



Clean Water Act Section 404: Site Visit/Case Development

For inspections authorized pursuant to Clean Water Act sections 308 and 404 (33 U.S.C. §§ 1318 and 1344)

This report includes only factual information gained by documentation, onsite observations, and/or onsite interviews.

Inspector Name(s)	Marco Finocchiaro	Time In	2:30 PM	Start Date	April 6, 2022
		Time Out	4:30 PM	End Date	April 6, 2022

Inspector's Organization

Organization Requesting Inspection (if different)

Inspection Type	Case Development	Inspection Status	Original
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Site Name

Site Address*

City*	Canóvanas	County*	Loíza	State*	PR	Zip Code*	00729
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Mailing Address*

City*	San Juan	County*	N/A	State*	PR	Zip Code*	00907
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Latitude*	18.422966	Longitude*	-65.881807
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Estimated Size of Site (acres) Is there a home on the site? Yes No

Inspector Signature	MARCO FINOCCHIARO Digitally signed by MARCO FINOCCHIARO Date: 2022.06.14 15:43:14 -04'00'	Date	6/14/22
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Supervisor Signature	RICHARD BALLA Digitally signed by RICHARD BALLA Date: 2022.06.14 17:34:37 -04'00'	Date	6/14/22
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Clean Water Act Section 404: Site Visit/Case Development

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Site Name	Loubuildco, LLC (hereinafter as "Loubuildco")	Start Date	April 6, 2022
		End Date	April 6, 2022
Inspection Purpose	Initial site visit		
Opening Conference			
<input checked="" type="checkbox"/> Presentation of Inspector Credentials			
Name and Title (Use N/A if owner/operator not available to join the inspection)			
Marco Finocchiaro, Inspector presented credentials to Andrew Staskevicius, consultant on behalf of Loubuildco, LLC			
<input checked="" type="checkbox"/> Opening Conference			
Name of person authorizing access if applicable			
Andrew Staskevicius, authorized access of property during scheduling of the inspection on behalf of Yan Katsnelson, M.D., Owner, who was not present during the inspection.			
Notes from Opening Conference			
EPA explained the purpose of the inspection, EPA and the Corps role with regulating wetlands under the CWA, and what areas would be inspected. EPA asked Mr. Staskevicius when the property was purchased and who are the operators of the land. Mr. Staskevicius explained that the property was purchased in 2021 and that Loubuildco has not conducted any operations on the site; however, there are approximately 6 lessees on the property that are.			
<input checked="" type="checkbox"/> Access Issues if Any			
Describe			
The site has a gate that is routinely open and closed daily by the residents of the property and not through Mr. Katsnelson or his consultants. The site is a large parcel with dirt roads and dense vegetation throughout. Issues with safe driving and lack of pedestrian access without vegetative clearing tools made most of the site inaccessible for EPA..			
Inspection Observations and Sample Collection			
Site Owner/Site Operator/Responsible Party (Name, title and contact information)			
Yan Katsnelson, M.D., Owner; [REDACTED] (not present during the inspection)			
Additional Persons Present at Inspection			
EPA: Sofia Olivero Lora, PhD, Seika Robinson			
Andrew Staskevicius, Mid-Continental Management; [REDACTED]			
Enrique Santiago, consultant, No contact information given			
General Site Characteristics (layout of property, etc.)			
The property is comprised of approximately 900-acre parcel containing a plantain farming operation and residential activities. The site must be entered off of PR-188, through 065-000-005-14-901 on the only road to the site. After entering the site, residential buildings are seen and the remainder of the property is utilized primarily for farming activities. A large portion of the site was not accessible through vehicular access or walking. Mr. Katsnelson does not reside on the property but there are approximately 6 lessees residing in and conducting any and all operations on the site.			



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Site Name	Loubuildco, LLC (hereinafter as "Loubuildco")	Start Date	April 6, 2022
		End Date	April 6, 2022
Purpose and Need for Discharge of Dredged and/or Fill Material			
The purposed for vegetative clearing and placement of fill material are for agricultural activities related to plantain farming.			
Site Overview (Past inspections, site description, permits, etc.)			
There are no known Corps wetland permits for any activities on site or Jurisdictional Determinations for the Site. Parts of the property has historically been utilized for agricultural farming by the residents that live on the property; however, the farming activities appear to be inconsistent and, the area where EPA had inspected has not been an area of historical impact as seen from available aerial imagery dating back to 2004. The municipality of Loiza is identified as an environmental justice community.			
Scope of Inspection (Areas inspected or not inspected)			
Access throughout the site is limited by lack of safe driving conditions the day of (muddy roads due to the rain the night prior) and dense vegetation. EPA conducted field wetland indicator testing in the center of parcel 065-000-010-01-000.			



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Site Name	Loubuildco, LLC (hereinafter as "Loubuildco")	Start Date	April 6, 2022
		End Date	April 6, 2022
Environmental Conditions (e.g., wind, rain, smoke, dust, temperature, snow)			
Temperatures were in the 70s (degrees in F); sunny; dry season but rained the night prior			
Field Work Conducted			
<p>During the inspection, EPA collected photographs, GPS data, and handwritten notes. Observations were recorded with the understanding that the inspection occurred during the dry season and that it rained the day prior.</p> <p>EPA began the inspection at the center of parcel 065-000-010-01-000, the southern parcel of the site. EPA observed the Caño Gallardo and its many tributaries flowing throughout the site.</p> <p>Three soil pit samples were dug (see wetland delineation forms attached for data). Location of the GPS data points taken at each soil pit can be seen in attached Figures 1 and 2. EPA observed clear vegetative disturbance throughout the site due to the plantain farming activities. EPA also observed soil disturbances from the row crop farming.</p> <p>EPA observed a possible jurisdictional wetland of an unknown size in the western two GPS data locations. Standing water, saturated soils, high water table, and wetland vegetation growth were present in the soil pit 1 area. Soil pit 2 was taken in an adjacent area of higher topography and also presented positive for field wetland indicators such as hydric soils, wetland vegetation growth, and stunted growth in the plantain trees.</p> <p>EPA then walked as east as possible and took a third soil pit sample. Vegetation, soils, and possible hydrology in the area were disturbed from the farming activities. The soil was uniform in color with no hydric indicators so it did not meet the definition of a hydric soil.</p> <p>EPA could not conduct further soil pit samples in suspected wetland areas due to the lack of access. The fill material in the wetlands observed appear to be comprised of dirt for farming. An estimation of volume of dirt and the area of possible wetland impacts are unclear. A larger scale wetland delineation would be required to determine those quantities.</p>			
Closing Conference			
Documents Received and/or Requested During the Inspection			
Prior to the site visit, EPA issued a Section 308 Request for Information (RFI) letter to Loubuildco on March 31, 2022 via email. EPA requested that Loubuildco respond to the RFI letter.			
Compliance Assistance Provided (If any)			
Mr. Staskevicius stated that there are approximately 6 lessees/operators of multiple other properties in the area. EPA recommended consulting the Corps on the possible need for CWA Section 404 permits before starting any work including but not limited to draining, cutting, and filling wetlands.			
Observations Relayed to Site Owner/Operator			
N/A - Mr. Staskevicius and Santiago left the property before EPA had finish conducting inspection activities.			
Actions Taken by Owner/Operator During the Inspection (If any)			
N/A			
Potential Issues of Concern Including Regulatory Citations			
Potential areas of jurisdictional wetlands and streams may be present on the site. A wetland delineation should be done for the site			



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Site Name	Loubuildco, LLC (hereinafter as "Loubuildco")	Start Date	April 6, 2022
		End Date	April 6, 2022
prior to conducting additional work within suspected wetland areas.			
Attachments*			
<input checked="" type="checkbox"/> Maps and Sketches			
<input checked="" type="checkbox"/> Photographs (including location) and Photo Log			
<input checked="" type="checkbox"/> Other (SSIP, Wetlands Delineation Forms, etc.)			
Photolog; Map with GPS Points; delineation forms			
Additional Notes			
None.			

CWA 404 Inspection

Loubuildco, LLC

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loíza, Puerto Rico

April 6, 2022



Date: April 6, 2022
Time: 2:26 PM
Photographer: Seika Robinson
Photo ID: P4060099

Description: Entrance of the site where EPA had met with Loubuildco, LLC.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:23 PM

Photographer: Seika Robinson

Photo ID: P4060092

Description: Vegetative land clearing alongside the entrance road.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:24 PM

Photographer: Seika Robinson

Photo ID: P4060094

Description: Mature plantain trees for agricultural farming.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:25 PM

Photographer: Seika Robinson

Photo ID: P4060097

Description: The Caño Gallardo, a traditional navigable water location on the property.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022
Time: 2:25 PM
Photographer: Seika Robinson
Photo ID: P4060098

Description: Panorama of potential wetland area.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:40 PM

Photographer: Seika Robinson

Photo ID: P4060103

Description: An abandoned building located on the site. Other residential buildings were observed on site but were not photographed.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022
Time: 2:42 PM
Photographer: Seika Robinson
Photo ID: P4060107

Description: Unnamed tributary on the site.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:53 PM

Photographer: Seika Robinson

Photo ID: P4060118

Description: Panorama of the site located near the second soil pit.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022
Time: 2:45 PM
Photographer: Seika Robinson
Photo ID: P4060113

Description: Saturated soils interspersed throughout the site.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:51 PM

Photographer: Seika Robinson

Photo ID: P4060115

Description: First soil pit dug to test for field indicators of hydraulic soils.

Saturated soils and a high water table was observed.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:57 PM

Photographer: Seika Robinson

Photo ID: P4060124

Description: First soil pit dug to test for field indicators of hydraulic soils.

Saturated soils, high water table, depleted soils and redox reactions were observed.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:57 PM

Photographer: Seika Robinson

Photo ID: P4060123

Description: First soil pit dug to test for field indicators of hydraulic soils.

Depleted soils and redox reactions were observed.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 2:27 PM

Photographer: Seika Robinson

Photo ID: P4060102

Description: Panorama of the site conditions near second soil pit.

Potential wetland boundary area.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 3:20 PM

Photographer: Seika Robinson

Photo ID: P4060127

Description: Second soil pit dug to test for field indicators of hydraulic soils.

Depleted soils and redox reactions were observed.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 3:35 PM

Photographer: Seika Robinson

Photo ID: P4060139

Description: A flowing stream containing aquatic vegetation.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 3:41 PM

Photographer: Seika Robinson

Photo ID: P4060142

Description: Standing water containing algae.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 3:44 PM

Photographer: Seika Robinson

Photo ID: P4060146

Description: Panorama of the site between second and third soil pit.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022
Time: 3:48 PM
Photographer: Seika Robinson
Photo ID: P4060150

Description: Third soil pit dug to test for field indicators of hydraulic soils.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico



Date: April 6, 2022

Time: 3:56 PM

Photographer: Seika Robinson

Photo ID: P4060155

Description: Third soil pit dug to test for field indicators of hydraulic soils. No indicators were found.

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loiza, Puerto Rico

Loubuildco, LLC

Tax parcel numbers 065-000-010-01-000 and 065-000-005-14-901 in the Municipality of Loíza, Puerto Rico

Legend

- Caño Gallardo
- Río Grande De Loíza



Figure 1 Site map with locations of the soil pits highlighted.

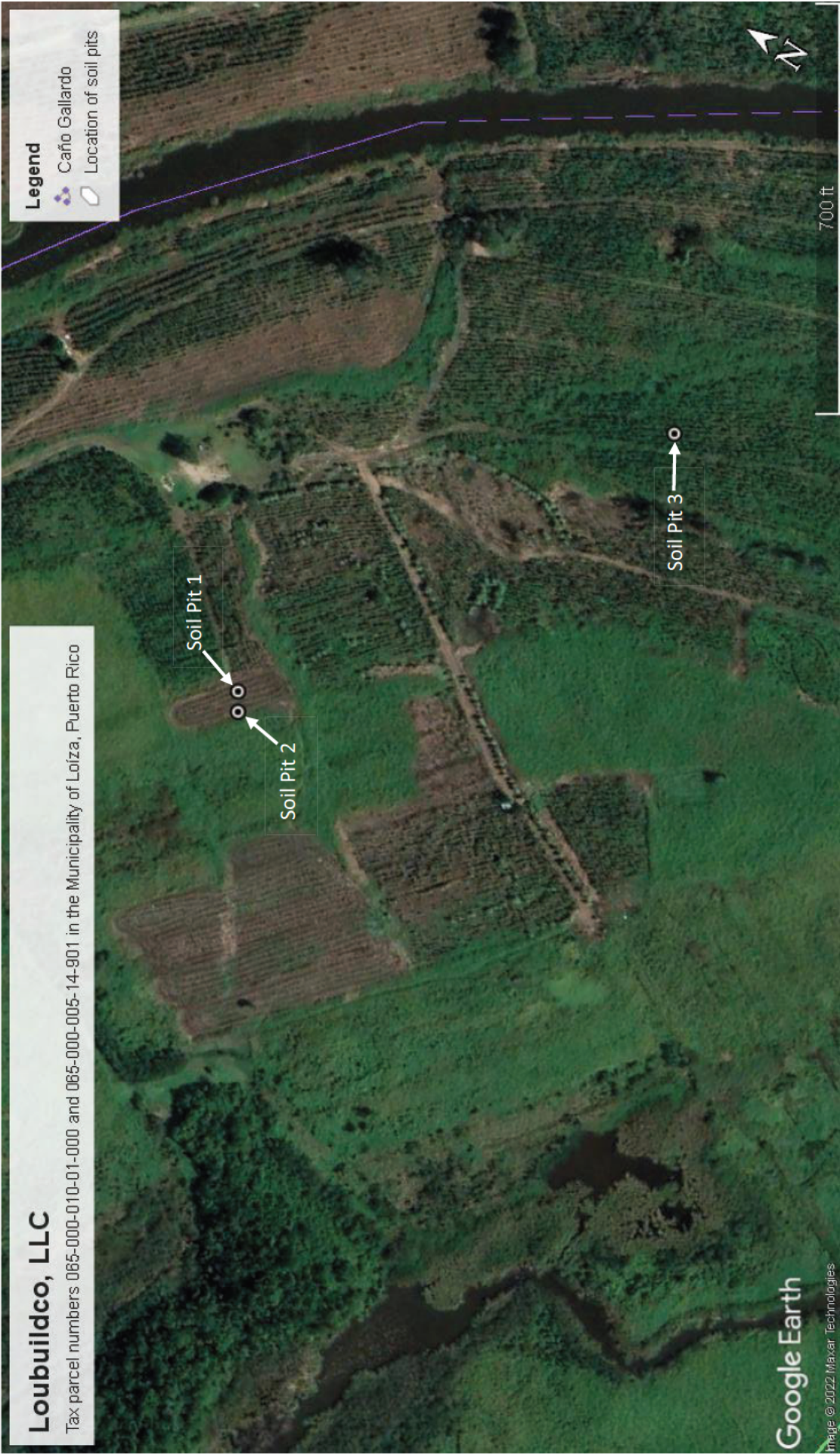


Figure 2 GPS Coordinate points taken of the soil pit locations.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Caribbean Islands Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Loiza Plantain Farm Municipality/Town: Loiza Sampling Date: 4/6/2022
 Applicant/Owner: Loubuildco, LLC Attn: Yan Katsnelson PR or USVI: PR Sampling Point: 1
 Investigator(s): Marco Finocchiaro and Seika Robinson Ward/Estate: _____
 Landform (hillside, terrace, etc.): Agricultural Land Local relief (concave, convex, none): _____ Slope (%): _____
 Lat: 18.422966 Long: -65.881807 Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation x, Soil x, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>musa x paradisiaca</i></u>	<u>20</u>	Yes	UPL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
	<u>20</u>	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>10ft</u>)																				
1. <u><i>Mimosa malacophylla</i></u>	<u>5</u>	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>70</u></td> <td>x 1 = <u>70</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>155</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.94</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>70</u>	x 1 = <u>70</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>155</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>1.94</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>70</u>	x 1 = <u>70</u>																			
FACW species <u>65</u>	x 2 = <u>130</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>20</u>	x 5 = <u>100</u>																			
Column Totals: <u>155</u> (A)	<u>300</u> (B)																			
Prevalence Index = B/A = <u>1.94</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
	<u>5</u>	=Total Cover																		
Herb Stratum (Plot size: <u>10ft</u>)																				
1. <u><i>Typha latifolia</i></u>	<u>15</u>	No	OBL	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Ludwigia octovalvis</i></u>	<u>40</u>	Yes	OBL																	
3. <u><i>Ceratopteris thalictroides</i></u>	<u>15</u>	No	OBL																	
4. <u><i>Paspalum fasciculatum</i></u>	<u>60</u>	Yes	FACW																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
	<u>130</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>10ft</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. _____	_____	_____	_____																	
	=Total Cover																			

Remarks:
 The area has been impacted with "musa x paradisiaca" plantain farming activities. It was noted that the area surrounding the sample area had trees that were significantly smaller in size than the trees seen by the EPA in other areas of the site visited.

SOIL

Sampling Point: 1

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		
0-4	2.5Y 4/1	70	7.5YR 4/6	30	C	PL/M	Loamy/Clayey	rhizosphere
4-7	10YR 4/6	50	7.5YR 4/6	25	RM	M	Loamy/Clayey	
4-7	10YR 4/6	50	10YR 5/6	25	RM	M	Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Organic Bodies (A6) <input type="checkbox"/> 5 cm Mucky Mineral (A7) <input type="checkbox"/> Muck Presence (A8) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input checked="" type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (Inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
 Soils and vegetation were historically disturbed from agricultural activities for decades prior to the inspection date. Manmade parallel ditches were observed throughout the area being tested. Within the area between the ditches (typical of farming activities) are Plantain trees.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Fiddler Crab Burrows (C10)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)				

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Data was recorded with photography and measured with a ruler. GPS data points of the location of the soil pits were taken with a Tremble device.

Remarks:
 Hydrology may have also may be disturbed from the agricultural activities as historically, agriculture within wetlands in PR involved impacting all three parameters of wetland determination. However, aerial photography and field collected GIS data shows the soil pit was located west of and adjacent to Caño Gallardo.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Caribbean Islands Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Loiza Plantain Farm Municipality/Town: Loiza Sampling Date: 4/6/2022
 Applicant/Owner: Loubuildco, LLC Attn: Yan Katsnelson PR or USVI: PR Sampling Point: 2
 Investigator(s): Marco Finocchiaro and Seika Robinson Ward/Estate: _____
 Landform (hillside, terrace, etc.): Agricultural Land Local relief (concave, convex, none): _____ Slope (%): _____
 Lat: 18.422966 Long: -65.881807 Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>musa x paradisiaca</i></u>	<u>25</u>	Yes	UPL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>25</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>10ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.31</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>130</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>2.31</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>35</u>	x 1 = <u>35</u>																			
FACW species <u>70</u>	x 2 = <u>140</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>25</u>	x 5 = <u>125</u>																			
Column Totals: <u>130</u> (A)	<u>300</u> (B)																			
Prevalence Index = B/A = <u>2.31</u>																				
1. <u><i>Mimosa malacophylla</i></u>	<u>10</u>	Yes	FACW																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>10</u> =Total Cover																				
Herb Stratum (Plot size: <u>10ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u><i>Ludwigia octovalvis</i></u>	<u>35</u>	Yes	OBL																	
2. <u><i>Paspalum fasciculatum</i></u>	<u>60</u>	Yes	FACW																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>95</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>10ft</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks:
 The area has been impacted with "musa x paradisiaca" plantain farming activities. It was noted that the area surrounding the sample area had some trees that were significantly smaller in size than the trees seen by the EPA in other areas of the site visited.

SOIL

Sampling Point: 2

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		
0-3	10YR 4/2	95	5YR 4/6	5	C		Loamy/Clayey	
3-17	10YR 3/1	75	5YR 4/4	25	C		Loamy/Clayey	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Organic Bodies (A6)
- 5 cm Mucky Mineral (A7)
- Muck Presence (A8)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Stratified Layers (A5)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (Inches): _____

Hydric Soil Present? Yes No

Remarks:

Soils and vegetation were historically disturbed from agricultural activities for decades prior to the inspection date. Manmade parallel ditches were observed throughout the area being tested. Within the area between the ditches (typical of farming activities) are Plantain trees.

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Fiddler Crab Burrows (C10)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

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:

Data was recorded with photography and measured with a ruler. GPS data points of the location of the soil pits were taken with a Tremble device.

Remarks:

Hydrology may have also may be disturbed from the agricultural activities as historically, agriculture within wetlands in PR involved impacting all three parameters of wetland determination.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Caribbean Islands Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Loiza Plantain Farm Municipality/Town: Loiza Sampling Date: 4/6/2022
 Applicant/Owner: Loubuildco, LLC Attn: Yan Katsnelson PR or USVI: PR Sampling Point: 3
 Investigator(s): Marco Finocchiaro and Seika Robinson Ward/Estate: _____
 Landform (hillside, terrace, etc.): Agricultural Land Local relief (concave, convex, none): _____ Slope (%): _____
 Lat: 18.422966 Long: -65.881807 Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, 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 <u>X</u> No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>musa x paradisiaca</i></u>	<u>20</u>	Yes	UPL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>20</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>10ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td style="text-align: center;"><u>x 1 = 5</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td style="text-align: center;"><u>x 2 = 30</u></td> </tr> <tr> <td>FAC species <u>110</u></td> <td style="text-align: center;"><u>x 3 = 330</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td style="text-align: center;"><u>x 4 = 0</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td style="text-align: center;"><u>x 5 = 100</u></td> </tr> <tr> <td>Column Totals: <u>150</u> (A)</td> <td style="text-align: center;"><u>465</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.10</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	<u>x 1 = 5</u>	FACW species <u>15</u>	<u>x 2 = 30</u>	FAC species <u>110</u>	<u>x 3 = 330</u>	FACU species <u>0</u>	<u>x 4 = 0</u>	UPL species <u>20</u>	<u>x 5 = 100</u>	Column Totals: <u>150</u> (A)	<u>465</u> (B)	Prevalence Index = B/A = <u>3.10</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	<u>x 1 = 5</u>																			
FACW species <u>15</u>	<u>x 2 = 30</u>																			
FAC species <u>110</u>	<u>x 3 = 330</u>																			
FACU species <u>0</u>	<u>x 4 = 0</u>																			
UPL species <u>20</u>	<u>x 5 = 100</u>																			
Column Totals: <u>150</u> (A)	<u>465</u> (B)																			
Prevalence Index = B/A = <u>3.10</u>																				
1. <u><i>mimosa malacophylla</i></u>	<u>5</u>	Yes	FACW																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>5</u> =Total Cover																				
Herb Stratum (Plot size: <u>10ft</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is $\leq 3.0^1$ <u>hair</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u><i>Ceratopteris thalictroides</i></u>	<u>5</u>	No	OBL																	
2. <u><i>Flatsedge</i></u>	<u>40</u>	Yes	FAC																	
3. <u><i>Vigna luteola</i></u>	<u>70</u>	Yes	FAC																	
4. <u><i>Saccharum giganteum</i></u>	<u>10</u>	No	FACW																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>125</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>10ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
=Total Cover																				

Remarks:
 Vegetation has been historically disturbed on the property due to long term agricultural uses of the land. The area has been impacted with "musa x paradisiaca" plantain farming activities. Manmade parallel ditches were observed throughout the area being tested. Within the area between the ditches (typical of farming activities) are Plantain trees.

SOIL

Sampling Point: 3

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		
0-15	10YR 5/2	40	7.5YR 5/8	60	D		Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Organic Bodies (A6) <input type="checkbox"/> 5 cm Mucky Mineral (A7) <input type="checkbox"/> Muck Presence (A8) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (Inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
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Remarks:
 Soils and vegetation were historically disturbed from agricultural activities for decades prior to the inspection date. Manmade parallel ditches were observed throughout the area being tested. Within the area between the ditches (typical of farming activities) are Plantain trees.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Fiddler Crab Burrows (C10)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)				

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Data was recorded with photography and measured with a ruler. GPS data points of the location of the soil pits were taken with a Tremble device.

Remarks: