

Page 1 can be sent as an email or as an attachment in your submittal
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January 29, 2019 (Date your submitting)

U.S. Army Corps of Engineers
Savannah District/Regulatory Branch (Whom to submit it to)
Attention: Attention:

Mr. Will M. Rutlin, Coastal Section Chief
Coastal/Savannah Office Address 100 West
Oglethorpe Avenue Savannah, Georgia
31401-3604

Mr. Edward B. Johnson, Piedmont Section Chief
1590 Adamson Parkway, Suite 200
Morrow, Georgia 30260-1777

Dear Mr. Section Chief: (Example)

Blankety Blank Company or Applicant name is submitting the attached information requesting an aquatic resource delineation review (ARDR) for the subject site located at 3246 Low Ground Road, Guyton, Effingham County, Georgia (32.04219, -81.31502). The owner of the property is Papa Smurf, LLC; however the applicant is Bam Bam, see contact information below (and cc'd in submittal). The property is composed of wetland and streams. Based on our site assessment , it is our opinion that the project area contains +/- 5.9 acres of wetland, 28 acres of upland, and 150 linear feet of intermittent stream.

The attached information includes the following:

Request for ARDR Review Papa Smurf Prepared
Figures 1-7
Approximate Wetland Sketch (Exhibit 5)
Data Forms-One Wetland, One Upland
DFIRM Map

We greatly appreciate your assistance withy this project. If you have any questions do not hesitate to call at 912-867-5309 or papasmuyrf@bambam.com.

Sincerely,

Papa Smurf and Company

cc: Bam Bam

At a minimum the beloww is acceptable ffor an ARDR submittal

Some of the numberedd items are hyperlinked for your ease to access to the maps.

- 1) SAS APPENDIX 1: Request for Corps of Engineers Jurisdictional Determination (JD) and/or Delineation Review
- 2) Street Map/Project Location Map
- 3) USGS Map of Project Location
- 4) Soils Map of Project Location
- 5))National Wetland Inventory Map of Project Location
- 6) Aquatic Resource Exhibit (GPS or Survey, or Approximate Sketch)
- 7) Color Infared Maps of Project Location optional
- 8) LiDAR Map of Project Location (Optional)
- 9) Data Forms (If multiple types of different wetlands i.e. PFO vs PEM, or Marsh vs PFO, more than one wetland form is required)

One Wetland
One Upland

Added the Coastal Plain and Piedmont Data Forms, Choose which region your in as well as if you will be using the four strata vegetation form or the five strata data form.

- 10) DFIRM Map (Floodplain Map)

The following pages, show the blank Appendix 1 Form to fill out, as well as maps that should be added to your submittal in PDF format. Once you've put it all together you may email to any of our offices

Piedmont Section: CESAS-OP-FP@usace.army.mil

Coastal Section: CESAS-OP-FC@usace.army.mil

Submit all GDOT applications to: CESAS-RD-GDOT-ESubmittal@usace.army.mil

General Inquiries: CESAS-RD@usace.army.mil

Example Submittal



SAS APPENDIX 1: Request for Corps of Engineers Jurisdictional Determination (JD) and/or Delineation Review

I. Reason for request: (check as many as applicable)

I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.

I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.

I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.

I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.

I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.

A Corps JD is required in order to obtain my local/state authorization.

I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.

I believe that the site may be comprised entirely of dry land.

Other: _____

II. I am requesting that the U.S. Army Corps of Engineers, Savannah District, provide me with the following:

Delineation Review of Aquatic Resources - Concurrence with an aquatic resource delineation is a written notification from the Corps concurring, not concurring, or commenting on the aquatic resource boundaries, or limits, delineated on a property.

Preliminary Jurisdictional Determination - (PJD). A PJD is defined in Corps regulations at 33 CFR 331.2, as "written indications that there may be waters of the United States on a parcel". When the Corps provides a PJD, the Corps is making no legally binding determination of any type regarding whether jurisdiction exists over the particular aquatic resource in question.

Approved Jurisdictional Determination - (AJD) An AJD is defined in Corps regulations at 33 CFR 331.2. A definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a parcel.

I am unclear as to what I would like to request and require additional information to inform my decision.

III. Property/Owner Information. Please complete ALL of the following information for the property under review:

SECTION 1

Parcel Number of Property:		
Lat.	Long. -	(in decimal degrees)
Parcel Address:		
Parcel City :	Parcel County:	Zip:
Size of Review Area:	Acre(s)	Linear feet

SECTION 2

LANDOWNER NAME	AUTHORIZED AGENT'S NAME
First:	First:
Last:	Last:
Company:	Company:
Email Address:	Email Address:
Address:	Address:
City:	City:
State: Zip:	State: Zip:
Phone:	Phone:

PROPERTY ACCESS PERMISSION, AKNOWLEDGEMENT OF 18 U.S.C. SECTION 1001 AND STATEMENT OF AGENT AUTHORIZATION

Initial ONLY One:

____ By signing below, I certify that I am the owner of record of the property referenced in III, Section 1 above, and I hereby authorize representatives of the U.S. Army Corps of Engineers, Savannah District, to enter the property for purposes of conducting on-site inspections, and issuing an aquatic resource delineation concurrence and/or a jurisdictional determination. My signature shall also be an affirmation that I possess the requisite property rights to request a delineation review and/or a jurisdictional determination on the property referenced in III - Section 1. Further, I authorize the agent in III - Section 2, to act on my behalf in the processing of this request and to furnish supplemental information in support of this request.

____ By signing below, I certify that I am acting as the duly authorized agent of the owner of record of the property referenced in III, Section 1 above, and have been given the authority to: 1) request a delineation review and/or a jurisdictional determination (JD) on the property referenced in III - Section 1, and 2) authorize representatives of the U.S. Army Corps of Engineers, Savannah District, to enter the property for purposes of conducting on-site inspections, and issuing an aquatic resource delineation concurrence and/or a jurisdictional determination. I understand that I may be required to provide documentary evidence of my authority to request a delineation review and/or JD, and/or to grant Corps of Engineers personnel access to the property.

Please Print Name Legibly: _____

Signature _____

Date: _____

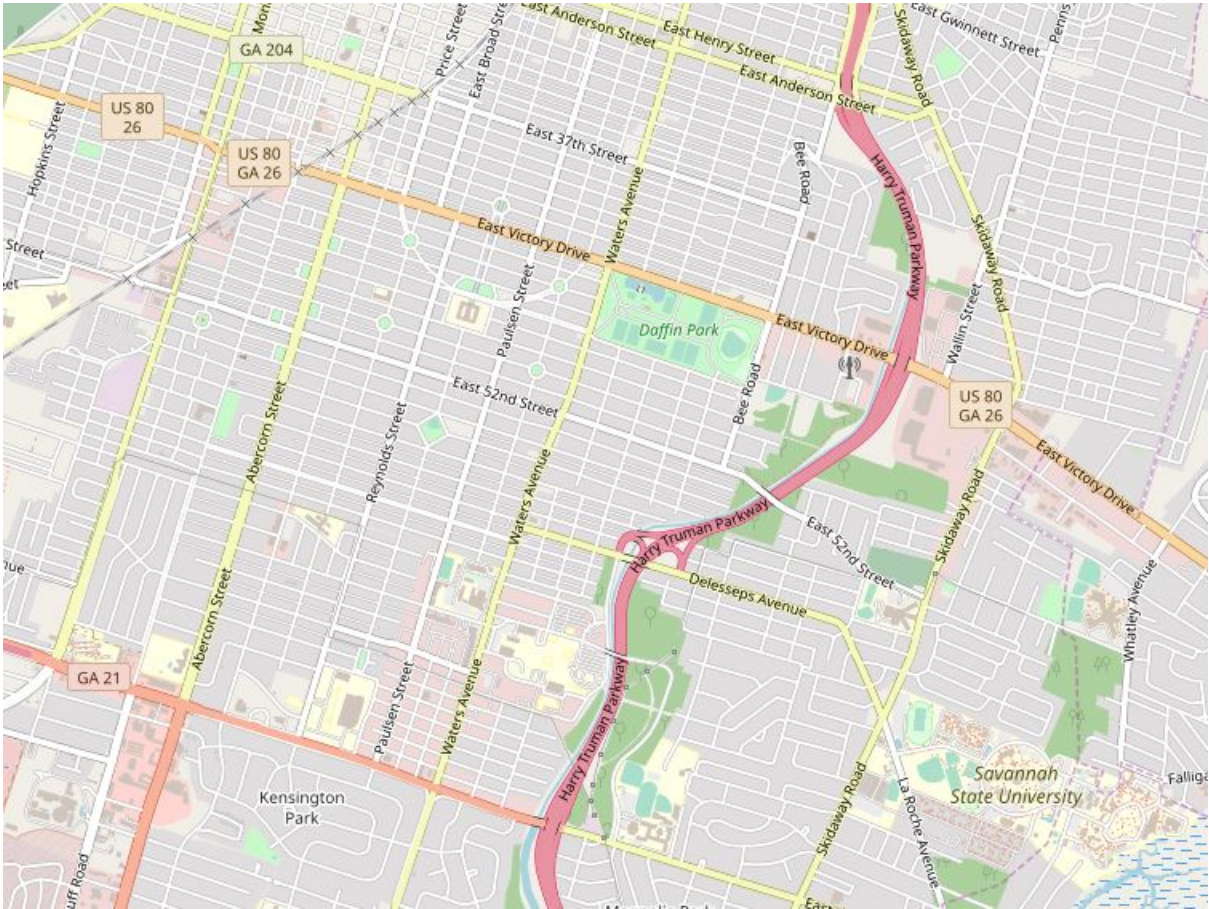
* Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

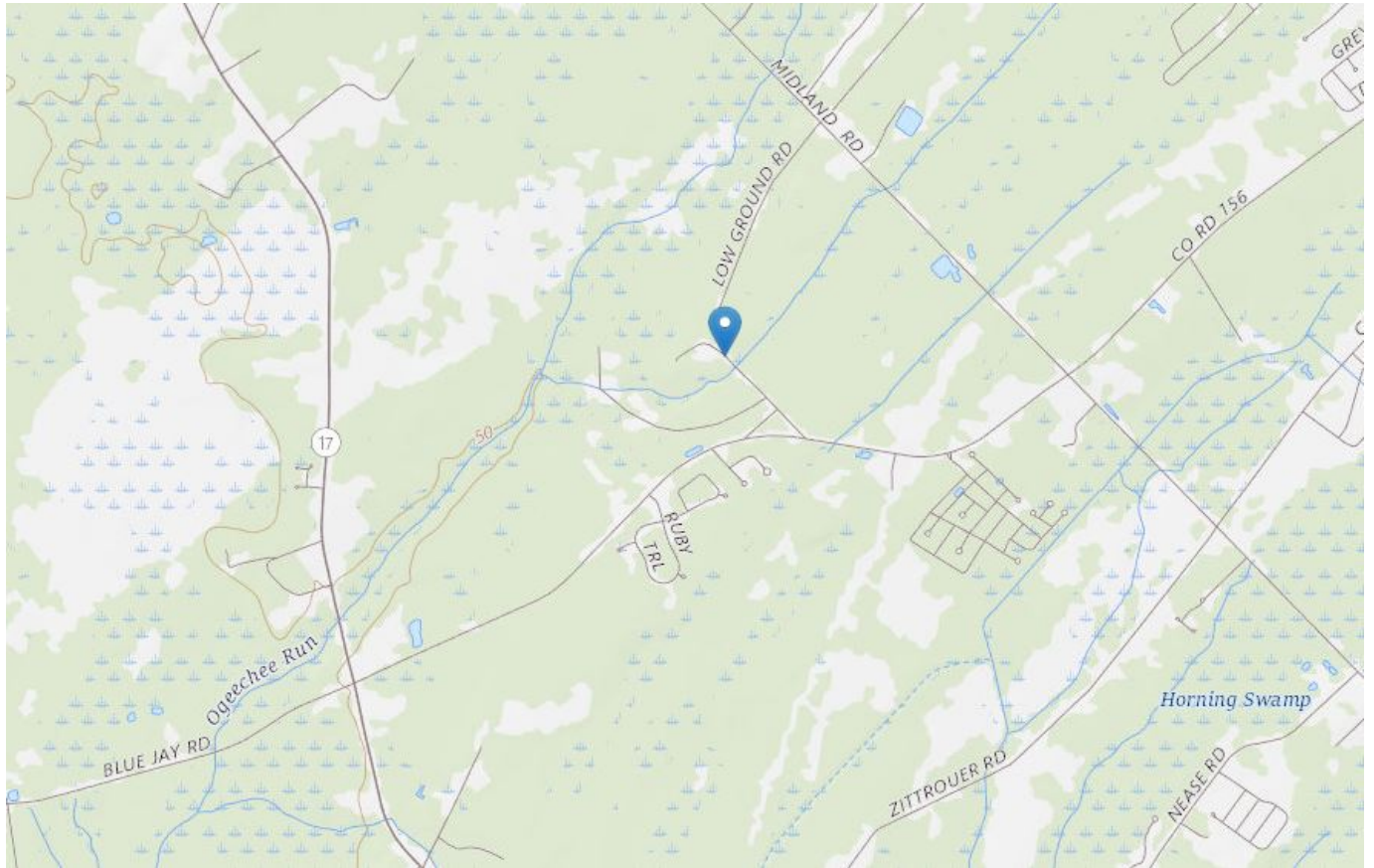
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Street Map Inserted/Project Location Map Inserted



USGS Map Inserted of Project Location



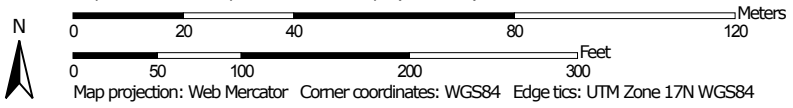
Soils Map Inserted of Project Location

Soil Map—Effingham County, Georgia



Soil Map may not be valid at this scale.

Map Scale: 1:1,370 if printed on A landscape (11" x 8.5") sheet.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Effingham County, Georgia

Survey Area Data: Version 12, Aug 30, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 21, 2014—Nov 23, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LnA	Leon sand, 0 to 2 percent slopes	3.2	44.2%
PeA	Pelham loamy sand, 0 to 2 percent slopes	0.0	0.1%
RgA	Rigdon sand, 0 to 2 percent slopes	4.1	55.7%
Totals for Area of Interest		7.3	100.0%




National Wetland Inventory Map of Project Location



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

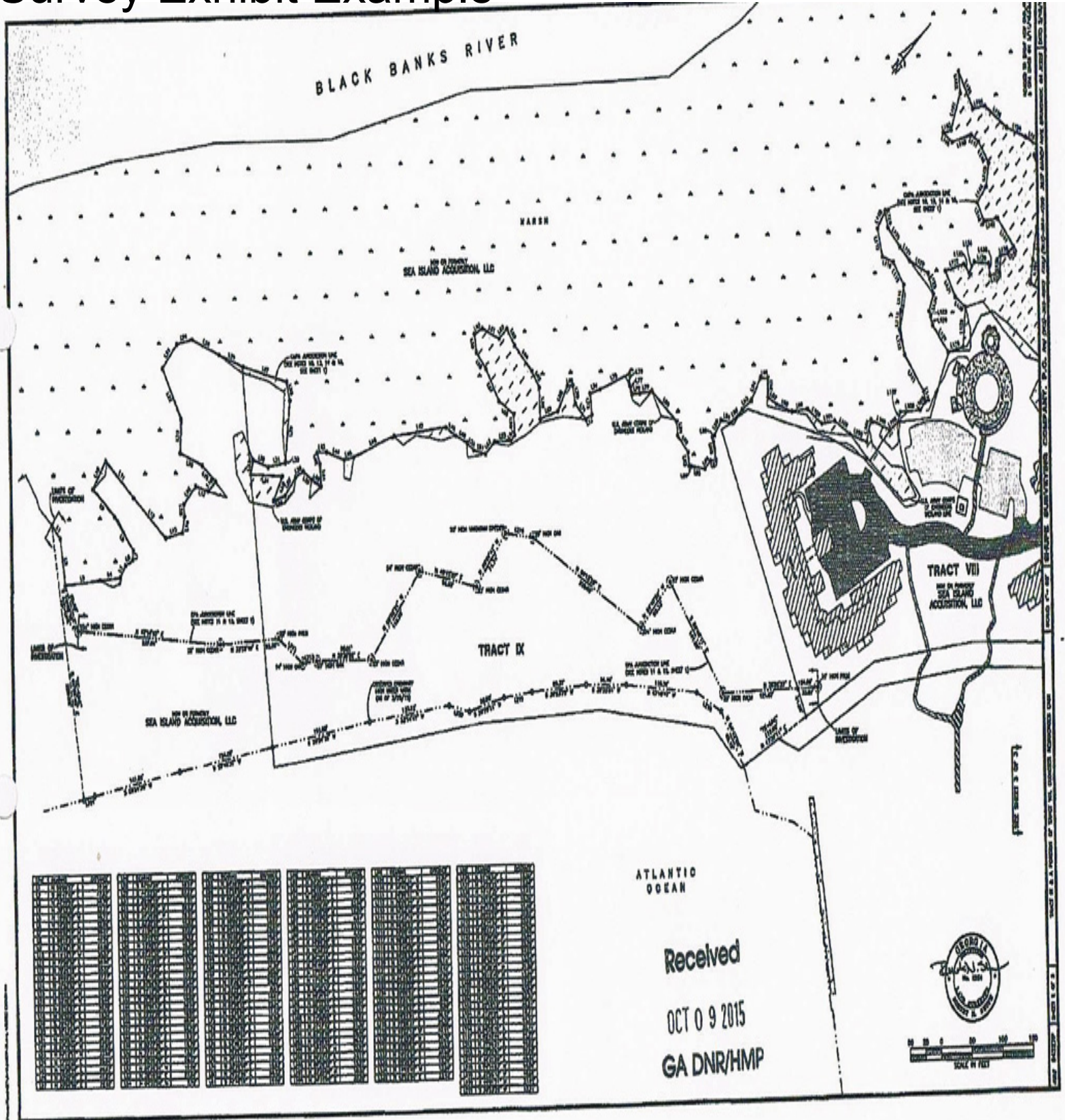
January 31, 2019

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |







This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

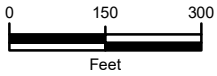
Survey Exhibit Example



Survey

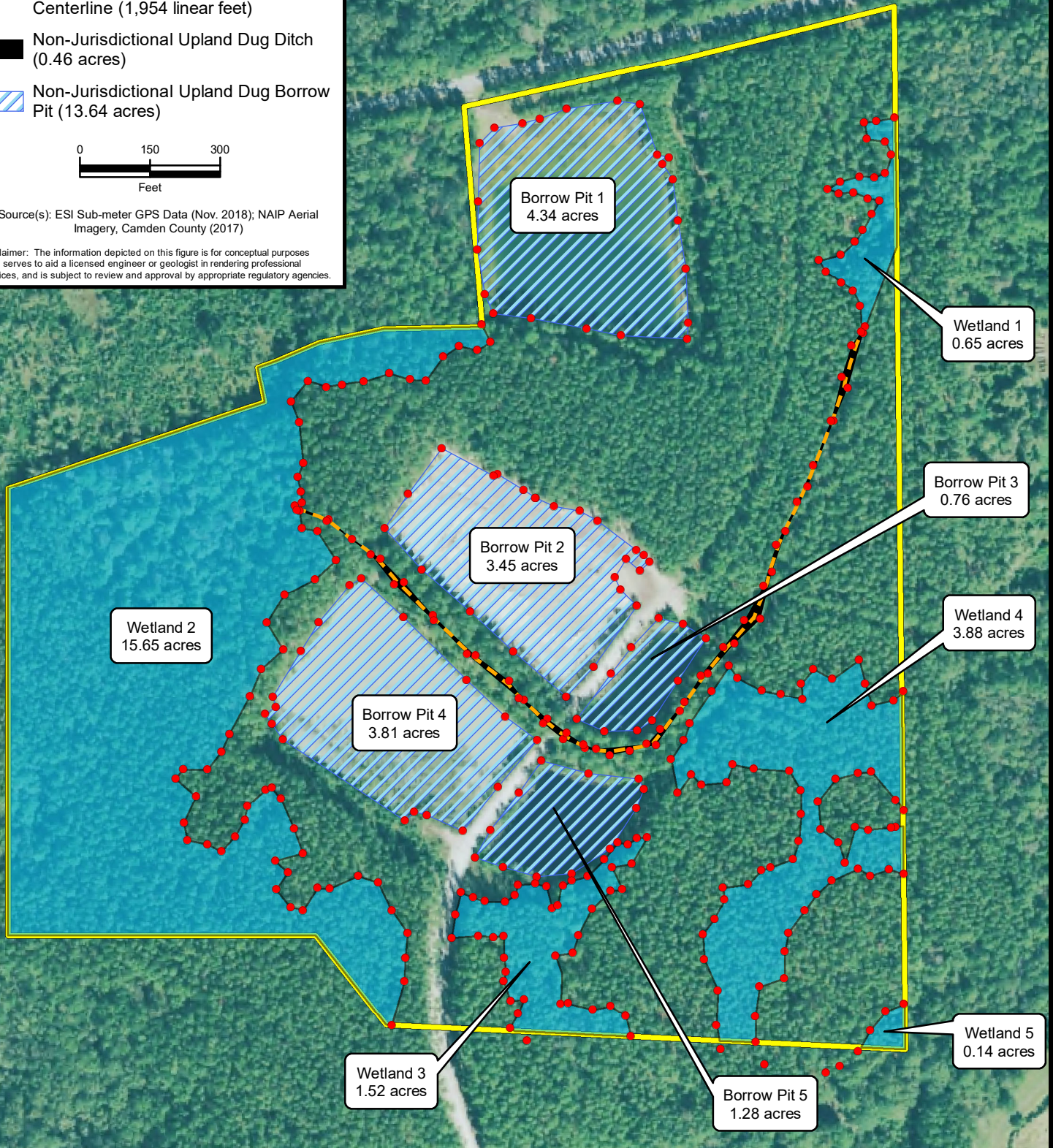
GPS Exhibit Example

-  Project Boundary (71.46 acres)
-  Sub-meter GPS Data
-  Jurisdictional Wetlands (21.84 acres)
-  Non-Jurisdictional Upland Dug Ditch Centerline (1,954 linear feet)
-  Non-Jurisdictional Upland Dug Ditch (0.46 acres)
-  Non-Jurisdictional Upland Dug Borrow Pit (13.64 acres)



Source(s): ESI Sub-meter GPS Data (Nov. 2018); NAIP Aerial Imagery, Camden County (2017)

Disclaimer: The information depicted on this figure is for conceptual purposes only, serves to aid a licensed engineer or geologist in rendering professional services, and is subject to review and approval by appropriate regulatory agencies.



GPS Exhibit Example

Wetland 1

30.8578918	-81.856918
30.8580435	-81.856928
30.8581321	-81.856975
30.8581834	-81.857055
30.8583434	-81.857058
30.8582431	-81.857116
30.8583121	-81.857208
30.8584205	-81.85696
30.8584901	-81.856908
30.8585827	-81.856846
30.8586628	-81.85679
30.8586726	-81.856872
30.858709	-81.856969
30.8587057	-81.857067
30.8587295	-81.857145
30.8587731	-81.857059
30.8588035	-81.85693
30.8587984	-81.856827
30.8588212	-81.856754
30.8589316	-81.85671
30.8590099	-81.856752
30.8590248	-81.856877
30.859122	-81.856896
30.8591309	-81.856812
30.8591488	-81.856689

Wetland 2

30.8540784	-81.860043
30.8542155	-81.860038
30.854361	-81.860023
30.854498	-81.860128
30.8546624	-81.860221
30.8546999	-81.860358
30.8546275	-81.860551
30.8546311	-81.860637
30.8544979	-81.860735
30.8545189	-81.860816
30.8546222	-81.860914
30.8547204	-81.860836
30.85479	-81.86092
30.8548346	-81.860734
30.8549809	-81.860793
30.8551548	-81.860883
30.8551128	-81.861112
30.8552086	-81.860986
30.8552197	-81.860943
30.855034	-81.861128
30.8549329	-81.861195
30.8548465	-81.861287
30.8548884	-81.861383
30.8549123	-81.861519
30.8550146	-81.861542
30.8551715	-81.86146

Wetland 3

30.854333	-81.85972
30.8544704	-81.859697
30.8546045	-81.859659
30.8545737	-81.859574
30.8545512	-81.859495
30.8545466	-81.859357
30.8545852	-81.859292
30.8546461	-81.859268
30.8546546	-81.85915
30.8546344	-81.859074
30.8545092	-81.859035
30.8545255	-81.858998
30.8546405	-81.858962
30.8546694	-81.8589
30.8546933	-81.858793
30.8547932	-81.858682
30.8548929	-81.858587
30.8548802	-81.858518

Wetland 4

30.8559308	-81.857826
30.855857	-81.857769
30.8557829	-81.857605
30.8557621	-81.857473
30.8557293	-81.857328
30.8558249	-81.857336
30.8559078	-81.857254
30.8558512	-81.857122
30.8559621	-81.856942
30.8558231	-81.856898
30.855693	-81.856856
30.8557237	-81.856704
30.8557787	-81.856638
30.8549821	-81.856695
30.854975	-81.856725
30.8549611	-81.856881
30.8549821	-81.856969
30.8549661	-81.857205
30.8548884	-81.857085
30.8547695	-81.85704
30.85513	-81.857224
30.8552628	-81.857101
30.8552973	-81.85695
30.8553048	-81.85686
30.8551388	-81.856695

Wetland 5

30.8535351	-81.857173
30.8535736	-81.85708
30.8536613	-81.856953
30.8537868	-81.856871
30.853896	-81.856764
30.8539383	-81.85664

30.8552769	-81.861599
30.8553298	-81.861548
30.8553267	-81.861382
30.855432	-81.861285
30.8555372	-81.861232
30.8557592	-81.861092
30.8560343	-81.860864
30.8559181	-81.861013
30.8561902	-81.860975
30.8563536	-81.860852
30.8565561	-81.860502
30.8564441	-81.860647
30.8568474	-81.86075
30.8567435	-81.860735
30.8567269	-81.860629
30.8568951	-81.860732
30.8569583	-81.86074
30.8570462	-81.860761
30.8571296	-81.860724
30.8573692	-81.86075
30.8574897	-81.860805
30.8576104	-81.86069
30.8575745	-81.860567
30.8575883	-81.860456
30.8576068	-81.860309
30.8576575	-81.860134
30.8576201	-81.859995
30.8578143	-81.859658
30.8577517	-81.85977
30.8576108	-81.859887
30.8577892	-81.859535
30.8578356	-81.859446
30.8579412	-81.859505
30.853823	-81.860133

30.8549188	-81.858472
30.8549224	-81.858388
30.8547682	-81.858492
30.8547454	-81.858628
30.8546171	-81.858558
30.8546094	-81.858638
30.8545057	-81.858764
30.8543497	-81.858858
30.8542432	-81.858895
30.8542283	-81.859014
30.8539444	-81.858981
30.853947	-81.85893
30.8539099	-81.858761
30.8539301	-81.858638
30.8538754	-81.858539
30.8537545	-81.858504
30.8537295	-81.85921
30.8538044	-81.859323
30.8538901	-81.859271
30.8539715	-81.85923
30.8539608	-81.85932
30.8540789	-81.85937
30.8541354	-81.859352
30.8542165	-81.859364
30.8543397	-81.859437
30.8543447	-81.859367
30.8543435	-81.859538

30.8557827	-81.857945
30.8555926	-81.858097
30.8554942	-81.858138
30.8553799	-81.858225
30.8551838	-81.858179
30.8552883	-81.858086
30.8552308	-81.858018
30.8552448	-81.857843
30.8553494	-81.857804
30.8553231	-81.857659
30.8553095	-81.857417
30.8551959	-81.85734
30.8550564	-81.857338
30.8548979	-81.857355
30.8547922	-81.857395
30.8547432	-81.857547
30.8547267	-81.85761
30.8546454	-81.857701
30.8545563	-81.857863
30.8544436	-81.857929
30.8546271	-81.857872
30.8543508	-81.858011
30.8540216	-81.85791
30.8542029	-81.858002
30.853817	-81.85792
30.8536772	-81.857893
30.8535876	-81.857592
30.8537174	-81.857651
30.8538692	-81.857655
30.8540436	-81.857627
30.8540911	-81.857456
30.8542499	-81.857454
30.8543585	-81.857428
30.8544917	-81.857316
30.8545852	-81.857234
30.8546653	-81.857131
30.8547335	-81.856952
30.8546938	-81.856868
30.8547314	-81.85674
30.8547037	-81.856638

Example

GPS Form

**US Army Corps of Engineers
Savannah District, Regulatory Division
Global Positioning Systems (GPS) Datasheet
Delineation of Wetlands, Streams and Other Waters
Within the State of Georgia**

USACE File Number _____ Date of Delineation 8/8/2018

Name of Delineator Present _____

Make and Model of GPS Device Used (must be capable of sub-meter accuracy)
Trimble Geo7x (H-Star, Floodlight, NMEA)

Geographic Coordinate System Used NAD 1983 StatePlane Georgia East FIPS (US Feet)

Name of Continually Operated Reference Station Used for Post-processing
CORS, TIFTON (GATF), GEORGIA (ITRF00 (1997)-Derived from IGS08 (NEW))

Date Post-processing Performed 11/15/2018

Percent Dilution of Position (PDOP) (6 or less is required) Max PDOP set to 6

Name and Coordinates of Known Property Corner and/or Monument
N/A

GPS Reading of Known Property Corner and/or Monument
N/A

Frequency of Waypoints Taken During Survey N/A

Note: GPS data must be provided, if requested. If GPS data and/or a GPS delineation is determined unacceptable by the Savannah District, a survey sealed by a surveyor licensed in Georgia will be required.

Approximate Wetland Sketch

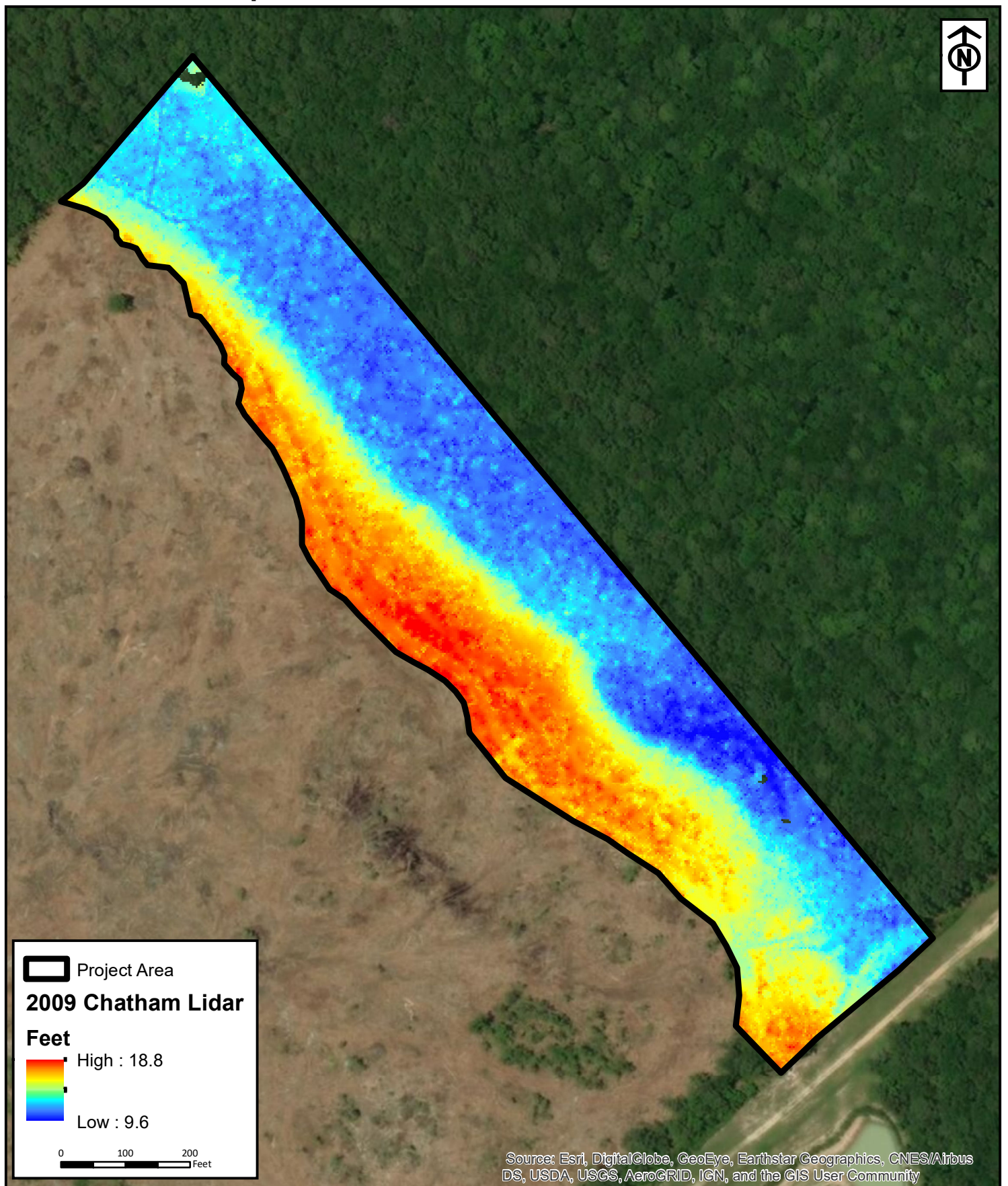


Approximate Wetland Sketch

Color/Infared Map of Project Location



LiDAR example



LiDAR Example

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: _____ City/County: _____ Sampling Date: _____
 Applicant/Owner: _____ State: _____ Sampling Point: _____
 Investigator(s): _____ Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: _____

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
50% of total cover: _____ 20% of total cover: _____					
Sapling Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: _____ 20% of total cover: _____					
Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
_____ = Total Cover				Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.	
50% of total cover: _____ 20% of total cover: _____					
Herb Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No _____	
50% of total cover: _____ 20% of total cover: _____					
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Remarks: (If observed, list morphological adaptations below).					

SOIL

Sampling Point: _____

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		

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.)

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

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

Indicators for Problematic Hydric Soils³:

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

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:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: _____ City/County: _____ Sampling Date: _____
 Applicant/Owner: _____ State: _____ Sampling Point: _____
 Investigator(s): _____ Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ True Aquatic Plants (B14) ___ High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) ___ Saturation (A3) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Water Marks (B1) ___ Presence of Reduced Iron (C4) ___ Sediment Deposits (B2) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Drift Deposits (B3) ___ Thin Muck Surface (C7) ___ Algal Mat or Crust (B4) ___ Other (Explain in Remarks) ___ Iron Deposits (B5) ___ Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9) ___ Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> ___ 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) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ 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:	
Remarks:	

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

Sampling Point: _____

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: _____		20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
Remarks: (Include photo numbers here or on a separate sheet.)				

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0¹
- 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- 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 or equal to 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 _____

DFIRM Map of Project Location

3246 Low Ground Rd, Guyton, GA 31312



Current Flood Zone:
 *Probability of Flooding:
 (30-Year Period)
 Base Flood Elevation:
 Lowest Adj Grade:
 Preliminary Flood Zone:
 Flood Zone Change Type:

Location Information

Water
Community
Map

* Flood Depths shown on this report rounded to the nearest tenth of a foot and represent the best available data for the watershed. For more information, please visit <https://msc.fema.gov/portal/resou>

Nature Does

Many people
 the floodpl
 26% chance
 SFHA w

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 the sa

FOR MORE INFORMATION V

Legend with Flood Zone Designations

- | | | | |
|--------------------------|---|-------------------------------|------------------------------|
| Flood Control Structures | 1% Flood - Floodway (High Risk) | 1% Flood - Zone VE (HighRisk) | Floodway Decrease |
| Base Flood Elevations | 1% Flood - Zone AE (High Risk) | Area Not Included | Floodway Increase |
| Cross Sections | 1% Flood - Zone A, AH, or AO (HighRisk) | Letters of Map Revision | 100-Year Flood Zone Decrease |
| Coastal Transects | 0.2% Flood - X-Shaded (Moderate Risk) | Coastal Barrier Resource Area | 100-Year Flood Zone Increase |
| FIRM Panel Index | Area of Underdetermined Flood Hazard | Zone Change | |

Disclaimer: This data is not to be used to determine any base flood elevations or flood zone designations for NFIP (National Flood Insurance Program) purposes. For NFIP flood insurance and regulation purposes, please refer to the published effective concern. Values displayed for Current Flood Zone, Preliminary Flood Zone, Flood Zone Change Type, and Probability of Flooding over a 30-year period based on center of dot location, not extent of structure(s).