

REGULATORY UPDATES

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Chief, Regulatory Division

912-652-5047

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Regulatory Highlights

- STRATEGIC HUMAN CAPITAL PLAN
- AVATAR & WHAT IS RIGHT?
 - ▶ Jurisdiction
 - ▶ Permits
 - ▶ Mitigation/Mitigation Banking
- PROPOSED NWP PROCESS
- MITIGATION UPDATES
- OTHER OUTREACH INITIATIVES



Mission

- Is to implement the delegated Department of the Army regulatory authorities provided under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act and Section 103 of the Ocean Dumping Act.
- Is to protect the nation's aquatic resources, while allowing reasonable development through fair and balanced permit decisions in accordance with federal laws and regulations.



Strategic Human Capital Plan

- **Baseline**
 - Existing Conditions
 - Workload/Budget
 - Workforce
 - Staff Diversity
 - Competencies
- **Workload Development**
 - Hiring Processes
 - Recruitment
 - Retention



STRATEGIC HUMAN CAPITAL MANAGEMENT PLANS

Workforce Development Program

RESOURCE PLAN

BUDGET SOP

AVATAR ENHANCEMENTS

- Jurisdiction
- Permits
- Mitigation
- Compliance
- Enforcement

TRAINING

- Internal Training Plan
- Handbook
- Orientation Program
- Field Manuals
- EAC

COMMUNICATIONS

- Workshops
- News Letters
- Web-Based
- Pamphlets
- Avatar

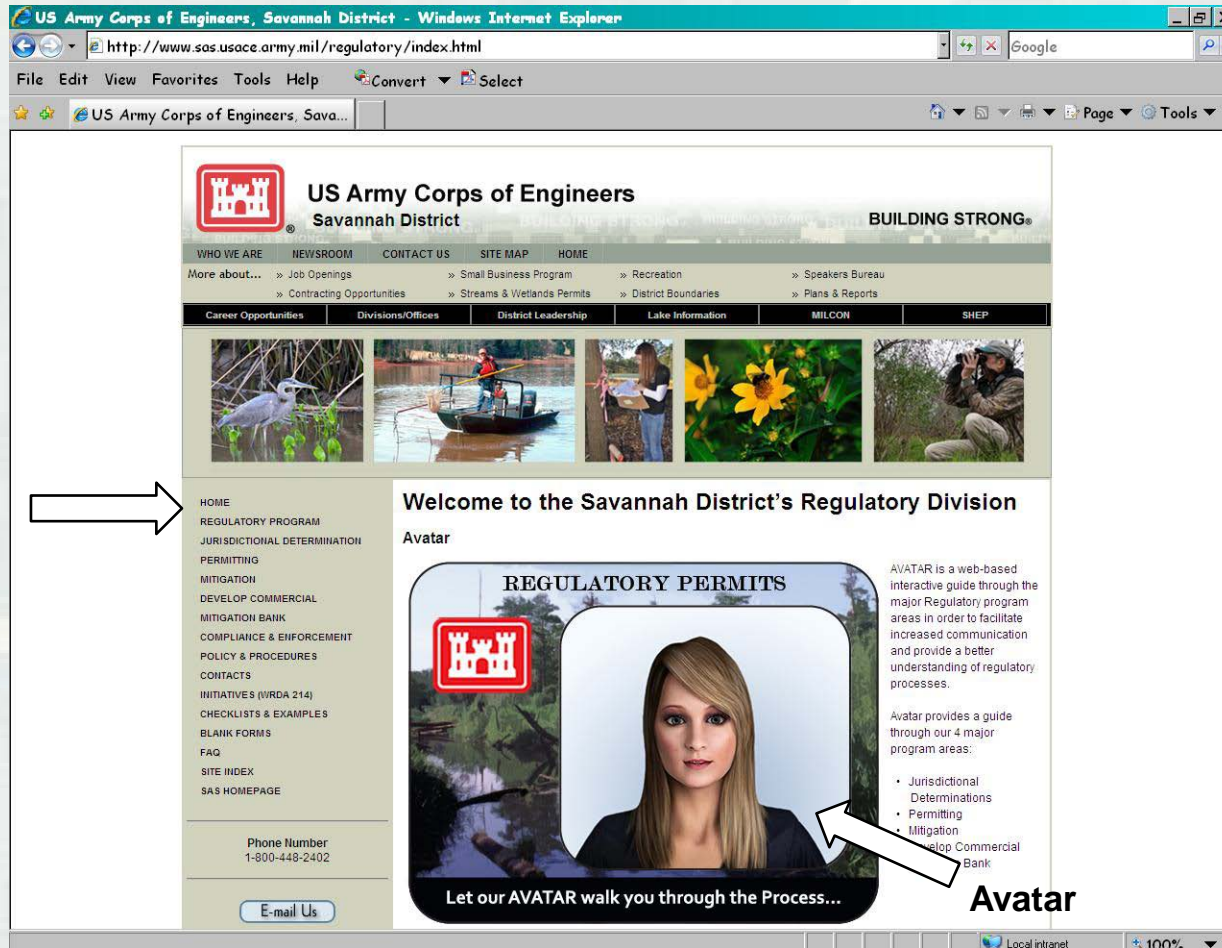
POLICY

- Office
- Technical
 - Consistency
 - Mitigation
 - Farm Ponds
 - Enforcement
 - Field Manuals
 - Nationwide Permits



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Website – A New Look



<http://www.sas.usace.army.mil/index.html>



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**US Army Corps
of Engineers**
Savannah District

Hi and welcome to the US Army Corps of Engineers Savannah District Regulatory Training Module. If you are considering a project in or near a lake, river, stream, or wetland within the State of Georgia, you'll find that our website provides all the information and resources necessary to pursue a permit for your proposed project.

The following modules will help you apply for a Jurisdictional Determination and the appropriate permit. In addition, these modules will help you determine mitigation requirements. And finally, we will discuss the process for developing and operating a commercial mitigation bank.

You will find application forms, checklists, related links and other resources designed to make the process simpler.

And remember, you can always contact us directly by email or phone if you have any questions or need any additional information.

This module is a central source for information on the Savannah District's Regulatory Program

Jurisdictional Determination Permitting Mitigation Develop Commercial Mitigation Bank

The JD process helps to identify wetlands and other waterbodies, such as lakes, rivers, and streams that are subject to US Army Corps of Engineer's jurisdiction. The JD is essential for planning purposes and determining if a permit is required for any work you may want to perform on a particular property. There are three types of JDs used by the Savannah District. They are Preliminary JDs, Expanded Preliminary JDs, and Approved JDs.

[Learn More](#)

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US Army Corps of Engineers Savannah District

Turn Guide Off

Jurisdictional Determination | Permitting | Mitigation | Develop Commercial Mitigation Bank

Blank Forms | Checklists & Examples | Policy & Procedures | District Boundary Map | Glossary of Terms | Helpful Links | FAQs

Key steps in this process:

1. Ensure that the JD Request Form is filled out completely and accurately – be sure to sign it!
2. Delineations of waters, including wetlands, must follow all current guidance and be complete to be processed.
3. Provide all information up front so we may effectively and efficiently serve you.

Welcome to our overview on jurisdictional determinations, or "JDs" as they are commonly known. This module will discuss the different types of JDs and help assist you in applying for a determination.

AJD is the process of locating, identifying, and classifying waters of the United States.

Specifically, the JD process helps to identify wetlands and other waterbodies, such as lakes, rivers, and streams that are subject to US Army Corps of Engineer's jurisdiction. The JD is essential for planning purposes and determining if a permit is required for any work you may want to perform on a particular

Jurisdictional Determination

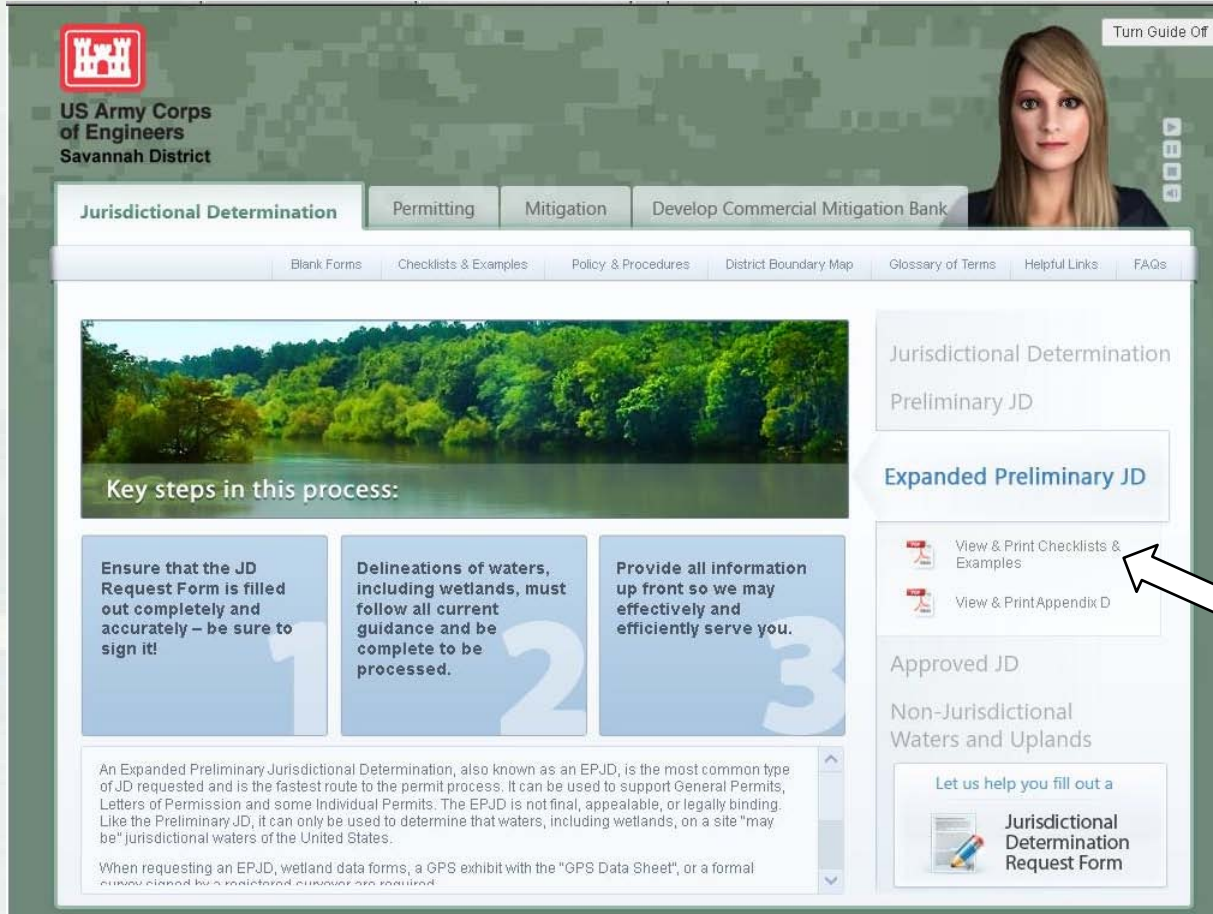
- Preliminary JD
- Expanded Preliminary JD
- Approved JD
- Non-Jurisdictional Waters and Uplands

Let us help you fill out a

Jurisdictional Determination Request Form



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US Army Corps of Engineers Savannah District

Turn Guide Off

Jurisdictional Determination | Permitting | Mitigation | Develop Commercial Mitigation Bank

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3. Provide all information up front so we may effectively and efficiently serve you.

An Expanded Preliminary Jurisdictional Determination, also known as an EPJD, is the most common type of JD requested and is the fastest route to the permit process. It can be used to support General Permits, Letters of Permission and some Individual Permits. The EPJD is not final, appealable, or legally binding. Like the Preliminary JD, it can only be used to determine that waters, including wetlands, on a site "may be" jurisdictional waters of the United States.

When requesting an EPJD, wetland data forms, a GPS exhibit with the "GPS Data Sheet", or a formal survey signed by a registered surveyor are required.

Jurisdictional Determination

Preliminary JD

Expanded Preliminary JD

- View & Print Checklists & Examples
- View & Print Appendix D

Approved JD

Non-Jurisdictional Waters and Uplands

Let us help you fill out a

Jurisdictional Determination Request Form



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Expanded Preliminary JD Example

Expanded Preliminary Jurisdictional Determination (EPJD) Checklist US Army Corps of Engineers Savannah District

This checklist is to assist you in submitting complete and proper information. Please keep in mind that this is not an exhaustive list. Each project has unique components and **more or less information may be required** by the project manager to complete the EPJD on any given project. However, this list contains information typically necessary for this office to issue an EPJD. We appreciate your cooperation in providing this information at the time of your request. Failure to provide this information may delay our response to you.

1. **Written request** indicating an EPJD on the two page form, "REQUEST FOR JURISDICTIONAL DETERMINATION FOR PROPERTY LOCATED WITHIN THE STATE OF GEORGIA" available at: <http://www.sas.usace.army.mil/regulatory/JDs.html>. The form must be filled out completely and include all contact information and written permission (signature) from the property owner or the owner's legal representative for USACE personnel to access the property.
 - a. **Name, address, and phone number** of applicant, current property owner(s), and agent/consultant (if applicable).
 - b. **Location** of property or review area (road names, cross streets, nearest town, etc).
 - c. **Directions** to the property or review area from the nearest interstate highway. Also include a MapQuest, Google, or other map with directions.
 - d. **Coordinates** of center of property or review area in **decimal degrees** (xx.xxxx°N, -xx.xxxx°W format). Linear projects should also include decimal degrees location of the start and end of the review/project area.
 - e. **Size** of property or review area in acres.
 - f. **Name of nearest named waterbody** (stream/river/lake) to which the property or review area is hydrologically connected, closest TNW, name and number of drainage basin (if the property is connected to an unnamed tributary, then specify the nearest named waterbody, e.g. unnamed tributary to Wilmington River).
2. **Completed EPJD form (Appendix D)** for all waters including wetlands that may be jurisdictional waters on-site available at: <http://www.sas.usace.army.mil/regulatory/documents/PrelimAppendixD.pdf>. The first three pages must be filled out in their entirety, the fourth page only if applicable.
3. **Complete the EPJD form (Appendix E)** for any on-site water or wetland you believe to be non-jurisdictional or isolated, available at: <http://www.sas.usace.army.mil/regulatory/documents/PrelimAppendixE.pdf>. The first page must be filled out in its entirety, the second page only if applicable.
4. **Project name.** The name of the subdivision or project (e.g. Lakeview Subdivision, Wally World expansion).
5. **Past Actions** including JDs, Permits, etc with the Corps Action ID number.
6. **Property record(s)** for the property or review area.
7. **Photographs** should be representative of the site and may include pictures of the wetlands, soils, tributaries, etc... on the site. Photographs will help in determining the need for a site visit.

Revised Date: 1/28/11

8. **Data forms** of both upland and wetland data points for each wetland type; supplements available at: http://www.usace.army.mil/CECW/Pages/reg_supp.aspx. All data points shall include distinct decimal degrees location of the point taken.
9. **Brief narrative description** of each water and wetland including type and function of each.
10. **Size of waters of the US.** Total area of each wetland and open water on site. Total linear feet of each on site tributary. Name each water (i.e. Wetland A, Tributary A, Wetland 1, Stream 1, Open Water 1...). GPS exhibits or surveys should not title waters as jurisdictional or non-jurisdictional. For projects with multiple distinct crossings, submit and electronic copy in Excel format of the Waters Upload Sheet available at: <http://www.sas.usace.army.mil/regulatory/JDs.html>.
11. **Survey** in accordance with the requirements available at: <http://www.sas.usace.army.mil/regulatory/JDs.html>. For a GPS exhibit, provide an excel table that includes decimal degrees and a flag numbers for each flag location of each aquatic resource on-site.
12. **Maps** which must include: scale, north arrow, title block with date, property name, drawing number/preparer, revision dates, roads and waterway names and project/property boundaries.
 - a. **Vicinity/Location Map** including exact location of the property or review area. It should include the nearest intersection of two state highways or other identifiable reference points. A USGS quadrangle map and/or street atlas is preferred.
 - b. **Map of Wetlands and Other Waters, show all on-site ditches.** Include data points taken, referencing a specific data form, and location of photographs taken including direction of each representative photograph.
 - c. **Soils Map** available at: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.
 - d. **Aerial Map** with property or review area limits and wetland/waters sketch including date of photo, available at: <http://earth.google.com/>.
 - e. **USGS Topographic Map** including quadrangle name and date, available at: http://store.usgs.gov/b2c_usgs/b2c/start?x=cr3standard&pitres_prd1.do.
 - f. **Flood Plain Map**, available at: <http://msc.fema.gov>.
 - g. **National Wetlands Inventory (NWI) Map**, available at: <http://www.fws.gov/wetlands/Data/Mapper.html>.
 - h. **Infra-red maps** (optional).
 - i. **Engineering Surveys**, e.g. two foot or less topographic map of the site (optional).
 - j. **LIDAR** is highly recommended where available and eases the review of a project including: desktop verification requests, re-verification requests and determining whether a site visit is necessary.

Questions can be directed to the following:

Coastal Branch: Kim Garvey at (912) 652-5133 or Kimberly.L.Garvey@usace.army.mil
Piedmont Branch: Alan Miller at (678) 422-2729 or Alan.Miller@usace.army.mil

Revised Date: 1/28/11

EPJD Checklist



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Expanded Preliminary JD Example

REQUEST FOR JURISDICTIONAL DETERMINATION FOR PROPERTY LOCATED WITHIN THE STATE OF GEORGIA

APPLICANT:

Name (First Last) Joe T. Public
Address 123 Main Street
City Savannah State GA Zip Code 31410
Phone (912) 555 - 1234 Fax (912) 555 - 5678 Email joetpublic@email.com

PROPERTY OWNER: ☒ Same as Applicant

Name (First Last) _____
Address _____
City _____ State GA Zip Code _____
Phone () - - Fax () - - Email _____

AGENT/CONSULTANT: (if applicable)

Name (First Last) John Consultant
Address P.O. Box 1234
City Savannah State GA Zip Code 31410
Phone (912) 555 - 8888 Fax (912) 555 - 9999 Email john@consulting.com

PROPERTY LOCATION:

Location/Address/Subdivision 123 Lake Street / Riverview Subdivision
City (in/near) Savannah County Chatham

Directions from nearest interstate (use additional sheet(s) if needed):
From downtown Savannah, take I-16 West. From I-16, take exit 157A to merge onto I-95 South toward Brunswick/Jacksonville. Take exit 94 to merge onto GA-204 W/Fort Argyle Road. Site is approximately 5 miles down Fort Argyle Road on right near Falcon Lane.

Latitude 32 1234 Longitude .81 1234
(In decimal degrees at center of the site. Linear projects should also include decimal degrees location of the start, end, and any turn points of the review/project area. Use additional sheet(s) if needed.)

Property Size (acres and/or dimensions) 52 acres

Nearest named waterbody (Stream/River/Lake) Ogeechee River

10/15/2010

Page 1 of 2

TYPE OF JURISDICTIONAL DETERMINATION:

Please indicate the type of jurisdictional determination (JD) you are requesting by marking the appropriate type below. The Corps encourages the regulated public to utilize the preliminary JDs and expanded preliminary JDs where appropriate.

☐ **Preliminary Jurisdictional Determination** - Preliminary JDs are non-binding "written indications that there may be waters of the United States, including wetlands, on a parcel or indications of the approximate location(s) of waters of the United States or wetlands on a parcel. Preliminary JDs are advisory in nature and may not be appealed." (See 33 C.F.R. 331.2.)

☒ **Expanded Preliminary Jurisdictional Determination** - The intent of using the expanded preliminary JD is to allow a landowner or other "affected party" to move ahead expeditiously to obtain a Corps permit authorization where the party determines that it is in his or her best interest. In most cases, expanded preliminary JDs are also non-binding "written indications that there may be waters of the United States, including wetlands, on a parcel or indications of the approximate location(s) of waters of the United States or wetlands on a parcel." However, Corps verification of a delineation, which is submitted in conjunction with an expanded preliminary JD request, would provide the landowner or affected party with defensible documentation concerning the limits of Corps jurisdiction.

☐ **Approved Jurisdictional Determination** - As defined in Regulatory Guidance Letter 08-02, an approved JD is an official Corps determination that jurisdictional "waters of the United States," or "navigable waters of the United States," or both, are either present or absent on a particular site. An approved JD precisely identifies the limits of those waters on the project site determined to be jurisdictional under the CWA/RHA. (See 33 C.F.R. 331.2.)

I, Joe T. Public, request a jurisdictional determination of the above property, grant the US Army Corps of Engineers permission to conduct an on-site inspection, and certify that I am authorized to grant permission for entry into the property.

SIGNED Joe T. Public DATE 1/26/11

****TO COMPLETE THIS REQUEST ALL OF THE REQUIRED INFORMATION IN THE APPLICABLE CHECKLIST MUST BE PROVIDED ****

10/15/2010

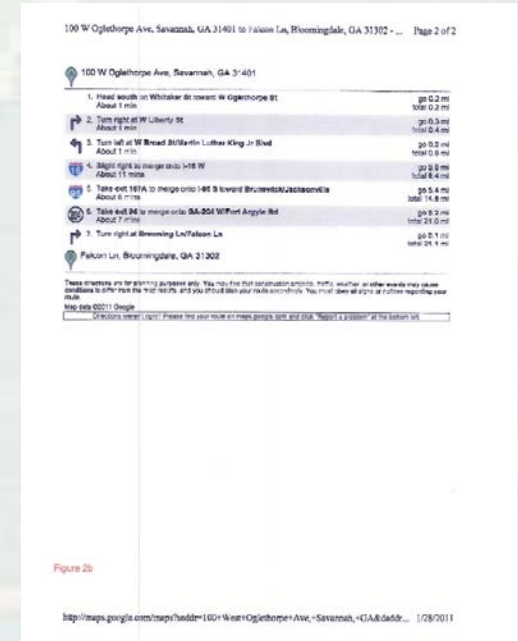
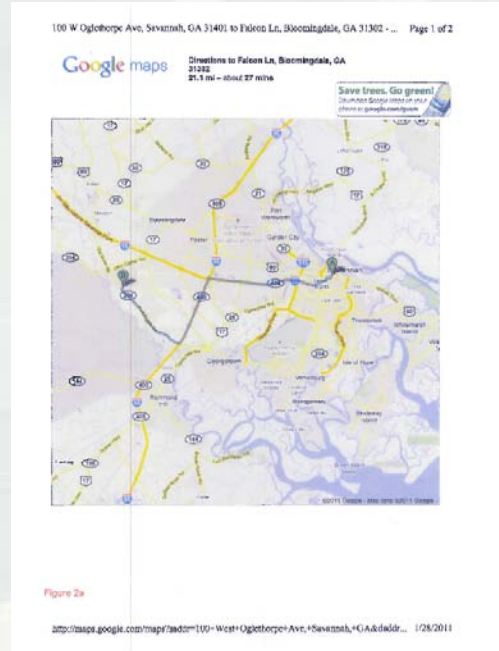
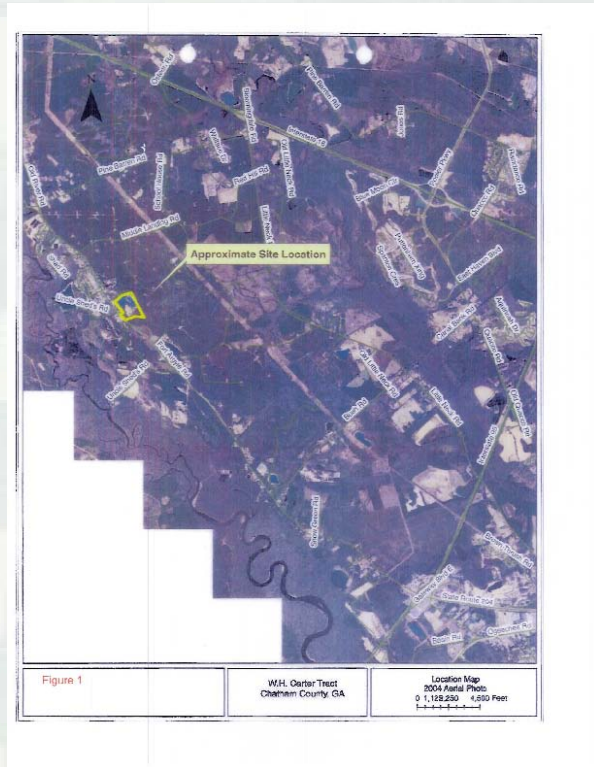
Page 2 of 2

JD Request Form



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Avatar Expanded Preliminary JD Example



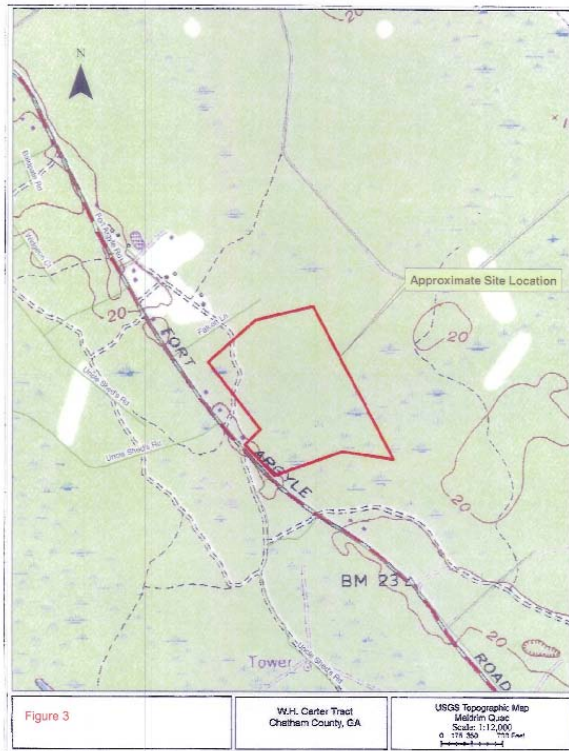
Driving directions to site

Location Map

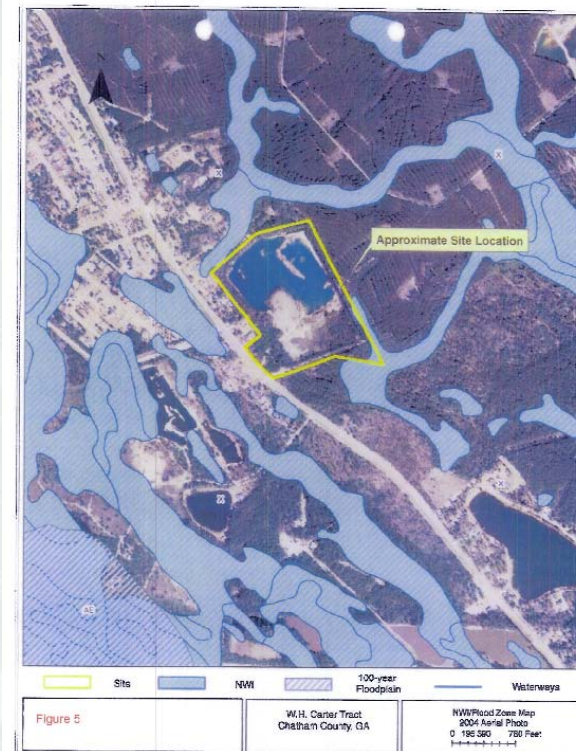


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Avatar Expanded Preliminary JD Example



USGS Topographic Map



NWI/Flood Zone Map



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Expanded Preliminary JD Example



Soils Map

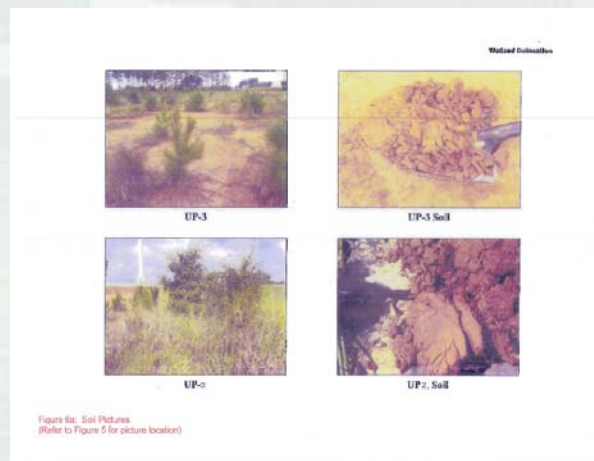
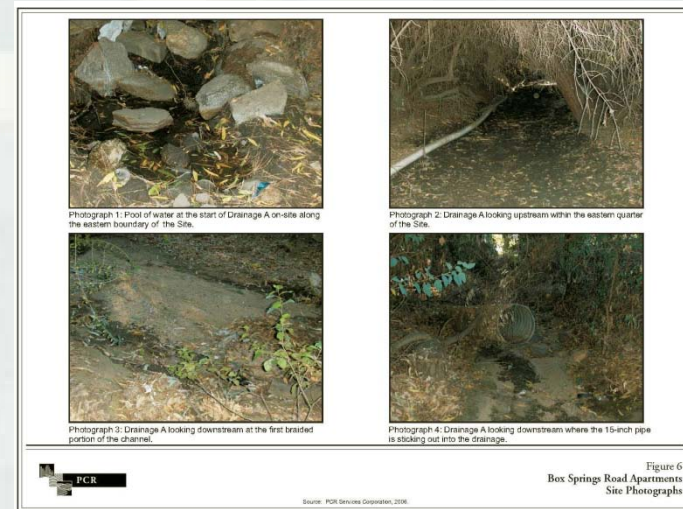
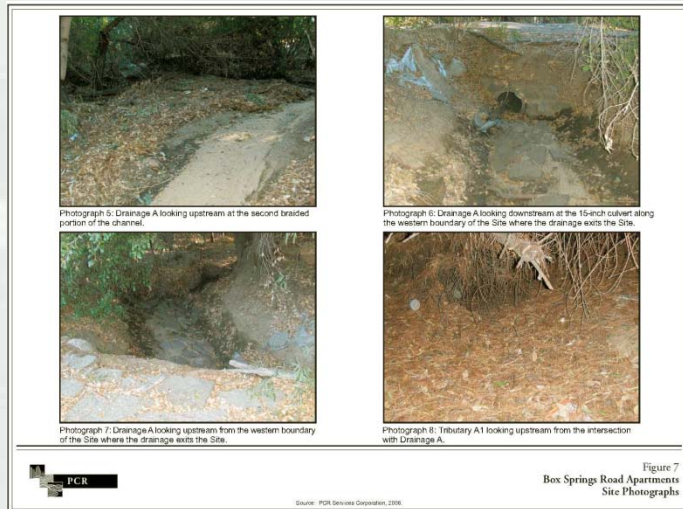


Wetland Data Point Map



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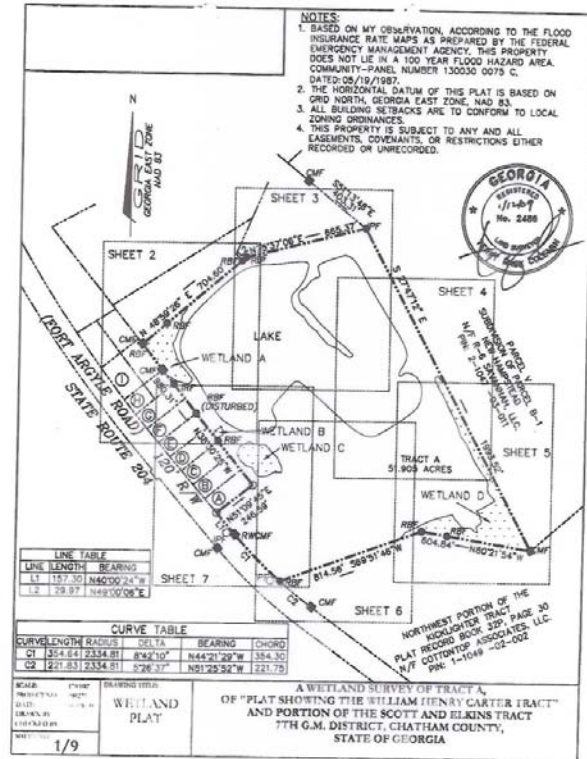
Expanded Preliminary JD Example



Supplemental Pictures

Avatar Expanded Preliminary JD Example

Formal GPS survey



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

USACE File Number: 200906967 Date of Delineation: 07/14/2009

Name of Delineator Present: Brandon Smith, Jonathan Oetzel

Make and Model of GPS Device Used (must be capable of sub-meter accuracy): Trimble Geo X2H with SBAS differential correction

Geographic Coordinate System Used: NAD 83 Contour

Name of Continuously Operated Reference Station Used for Post-processing: CORS, Jacksonville FL

Date Post-processing Performed: 07/16/2009

Percent Dilution of Precision (PDOP) (6 or less is required): Average=3.5

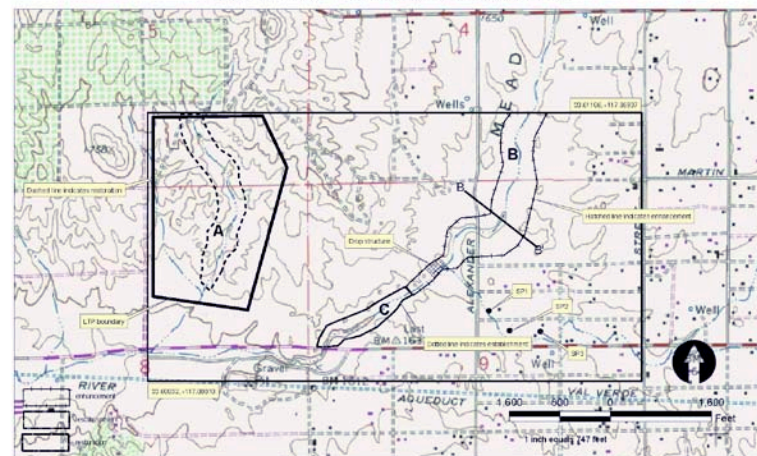
Name and Coordinates of Known Property Corner and/or Monument: SS-001- Culvert at Road Crossing of Butler Land Property Boundary 31.23400N, 81.479700W

GPS Reading of Known Property Corner and/or Monument: 31.234000N, 81.479700W

Frequency of Waypoints Taken During Survey: Waypoints Taken at 30'-50' intervals, and average of 14 positions were taken per waypoint.

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

Figure X. Happy Frogs development mitigation sites



Formal survey by registered
surveyor



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Avatar Expanded Preliminary JD Example

Appendix D

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):
October 29, 2010

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD: Joe T. Pollio, 123 Main Street,
Seaside, CA, 94134

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)
State: CA County/parish/borough: Clatsop City: Seaside
Center coordinates of site (in/long in degree decimal format): Lat: 39° Pick List, Long: 124° Pick List
Universal Transverse Mercator:
Name of nearest waterbody: Ogish River
Identify (estimate) amount of waters in the review area:
Non-wetland waters: linear feet: width (ft) and/or acres:
Wetland Class:
Stream Flow:
Wetlands: 25-W acres:
Wetland Class: POC
Name of any water bodies on the site that have been identified as Section 10 waters:
Tidal: N/A
Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☐ Field Determination. Date(s):

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction to any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R.

1

331.5(a)(2). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plot submitted by or on behalf of the applicant/consultant:
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant:
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps:
☐ Corps navigable waters' study:
☐ U.S. Geological Survey Hydrologic Atlas: Wetland
☐ USGS NHD data:
☐ USGS 8 and 12-digit HUC maps:
☒ U.S. Geological Survey map(s). Cite scale & quad name: Wetland Quad: 1:12,000.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Oregon and Clatsop Counties
☒ National wetlands inventory map(s). Cite name: NWI Field Review Map 2004 Aerial Photo
☒ State/Local wetland inventory map(s):
☒ FEMA/FIRM maps: Aerial Photo Zone Wetland Aerial Photo
☒ 100-year Floodplain Elevation in: (National Geodetic Vertical Datum of 1929)
☒ Photographs ☒ Aerial (Name & Date): 2004 2004
☐ or ☒ Other (Name & Date): Photo of US-5 + up-2 scale
☐ Previous determination(s). File no. and date of response letter:
☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory Project Manager
(REQUIRED)

Joe T. Pollio
Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining the signature is
impracticable)

2

Appendix D



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Expanded Preliminary JD Example

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Title: Riverview Tract City/County: Savannah/Chatham Sampling Date: 10/28/2019
 Applicant/Owner: Joe T. Public State: GA Sampling Point: 1
 Investigator(s): John Consultant Section, Township, Range: N/A
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRR T Lat: 32 1234 Long: -81 1234 Datum: WGS 84
 Soil Map Unit Name: Elabelle NWI classification: PFO1C
 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 Soil ☒ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation Soil ☐ or Hydrology Soil ☐ 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 ☐ Is the Sampled Area within a Wetland? Yes ☒ No ☐
 Hydric Soil Present? Yes ☒ No ☐
 Wetland Hydrology Present? Yes ☒ No ☐
 Remarks: Site significantly disturbed.

HYDROLOGY

Wetland Hydrology Indicators:
 Primary Indicators (minimum of one is required, check all that apply):
 Surface Water (A1) ☒ Water Stained Leaves (B6) ☒
 High Water Table (A2) ☒ Aquatic Fauna (B13) ☒
 Saturation (A3) ☒ Marl Deposits (B15) (LRR U) ☒
 Water Marks (B1) ☒ Hydrogen Sulfide Odor (C1) ☒
 Sediment Deposits (B2) ☒ Oxidized Rhizospheres on Living Roots (C3) ☒
 Drift Deposits (B3) ☒ Presence of Reduced Iron (C4) ☒
 Algal Mat or Crust (B4) ☒ Recent Iron Reduction in Tilled Soils (C6) ☒
 Iron Deposits (B5) ☒ Thin Muck Surface (C7) ☒
 Inundation Visible on Aerial Imagery (B7) ☒ Other (Explain in Remarks) ☒ FAC Neutral Test (C5) ☒

Secondary Indicators (minimum of two required):
 Surface Soil Cracks (B6) ☐
 Sparingly 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) ☐
 Geomorphologic Position (C2) ☐
 Shallow Aquifers (C3) ☐
 Shallow Aquifers (C3) ☐
 FAC Neutral Test (C5) ☒

Field Observations:
 Surface Water Present? Yes ☒ No ☐ Depth (inches): 0
 Water Table Present? Yes ☒ No ☐ Depth (inches): 8
 Saturation Present? Yes ☒ No ☐ Depth (inches): 2 Wetland Hydrology Present? Yes ☒ No ☐
 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region – Interim Version

VEGETATION – Use scientific names of plants.

Sampling Point: 1

Tree Stratum (Plot sizes: 30 feet)
 1. Pinus taeda Absolute % Cover: 5 Dominant Species? Yes Indicator Status: FAC
 2. Quercus nigra 5 Yes FAC
 3. Persea borbonia 5 Yes FACW
 4. Nyssa sylvatica 10 Yes OBL
 5.
 6.
 7.
 8.
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Nationwide Permit Update

- Re-issued every 5-years.
- Feb 11 – 2012 NWPs issued in Federal Register
 - 34 of 48 NWPs to be reissued with no changes
 - New NWPs A and B proposed for energy projects

Mar 19, 2012 –Proposed NWP Effective Date



2012 Nationwide Permits

- Jan 11 – Initiated consultation with Native American Indian Tribes for issuance of 2012 NWP
- Mar 11 – Issued a Public Notice soliciting public input on revisions to NWP Regional Conditions (RCs)
- Apr 11 – Initiated coordination with resource agencies for development of 2012 NWP RCs
- Apr 11 – Initiated consultation with USFWS and NMFS on use of Standard Local Operating Procedures for Endangered Species (SLOPES)
- May 11 – Initiated Coordination with Georgia EPD and CRD for Water Quality and CZM Certifications



2012 Nationwide Permits

- Aug 11 – Issue Public Notice advertising final draft of 2012 NWP RCs
- Oct 11 – Prepare draft Decision Documents for final approval of final NWP RCs
- Dec 11 – Complete coordination with Georgia EPD and CRD for issuance of conditional Water Quality and CZM Certifications
- Dec 11 – Final 2012 NWPs published in Federal Register, 90 days prior to March 19, 2012



Final Mitigation Rule

- 2008 - Final Mitigation Rule (33CFR Part 332)
- Rule requires watershed-level review
- Mitigation Hierarchy
 - ▶ Mitigation bank credits
 - ▶ In-lieu fee credits
 - ▶ Permittee - responsible watershed approach
 - ▶ Permittee - responsible: on-site & in-kind
 - ▶ Permittee - responsible: off-site and/or out-of-kind



Mitigation Banking Tools

Draft Guidelines to Establish and Operate Mitigation Banks in GA



Primary/Secondary Service Area Modifications in the State of Georgia

- 17 Primary Service Areas (PSA)
- 52 – 8-digit HUCs
- Approx 1000 – 12-digit HUCs

SOP Revisions – In development now.

BI Evaluation and Findings



- 1996/97 – Savannah District's Mitigation SOP. Revised in 2000 and 2004.
- 2010 – Revising SOP. Emphasis will placed on watershed context and habitat replacements.

Guidelines to Evaluate Proposed Mitigation Bank Credit Purchases in the State of Georgia



Regulatory Internet Banking Information Tracking System

- 1992 – 1st Commercial Mitigation Bank – Millhaven Plantation, Screven County
- 100+ Commercial Mitigation Banks Approved
- 68% Approved Since 2005
- 50% Approved Since 2007
- 30,000+ Acres in Georgia Mitigation Banks



RIBITS

- Online database, viewable to the public
- Provides:
 - ▶ Secure, web-based application
 - ▶ Online tracking of mitigation banks and in-lieu fee programs/sites
 - ▶ **REGULATORY:** Credit tracking, national reporting, information repository, ORM interface
 - ▶ **MITIGATION BANKERS:** Technology transfer, electronic ledger, contact information
 - ▶ **PUBLIC:** Information lookup



RIBITS

Regulatory In-lieu Fee and Bank Information Tracking System



Navigation

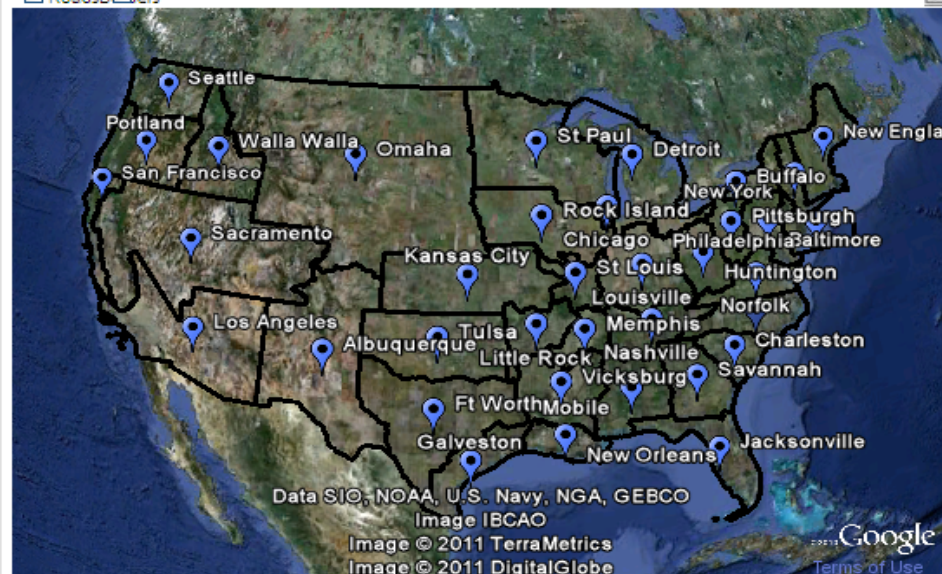
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Filter View & Login

LOGIN

USACE District **ALL DISTRICTS**

☐ Roads ☐ Rivers



News

- [Plug-in Information](#)
- [Security Certificates](#)

Map Results

List of Banks - Microsoft Internet Explorer provided by U.S. Army Corps of Engineers

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Live Search

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List of Banks
SAS InfoNet Homepage

Page Tools

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Filter View & Login

LOGIN

USACE District: Savannah
State: ALL STATES
USFWS Field Office: ALL OFFICES
Feedback

Map Results

103 banks in District of Savannah including single clients

Bank Name	District	Status
Alecusly	Savannah	Approved
Applewood	Savannah	Approved
Bannister Creek	Savannah	Approved
Barnett Farms	Savannah	Approved
Bath Branch	Savannah	Approved
Big Cotton Indian Creek	Savannah	Approved
Big Creek	Savannah	Approved
Black Creek	Savannah	Approved
Blue Creek	Savannah	Approved
Broadfield	Savannah	Approved
Broxton Rocks	Savannah	Approved
Brushy Creek	Savannah	Approved
Butler Creek	Savannah	Approved
Carrollton Mills	Savannah	Approved
Cecil Bay	Savannah	Approved
Chattahoochee	Savannah	Approved
Cherry Creek	Savannah	Approved
Chicopee Woods	Savannah	Approved
Cochrans Creek	Savannah	Approved
Conasauga River	Savannah	Approved
Coosa River	Savannah	Approved
Demorest Lake	Savannah	Approved
East Swift Creek	Savannah	Approved
Etowah River Preserve	Savannah	Approved
Flint River	Savannah	Approved
Goat Farm	Savannah	Approved
Greensboro	Savannah	Approved
Gum Log	Savannah	Approved
Hambidge Center	Savannah	Approved
Hard Labor Creek	Savannah	Approved
Hoq Creek	Savannah	Approved

Map for USACE District Savannah

Status: All... Include: ☒ Single Client Credit Type: All... Credit Classification: All...

☐ Roads ☐ USACE ☐ Districts ☐ USFWS ☐ File ☐ Offices ☐ HUCS ☐ Footprint

Data SIO, NOAA, U.S. Navy, NGA, GEBCO, Inc., O
Image, USDA Farm Service Agency

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List of Banks - Microsoft Internet Explorer provided by U.S. Army Corps of Engineers

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File Edit View Favorites Tools Help

Links >> Convert Select

List of Banks SAS InfoNet Homepage

RoadsB UsersUSAC DistrictsUSFWS File OfficesHUCSFootprint

Big Cotton Indian Creek

Last Transaction: Jun 10, 2010

Name	Available Credits	Withdrawn Credits	Released Credits	Potential Credits
Wetland				
Wetlands	.24	13.78	14.02	32.48
Stream				
Stream	2724.6	15666.65	18391.25	28235.25

Alabama South Carolina

Coosa River Yellow Creek Big Sandy Creek Mulberry River Gum Log Wahatchee Creek Pine Mountain Snapfinger Creek Goat Farm Little River

Carrollton Mills Flint River Pritchett Big Cotton Indian Creek Bath Branch Phinizy Swamp Centralhatchee Rocky Creek Shadydale

Tower Bar Callawa Ossa

Wilkinson-Oconee Millhaven Plantation

Yam Grandy AA Shaw

Black Creek Pritchards Is

Old Thorn Pond Margin Bay Tide Gate Savannah

Salt Creek Ogeechee River Vallambrosa

Moreland Place Broxton Rocks

Kolomoki

Offerman (Marshlands, Inc.)

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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Indian Creek Indian Creek Cecil Bay

Local intranet 90%

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[Ledger][Bank Contact Sheet][Annual Inspections][Cyber Repository][Photo Gallery]

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Filter View & Login

LOGIN

USACE District: Savannah

State: ALL STATES

USFWS Field Office: ALL OFFICES

Feedback

General Bank Information

Big Cotton Indian Creek

District: Savannah

Field Office: Georgia

Permit No: 200306300

Total Acres: 75.00

Bank Status: Approved

Bank Type: Private Commercial

Website:

Comments: This bank's stream totals 8,115 Linear Feet.

Contact Information

Wetland and Ecological Consultants

3225 South Cherokee Lane
Building 800
Woodstock, GA 30188

Rick Whiteside
3225 South Cherokee Lane
Building 800
Woodstock, GA 30188
Email: rwwhiteside@wet-eco.com
Phone: (770)591-9990

Credit Ledger Summary

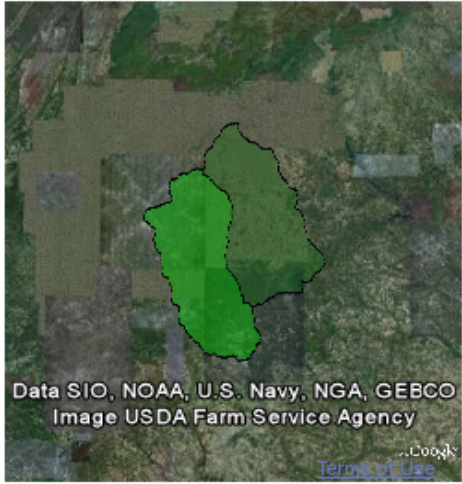
Last Transaction: Jun 10, 2010

Name	Available Credits	Withdrawn Credits	Released Credits	Potential Credits
Wetland				
Wetlands	24	13.78	14.02	32.48
Stream				
Stream	2724.8	15868.65	18391.25	28235.25

Google Map for Big Cotton Indian Creek

☒ Primary ☒ Boundary

Download KML!



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image USDA Farm Service Agency

Terms of Use

Credit Ledger at a Glance for Big Cotton Indian Creek

Last Transaction: Jun 10, 2010

Name	Available Credits	Withdrawn Credits	Released Credits	Potential Credits
Wetland				
Wetlands	.24	13.78	14.02	32.48
Stream				
Stream	2724.6	15666.65	18391.25	28235.25

Query Ledger

Extended View ☐ No ☐ Yes

Transaction Type

Credit Classification

Jurisdiction

Permit No

TW = Total Withdrawal Credits, BoR = Balance of Released Credits

View	Type	Jurisdiction	Date	Credits	Permits	Credit Classification	Impact HUC	Impact Quantity	Stream		Wetlands		Comment
									TW	BoR	TW	BoR	
	Init	Federal	11/08/2004	24.94		Wetlands			0	0	0	0	
	Init	Federal	11/08/2004	9,335.25		Stream			0	0	0	0	
	Init	Federal	11/08/2004	18,900.00		Stream			0	0	0	0	
	Init	Federal	11/08/2004	5.88		Wetlands			0	0	0	0	
	Init	Federal	11/08/2004	1.66		Wetlands			0	0	0	0	
	Rel	Federal	11/08/2004	4.80		Wetlands			0	0	0	4.8	
	Rel	Federal	11/08/2004	4,201.00		Stream			0	4201	0	4.8	
	Wdr	Federal	01/01/2005	.50	200414930	Wetlands			0	4201	.5	4.3	
	Wdr	Federal	01/01/2005	1.50	200416780	Wetlands			0	4201	2	2.8	
	Wdr	Federal	01/01/2005	1,115.00	200409070	Stream			1115	3086	2	2.8	
	Wdr	Federal	01/01/2005	643.00	200401500	Stream			1758	2443	2	2.8	
	Wdr	Federal	01/01/2005	1,173.00	200401450	Stream			2931	1270	2	2.8	
	Wdr	Federal	01/01/2005	570.00	200400220	Stream			3501	700	2	2.8	

RIBITS

Regulatory In-lieu Fee and Bank Information Tracking System

[\[Bank Info\]](#) [\[Cyber Repository\]](#)

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Filter View & Login

Folder Information

MBI

Date Created: Nov 11, 2009

Description:

Folder Documents

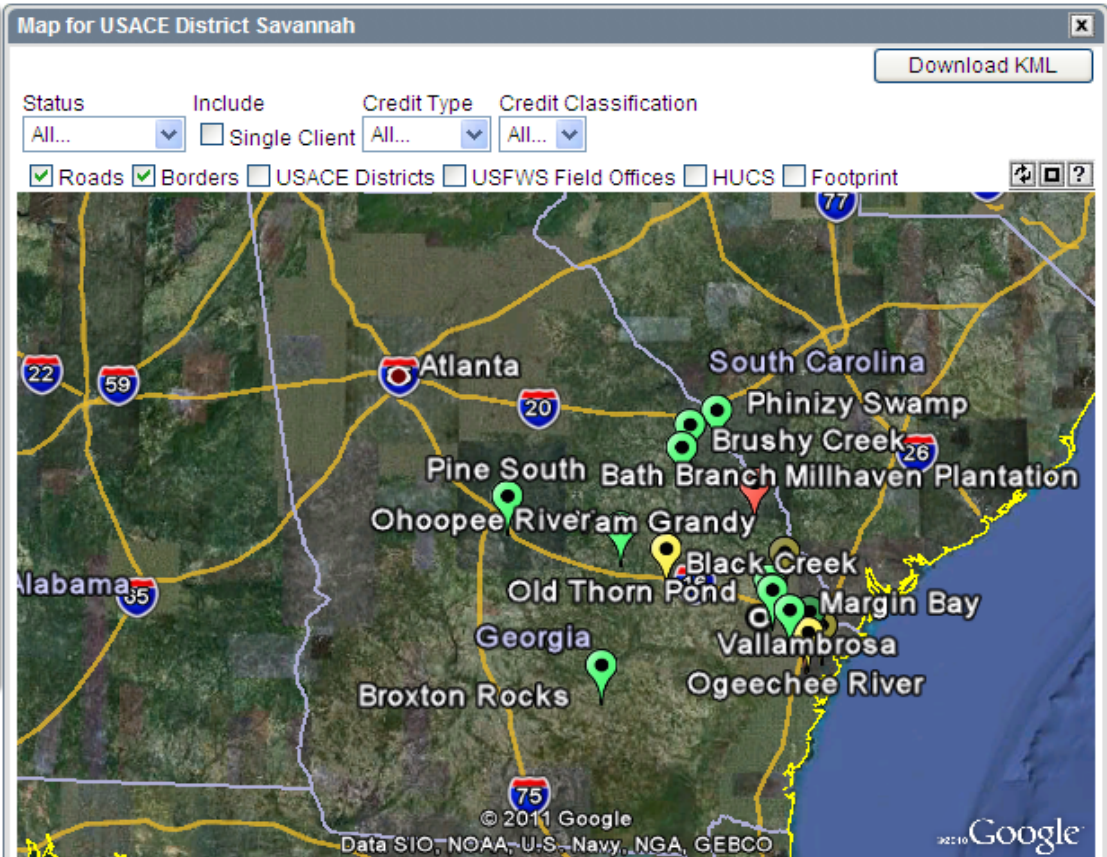
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 Final BI Big Cotton Indian MB 200306300.PDF	Nov 07, 2009	-
Final Bank Instrument Big Cotton Creek MB		

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Map Results

16 banks in District of Savannah excluding single clients

Bank Name	District	Status
Bath Branch	Savannah	Approved
Black Creek	Savannah	Approved
Broxton Rocks	Savannah	Approved
Brushy Creek	Savannah	Approved
Margin Bay	Savannah	Approved
Ochoopee River	Savannah	Approved
Old Thorn Pond	Savannah	Approved
Phinizy Swamp	Savannah	Approved
Pine South	Savannah	Approved
Wilhelmina Morgan	Savannah	Approved
AA Shaw	Savannah	Pending
Tide Gate	Savannah	Pending
Vallambrosa	Savannah	Pending
Yam Grandy	Savannah	Pending
Millhaven Plantation	Savannah	Sold-Out
Ogeechee River	Savannah	Sold-Out



Benefits

- Better information for regulators, resource agencies and the public
- District institutional memory
- Reduced number of FOIA requests
- Interface with ORM to complete missing information for permits
- Way Forward:
 - ▶ In-lieu Fee: initial load complete, not viewable to the public yet
 - ▶ Species credit tracking



Mitigation: Why Change The Approach?

- According to the Rule, “the amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate **functional** or **condition assessment methods** or other suitable metrics are available, **these methods should be used** where practicable to determine how much compensatory mitigation is required.”
- In response to comments encouraging USACE to use functional assessments to determine mitigation requirements, Savannah District set out to develop its own functional assessment methodology for calculation mitigation.



2011 SOP Concept

- For impacts and restoration, the first step is to determine how much function does the aquatic resource currently have (i.e., a functional assessment of existing conditions).
- Once the existing condition is determined, then you can calculate the appropriate functional loss or gain from the baseline score dependent upon the proposal.
- The existing conditions, impacts, and restoration worksheets are structured to follow the 3 factor approach in Appendix 10 of the Guidelines.



2011 SOP – Existing Conditions

I. Buffer/Landscape Functions

Average Buffer Width:	> 300 linear feet	1.00	
Percent of Buffer Coverage of AA Perimeter:	100%	1.00	
Localized Drainage Basin Condition:	Forest and Native Range - > 75% groundcover	1.00	Choose Soil Class
Patch/Cooridor Connectivity:	Unobstructed Connectivity to Natural Areas - 4 directions (900 feet)		1.00
Mean Buffer Score (Buffer _{score}):	1.00		

IV. Summary Existing Conditions Score

Buffer _{score} =	1.00
Abiotic _{score} =	1.00
Bio _{score} =	1.00

Total Mean Existing Condition Score =	$\text{Buffer}_{\text{score}} + \text{Abiotic}_{\text{score}} + \text{Bio}_{\text{score}} / 3 =$	1.00
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New Aquatic Resource Credit Types

- Wetland Credits will be replaced by the following wetland credit types (based upon hydro-dynamics):
 - Riverine (i.e., Bottomland Hardwoods)
 - Lacustrine Fringe
 - Depressional
 - Slope (i.e., Seeps and Bays)
 - Flats (i.e., Pine Flatwoods)
 - Salt Tidal (i.e., Saltwater Marsh)
 - Fresh Tidal (i.e., Freshwater Marsh)
- Stream Credits will be replaced by the follow stream credit types (base upon flow regime):
 - Ephemeral
 - Intermittent
 - 1st and 2nd Order Perennial
 - 3rd Order Perennial and greater

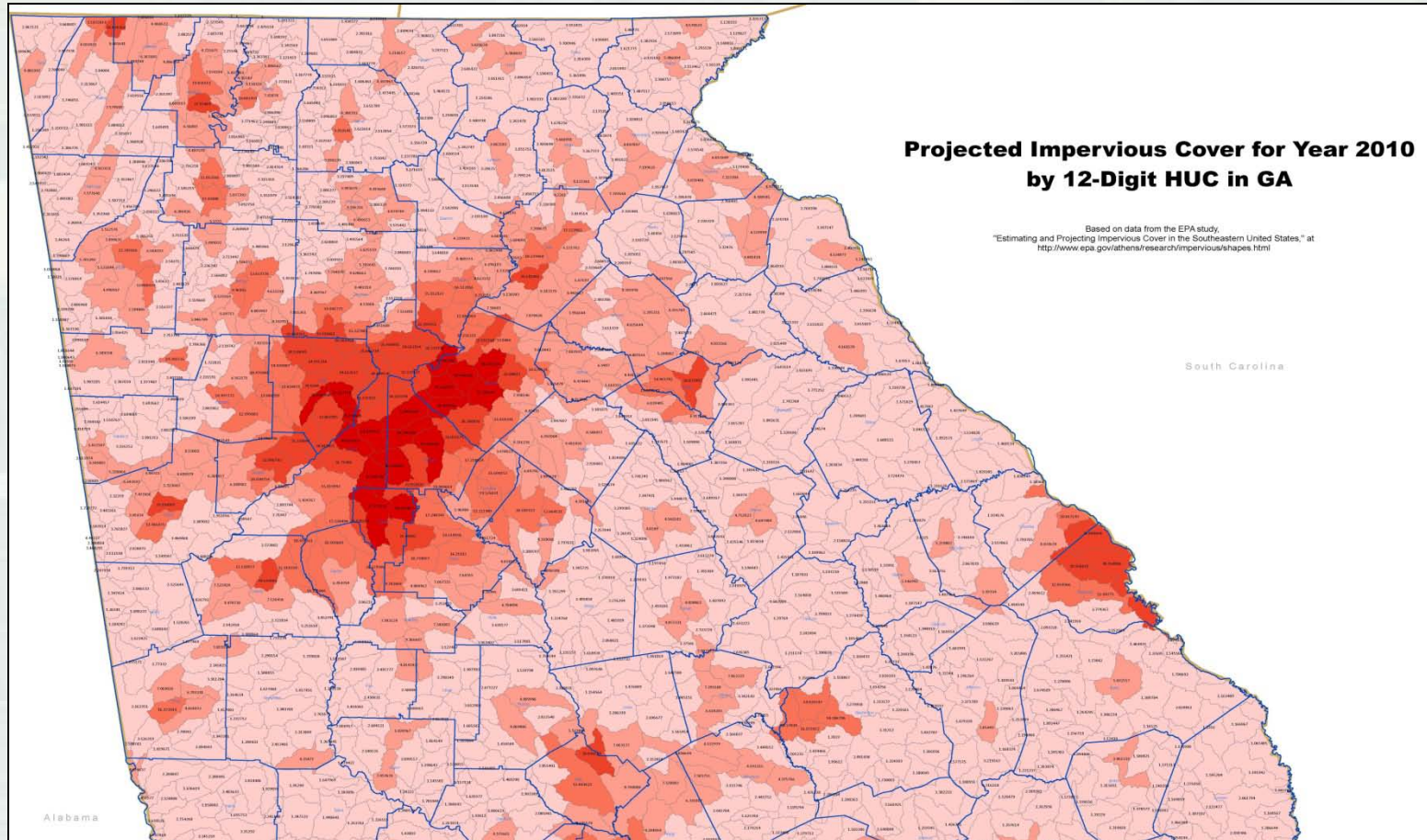


New Urban Service Area Filter

- As a measure to ensure aquatic functions are not trans-located from urban areas through the purchase of credits from non-urban mitigation banks, Savannah District has developed a new urban service area filter concept.
- This concept would provide additional filter in which to determine the preferential mitigation option. This urban filter would be placed upon the existing primary service areas and give urban mitigation banks higher preference to compensate for impacts that occur within urban designated 12-digit HUCs.
- Urban 12-digit HUCs will be identified through a selected percentage of impervious surface present.
- The threshold of the percentage of impervious surface for the “urban” categorization has yet to be finalized.



New Urban Service Area Filter



BUILDING STRONG®

Mitigation Rule's Requirement for FA/LTM

- According to the Mitigation Rule, “The district engineer shall require sufficient financial assurances to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with applicable performance standards”.
- The Mitigation Rule also requires that bank sponsors provide for LTM. This LTM plan must include a non-wasting endowment to ensure that there is funding for management and maintenance in perpetuity.
- To date, there is only one software package commercially available to accurately estimate these costs (*only for LTM).



FA/LTM Database Development

- Purpose is to provide public with a consistent methodology for determining both financial assurances (FA) and long term management (LTM) funding.
- Database will provide costs for the following:
 - ▶ FA for construction;
 - ▶ FA for monitoring; and
 - ▶ Funding for the endowment of LTM.
- Database should be ready for public use by late-June.



FA/LTM Database Development

Wetlands Construction					
CATEGORY/Task List	Specification	Unit Type	Unit Cost	# of Units	Total Cost
Hydrologic Enhancement					
Ditch Plug		Item (Each)	\$1,000.00		
Levee Removal		Linear Foot	\$500.00		
Mass Grading (Creation)		Acre	\$10,000.00		
Equipment Operator Labor		Labor Hours	\$60.00		
Sub-Total					
VEGETATIVE ENHANCEMENT					
Willow Stakes		Item (Each)	\$1.00		
Bare Root Hardwood Stem		Item (Each)	\$5.00		
1-Gallon Hardwood Stem		Item (Each)	\$10.00		
3-Gallon Hardwood Stem		Item (Each)	\$20.00		
5-Gallon Hardwood Stem		Item (Each)	\$30.00		
Bare Root Cypress Stem		Item (Each)	\$5.00		
1-Gallon Cypress Stem		Item (Each)	\$10.00		
3-Gallon Cypress Stem		Item (Each)	\$20.00		
5-Gallon Cypress Stem		Item (Each)	\$30.00		
Wetlands Seed Mix		Pound (LBS)	\$50.00		
Planting Crew Labor		Labor Hours	\$20.00		
Sub-Total					
EROSION CONTROL AND STABILIZATION					
Install Double Row Type-C Silt Fence		Linear Foot	\$50.00		
Annual Rye Seed Mix		Pound (LBS)	\$35.00		
Brown Top Millet Seed Mix		Pound (LBS)	\$35.00		
Warm Weather Seed Mix		Pound (LBS)	\$25.00		
Hay Bails		Item (Each)	\$5.00		
Sub-Total					
Total Cost					



FA/LTM Database Development

Summary Report

Name of Project

Project #

Project Phase/Category	Total Costs
Wetland Construction	\$204,340.00
Wetlands Monitoring	\$168,978.00
Year 1	\$23,800.00
Year 2	\$25,700.00
Year 3	\$27,230.00
Year 4	\$28,790.00
Year 5	\$31,002.00
Year 6	\$32,456.00
Year 7	
Long Term Management (LTM)	\$152,740.00
Year 1	\$50,230.00
Year 2	\$50,830.00
Year 3	\$51,680.00
Total Cost	\$526,058.00



Project Schedule

- We are currently working on completing the data input from our industry teams and formula development.
- By the end of May 2011, we will have beta testing sessions of the database tool with our industry teams.
- Database should be ready for public use by mid-June 2011.



In-Lieu-Fee Program

- 1997 I-L-F Program
- Lands preserved:
 - ▶ 1,479.93 acres of wetlands
 - ▶ 31.2 miles of waters/buffers
- May 12, 2010 programmatic revisions were reflected in PN to comply with new rule requirements.
- Way Forward.

Draft Guidelines to Establish and Operate In-Lieu Fee Programs in GA



Field Guide Book

Plants



Closeup of leaves, © 2002 Steve Barkauf



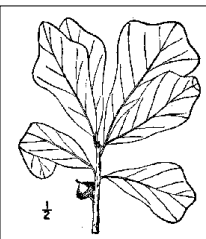
General Growth Form, © 2002 Steve Barkauf

Quercus nigra, Water Oak

P 1.1

Range: C, P, M

FAC



Line Drawing of Leaves

Quercus nigra, Water Oak.

Description: medium-sized deciduous tree. The leaves are alternate and vary tremendously, from rounded and entire to three-lobed with several bristle tips but are most frequently spatula shaped. Bark is smooth and brown on young trees, becoming gray-black with rough scaly ridges. Acorns are single or in pairs, 1/3 to 1/2 in. long and broad.

Similar Species: other oaks, especially laurel leaf oak. Can be distinguished by spatula shaped leaves with bristle tips.

Habitat: widespread including wet margins, floodplains, moderately dry uplands.

Wetland Indicator Status: FAC

Quercus nigra, Water Oak

P 1.1

Range: C, P, M

FAC

Soils



Profile



Representative Photo

Histosol, Indicator A1

P 1.1

Range: C, P, M

All Soils



Profile

Indicator A1: Histosol

Technical Description: Classifies as a Histosol (except folists)

Applicable Subregions: Applicable throughout The Atlantic and Gulf Coastal Plain Region

User Notes: A histosol has 16 in. or more of the Upper 32 in. as organic soil material. Histosols also include soils that have organic soil material of any thickness over rock or fragmental soil material that has interstices filled with organic soil material. Organic soil material has an organic carbon content (by weight) of 12 to 18% or more, depending on the clay content of the soil. The material includes muck (sapric soil material), mucky peat (hemisac soil material), or peat (fibric soil material). This indicator is locally common in LRRs T and U but is rare across most of the coastal plain region. It is most likely to be associated with flats and tidal fringe wetlands that are saturated to the surface, and with depressional wetlands that are ponded or saturated nearly all year. Folists are rare or absent in this region. Histosols are generally not found at the boundary between wetlands and non-wetlands.

Histosol, Indicator A1

P 1.1

Range: C, P, M

All Soils

Hydrology



Wetland With Surface Water Present

Surface Water, Indicator A1

P 1.1

Range: C, P, M

Primary Indicator



Wetland With Surface Water Present

Surface Water, Indicator A1

P 1.1

Range: C, P, M

Primary Indicator

Indicator A1: Surface Water
General Description: This indicator consists of the direct, visual observation of surface water (flooding or ponding) during a site visit.

Cautions and User Notes: Care must be used in applying this indicator because surface water may be present in non-wetland areas immediately after a rainfall event or during periods of unusually high precipitation, runoff, tides, or river stages. Furthermore, some non-wetlands flood frequently for brief periods. Surface water observed during the non-growing season may be an acceptable indicator if experience and professional judgment suggest that wet conditions normally extend into the growing season for sufficient duration in most years. If this is questionable and other hydrology indicators are absent, a follow-up visit during the growing season may be needed. Note that surface water may be absent from a wetland during the normal dry season or during extended periods of drought. Even under normal rainfall conditions, some wetlands do not become inundated or saturated every year (i.e., wetlands are inundated or saturated at least 5 out of 10 years, or 50 percent or higher probability). In addition, groundwater-dominated wetland systems may never or rarely contain surface water. Use caution in areas with functioning ditches and/or subsurface drains that may remove surface water quickly.

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