cylindrica</u>	80	✓	UPL
2. <u>Callicarpa americana</u>	40	✓	FACU
3. <u>Triadica sebifera</u>	30		FAC
4. <u>Serenoa repens</u>	10		FACU
5. <u>Rubus argutus</u>	3		FAC
6. <u>Ilex vomitoria</u>	2		FAC
7.			
8.			
9.			
10.			
11.			
12.			
	165	=Total Cover	
50% of total cover: 82.5	20% of total cover: 33		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)			
1. <u>Clematis terniflora</u>	65	✓	FACU
2. <u>Vitis rotundifolia</u>	40	✓	FAC
3. <u>Smilax bona-nox</u>	20		FAC
4.			
5.			
	125	=Total Cover 20%	
50% of total cover: 62.5	of total cover: 25		

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 57.14 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 185	x 3 = 555
FACU species 115	x 4 = 460
UPL species 80	x 5 = 400
Column Totals: 380 (A)	1415 (B)
Prevalence Index = B/A =	3.72

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

3 - Prevalence Index is $\leq 3.0^1$

Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No

VEGETATION Continued (Four Strata) – Use scientific names of plants.

Sampling Point: PC LS31-P5

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Tree Stratum</u>			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
	60	=Total Cover	
50% of total cover:	30	20% of total cover:	12
<u>Sapling/Shrub Stratum</u>			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
	30	=Total Cover	
50% of total cover:	15	20% of total cover:	6
<u>Herb Stratum</u>			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
	165	=Total Cover	
50% of total cover:	82.5	20% of total cover:	33
<u>Woody Vine Stratum</u>			
6.			
7.			
8.			
9.			
10.			
	125	=Total Cover	
50% of total cover:	62.5	20% of total cover:	25

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

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

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

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0 - 10	10YR 4/2	100						Sandy Loam	
10 - 20	10YR 3/2	100						Sandy Loam	
-									
-									
-									
-									
-									

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> (MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> (outside MLRA 150A)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (outside MLRA 150A, 150B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<input type="checkbox"/> (outside MLRA 138, 152A in FL, 154)
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	³ Indicators of hydrophytic vegetation and
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	wetland hydrology must be present, unless disturbed or problematic.
	<input type="checkbox"/> (MLRA 138, 152A in FL, 154)	

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

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

See ERDC/EL TR-10-20; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027

Requirement Control Symbol EXEMPT:

(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Lift StationCity/County: Gulfport / HarrisonSampling Date: 2025-08-07Applicant/Owner: City of Pass ChristianState: MississippiSampling Point: PC LS31-P3Investigator(s): Laura MoncriefSection, Township, Range: 20 / 8 South / 12 WestLandform (hillside, terrace, etc.): Coastal PlainLocal relief (concave, convex, none): NoneSlope (%): 0Subregion (LRR or MLRA): LRR: T, MLRA:152A Lat. 30.3366132Long: -89.2179183Datum: WGS 84Soil Map Unit Name: Harleston fine sandy loam, 0 to 2 percent slopes

NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?

Yes No _____

Hydric Soil Present?

Yes No _____

Wetland Hydrology Present?

Yes _____ No Is the Sampled Area
within a Wetland?Yes _____ No

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

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

Surface Water (A1)	Aquatic Fauna (B13)
High Water Table (A2)	Marl Deposits (B15) (LRR U)
Saturation (A3)	Hydrogen Sulfide Odor (C1)
Water Marks (B1)	Oxidized Rhizospheres on Living Roots (C3)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C6)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)
Iron Deposits (B5)	Other (Explain in Remarks)
Inundation Visible on Aerial Imagery (B7)	
Water-Stained Leaves (B9)	

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Sparsely Vegetated Concave Surface (B8)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial Imagery (C9)
Geomorphic Position (D2)
Shallow Aquitard (D3)
FAC-Neutral Test (D5)
Sphagnum Moss (D8) (LRR T, U)

Field Observations:

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

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: PC LS31-P3

Tree Stratum (Plot size: <u>30 ft r</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1.	<u>Quercus nigra</u>	40	✓	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A)		
2.	<u>Liquidambar styraciflua</u>	35	✓	FAC	Total Number of Dominant Species Across All Strata: <u>10</u> (B)		
3.	<u>Acer rubrum</u>	30	✓	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0</u> (A/B)		
4.	<u>Pinus elliottii</u>	20		FACW			
5.							
6.							
7.							
8.							
		<u>125</u>	=Total Cover			Total % Cover of:	Multiply by:
		50% of total cover: <u>62.5</u>	20% of total cover: <u>25</u>			OBL species <u>0</u>	x 1 = <u>0</u>
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)		30	✓	FAC	FACW species <u>40</u>	x 2 = <u>80</u>	
1.	<u>Acer rubrum</u>	30	✓	FAC	FAC species <u>262</u>	x 3 = <u>786</u>	
2.	<u>Cinnamomum camphora</u>	30	✓	UPL	FACU species <u>0</u>	x 4 = <u>0</u>	
3.	<u>Liquidambar styraciflua</u>	20		FAC	UPL species <u>70</u>	x 5 = <u>350</u>	
4.	<u>Ilex vomitoria</u>	15		FAC	Column Totals: <u>372</u> (A)	<u>1216</u> (B)	
5.	<u>Triadica sebifera</u>	12		FAC	Prevalence Index = B/A = <u>3.27</u>		
6.							
7.							
8.							
		<u>107</u>	=Total Cover			Hydrophytic Vegetation Indicators:	
		50% of total cover: <u>53.5</u>	20% of total cover: <u>21.4</u>			1 - Rapid Test for Hydrophytic Vegetation	
Herb Stratum (Plot size: <u>30 ft r</u>)		40	✓	UPL	✓ 2 - Dominance Test is >50%		
1.	<u>Imperata cylindrica</u>	40	✓	UPL	3 - Prevalence Index is $\leq 3.0^1$		
2.	<u>Eupatorium perfoliatum</u>	20	✓	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)		
3.	<u>Euthamia graminifolia</u>	20	✓	FAC			
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
		<u>80</u>	=Total Cover			1. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
		50% of total cover: <u>40</u>	20% of total cover: <u>16</u>				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)		40	✓	FAC	Definitions of Four Vegetation Strata:		
1.	<u>Toxicodendron radicans</u>	40	✓	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
2.	<u>Campsis radicans</u>	20	✓	FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
3.					Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
4.					Woody Vine – All woody vines greater than 3.28 ft in height.		
5.							
		<u>60</u>	=Total Cover 20%				
		50% of total cover: <u>30</u>	of total cover: <u>12</u>			Hydrophytic Vegetation Present?	Yes <u>✓</u> No <u> </u>

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

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

Depth (inches)	Matrix		Redox Features					Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	
0 - 20	2.5Y 3/1	100					Sandy Clay Loam	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	(MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> (outside MLRA 150A)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (outside MLRA 150A, 150B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<input type="checkbox"/> (outside MLRA 138, 152A in FL, 154)
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	³ Indicators of hydrophytic vegetation and
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	wetland hydrology must be present, unless disturbed or problematic.
	(MLRA 138, 152A in FL, 154)	

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No _____

Remarks:

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region

See ERDC/EL TR-10-20; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027

Requirement Control Symbol EXEMPT:

(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Lift Station

City/County: Gulfport / Harrison

Sampling Date: 2025-08-07

Applicant/Owner: City of Pass Christian

State: Mississippi

Sampling Point: PC LS31-P4

Investigator(s): Laura Moncrief

Section, Township, Range: 20 / 8 South / 12 West

Landform (hillside, terrace, etc.): Coastal Plain

Local relief (concave, convex, none): none

Slope (%): 0

Subregion (LRR or MLRA): LRR: T, MLRA: 152A

Lat: 30.3365458

Long: -89.2178683

Datum: WGS 84

Soil Map Unit Name: Harleston fine sandy loam, 0 to 2 percent slopes

NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?

Yes No _____

Hydric Soil Present?

Yes No _____

Wetland Hydrology Present?

Yes _____ No

Is the Sampled Area

within a Wetland?

Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1) Aquatic Fauna (B13)
- High Water Table (A2) Marl Deposits (B15) (LRR U)
- Saturation (A3) Hydrogen Sulfide Odor (C1)
- Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3)
- Sediment Deposits (B2) Presence of Reduced Iron (C4)
- Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6)
- Algal Mat or Crust (B4) Thin Muck Surface (C7)
- Iron Deposits (B5) Other (Explain in Remarks)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Sphagnum Moss (D8) (LRR T, U)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present?

Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: PC LS31-P4

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Quercus nigra</u>	<u>50</u>	<input checked="" type="checkbox"/>	FAC
2. <u>Acer rubrum</u>	<u>35</u>	<input checked="" type="checkbox"/>	FAC
3. <u>Pinus elliottii</u>	<u>30</u>	<input checked="" type="checkbox"/>	FACW
4.			
5.			
6.			
7.			
8.			
	<u>115</u>	=Total Cover	
50% of total cover: <u>57.5</u>	20% of total cover: <u>23</u>		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)			
1. <u>Cinnamomum camphora</u>	<u>25</u>	<input checked="" type="checkbox"/>	UPI
2. <u>Triadica sebifera</u>	<u>25</u>	<input checked="" type="checkbox"/>	FAC
3. <u>Ilex vomitoria</u>	<u>20</u>	<input checked="" type="checkbox"/>	FAC
4.			
5.			
6.			
7.			
8.			
	<u>70</u>	=Total Cover	
50% of total cover: <u>35</u>	20% of total cover: <u>14</u>		
Herb Stratum (Plot size: <u>30 ft r</u>)			
1. <u>Imperata cylindrica</u>	<u>60</u>	<input checked="" type="checkbox"/>	UPL
2. <u>Euthamia graminifolia</u>	<u>15</u>		FAC
3. <u>Eupatorium perfoliatum</u>	<u>10</u>		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	<u>85</u>	=Total Cover	
50% of total cover: <u>42.5</u>	20% of total cover: <u>17</u>		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)			
1. <u>Toxicodendron radicans</u>	<u>50</u>	<input checked="" type="checkbox"/>	FAC
2. <u>Campsis radicans</u>	<u>35</u>	<input checked="" type="checkbox"/>	FAC
3.			
4.			
5.			
	<u>85</u>	=Total Cover 20%	
50% of total cover: <u>42.5</u>	of total cover: <u>17</u>		

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 77.78 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u>230</u>	x 3 = <u>690</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPI species <u>85</u>	x 5 = <u>425</u>
Column Totals: <u>355</u> (A)	<u>1195</u> (B)

Prevalence Index = B/A = 3.37

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is $\leq 3.0^1$
- Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No

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

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 20	5Y 4/1	95	5YR 4/6	5	D	PL	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	(MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> (outside MLRA 150A)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (outside MLRA 150A, 150B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<input type="checkbox"/> (outside MLRA 138, 152A in FL, 154)
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	³ Indicators of hydrophytic vegetation and
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No _____

Remarks: