

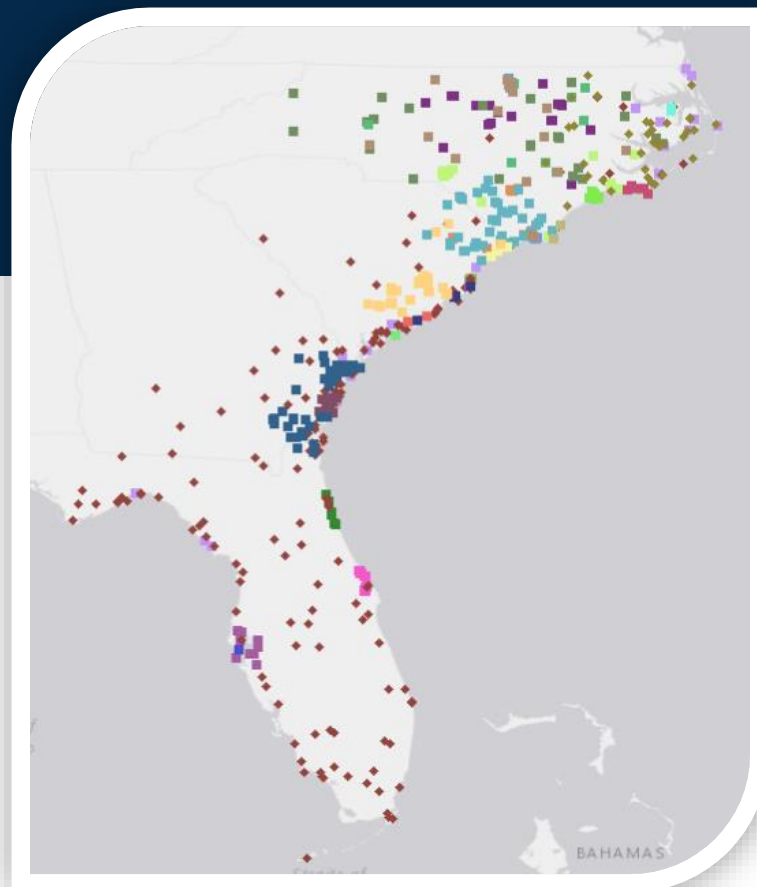
Coastal Wetlands Monitoring Data Catalog User Guide

December 2016

Legend

Monitoring Program

- ACE Basin NERR
- SEIWA
- GA Adopt-A-Wetland Program
- CHIMMP (FL)
- CWEM (FWS)
- CWRE (FL)
- DCERP
- Headwater Wetlands (NC)
- NC mitigation wetlands
- Field Verification (NC)
- GCE LTER Climate Monitoring
- GCE LTER Water Level Monitoring
- GCE LTER Water Quality Monitoring
- GTM NERR SWMP
- Hydrologic Connectivity of IWs (NC)
- LoBOS (SC)
- NOAA Shoreline Marsh Monitoring
- NSF LTRE at North Inlet SC
- NWCA (NC)
- NWCA 2011
- NWCA Intensification
- NC NERR SWMP
- Mitigation Evaluation Pilot Study (NC)
- NC WMN
- Oyster Reef Restoration
- Sapelo Island NERR SWMP
- SC HGM
- TNC Living Shoreline Program
- Tampa Bay
- TOWeR
- Winyah Bay North Island Living Shoreline



Contact Information

Questions and Comments about the database contact:

Kim Matthews, RTI

919-316-3366 (w); 919-618-1421 (m)

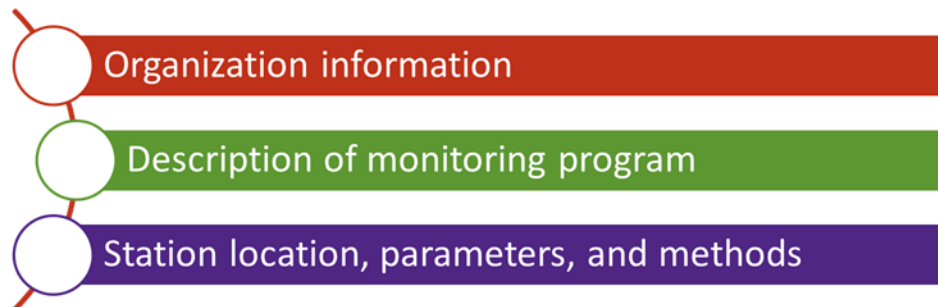
kmatthews@rti.org

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(<http://southatlanticalliance.org/>).



Purpose of Data Catalog

- The Coastal Wetlands Monitoring Data Catalog provides a centralized location to access information about coastal wetland monitoring programs and station information in North Carolina, South Carolina, Georgia and Florida (Atlantic Coast).
- Information includes organization and monitoring programs and station details including geographic location, wetland type, parameters monitored, and sampling methods used. If available, web links are provided for the user to access the data and the monitoring program. The data catalog was created using Microsoft Access.



- The user can query on each component variable and find information based on location, watershed, wetland type, or monitoring parameter. The purpose of the data catalog is to increase collaboration and sharing of data and information to better assess the condition and function of coastal wetlands in the South Atlantic region of the United States.

Target Population (more than just wetlands)



Examples of coastal wetland types. Forested wetland (top left); oyster reef bed (top right); estuarine marshes (bottom left); and planted marsh (bottom right).



Query Information

Search Interface

Search GSAA Coastal Wetlands Monitoring Metadata Portal

Organization Search *No criteria selected returns all

Organization Name: ?

OR Organization name containing:

Organization Type: ? [View/Find Organizations](#)

Monitoring Program Search

Program Name: ?

OR Program name containing:

Program Scale: ? [View/Find Programs](#)

Station Search (includes search criteria above)

State: ?

County: ?

HUC8: ?

HUC12: ?

Waterbody Name: ?

OR Waterbody name containing:

Station Type: ?

Parameter Category: ?

[View/Find Stations](#)

[Tabular Format](#)

[Individual Format](#)

[Export Stations \(Excel\)](#)

[Exit Database](#)

[Clear Criteria](#)

Add or edit data in this database -- [Add New Data](#) [Edit Data](#) Version 1.1 October 27, 2016

Organization Search

Monitoring Program Search

Station Search

Edit and Update

Search: Organization Name

1. Select from list or start typing the name.

Search GSA Coastal Wetlands Monitoring Metadata Portal

Organization/Program Search Parameters *No criteria selected returns all

Organization Name:

Organization Type:

Program Name:

Program Scale:

Station Search Parameters

2. Click on “View/Find Organization”.

Search GSA Coastal Wetlands Monitoring Metadata Portal

Organization/Program Search Parameters *No criteria selected returns all

Organization Name:

Organization Type:

Program Name:

Program Scale:

Results: Organization Name

Organization Information

Organization Name: Guana Tolomato Matanzas National Estuarine Research Reserve

Organization Acronym: GTMNERR

Organization Description: The GTMNERR is one of 28 reserves in the U.S. protected for long-term monitoring, research, and education (see www.nerrs.noaa.gov). It is a partnership between the National Oceanic and Atmospheric Administration (NOAA) and Florida's Department of Environmental Protection (DEP). The GTMNERR participates in the System-Wide Monitoring Program (SWMP), which is designed to measure short-term variability and long-term

Organization Type: Government - Federal

Type Details:

Organization Web Page: www.gtmnerr.org

Contact Names: Nikki Dix (Research Director), Pam Marcum (Biologist)

Email: nikki.dix@dep.state.fl.us

Phone: 904-823-4500

Mailing Address: 505 Guana River Rd

City: Ponte Vedra Beach State: FL Zip Code: 32082

Organization Programs: Guana Tolomato Matanzas National Estuarine Research Reserve System-Wide Monitoring Program

Record: 1 of 1 Filtered Search

Information about the organization conducting the monitoring

Monitoring Programs

Search results for key words

Navigate through multiple records

Search: Stations

- Search by location or waterbody name.
- Both wetland and non-wetland data include near by surface water and atmospheric data are included in the database.
- Parameter Categories are defined on next page.

The screenshot shows a web-based search interface for stations. The main form is titled "Station Search (includes search criteria above)". It contains several input fields and buttons. Callouts provide additional information:

- Geographic Search:** A bracket groups the "State", "County", "HUC8", and "HUC12" dropdown menus.
- Wetland Type:** A callout points to the "Station Type" input field.
- View Results:** A callout points to the "View/Find Stations" section, which includes "Tabular Format" and "Individual Format" buttons.
- Export Results:** A callout points to the "Export Stations (Excel)" button.
- Explanation of parameter categories:** A callout points to the "Parameter Category" dropdown menu.

The form includes the following fields and buttons:

- State: Florida (dropdown)
- County: FL -- St. Johns (dropdown)
- HUC8: (dropdown)
- HUC12: (dropdown)
- Waterbody Name: (text input)
- OR Waterbody name containing: (text input)
- Station Type: (text input)
- Parameter Category: (dropdown)
- Buttons: View/Find Stations, Tabular Format, Individual Format, Export Stations (Excel), Clear Criteria

Notes:

1. State and counties are linked so that selecting a state limits the counties to those in the selected state.
2. Station Type searches three fields: Wetland Type, Cowardin Type, and HGM Type.

Parameter Categories Defined

Parameter Category Definitions

Categories	Definition
Atmospheric Conditions	Data characterizing daily conditions of the atmosphere or weather in terms of air temperatures, barometric pressure, wind, precipitation, and photosynthetically active radiation.
Biology	Data relating to flora and fauna of wetlands include vegetation, algae, benthic macroinvertebrates, and fish.
Hydrology	Data relating to water level and saturation of the wetlands include a description of hydrologic indicators or conditions and quantitative well/gauge data.
Physical/Chemical Water Properties	Data characterizing the chemical and physical condition of surface water include water temperature, pH, dissolved oxygen, nutrients, metals, and sediment.
Porewater	Data characterizing the shallow groundwater contained in the wetland sediment.
Rapid Assessment Methods	On-site assessment of wetlands to characterize the condition or function of wetlands based on visual observations. Examples include USARAM, ORAM, and NC WAM.
Soils and Elevation	Data characterizing chemical (e.g., pH, metals) and physical (e.g., bulk density) soil properties, narrative descriptions soil horizons, and elevation (e.g., marker horizon, surface elevation).

Close Form

Results from Station Search: Tabular Format

Monitoring Program

Station Name and Location

Wetland Classification

Station Parameters

Search Stations - Access

Matthews, Kimberly

Program Name	Site Code	Site Name	State	County	Waterbody Name	Is it a Wetland	Cowardin	Station Parameters	Station Parameters
National Wetland Condition Assessment	3732	NWCA11-1326	FL	St. Johns	Tolomato River	yes	E2EM	algae species, algae toxin, ammonium, chlorophyll, conductivity, hydrology (description), nitrate+nitrite, pH, soil bulk density, soil chemistry, soil enzymes, soil stable isotopes, total nitrogen, total phosphorus, USA Rapid Assessment Method, vegetation native/alien species, vegetation species composition and abundance, vegetation structure	http://pa.f... l-aq... resc...
National Wetland Condition Assessment	4916	NWCA11-1292	FL	St. Johns	Tolomato River-Moses Creek Frontal	yes	E2EM	algae species, algae toxin, ammonium, chlorophyll, conductivity, hydrology (description), nitrate+nitrite, pH, soil bulk density, soil chemistry, soil enzymes, soil stable isotopes, total nitrogen, total phosphorus, USA Rapid Assessment Method, vegetation native/alien species, vegetation species composition and abundance, vegetation structure	http://pa.f... l-aq... resc...
National Wetland Condition Assessment	5383	NWCA11-1248	FL	St. Johns	Tolomato River	yes	E2EM	algae species, algae toxin, ammonium, chlorophyll, conductivity, hydrology (description), nitrate+nitrite, pH, soil bulk density, soil chemistry, soil enzymes, soil stable isotopes, total nitrogen, total phosphorus, USA Rapid Assessment Method, vegetation native/alien species, vegetation species composition and abundance, vegetation structure	http://pa.f... l-aq... resc...
National Wetland Condition Assessment	5808	NWCA11-3069	FL	St. Johns	Tolomato River	yes	E2EM	algae species, algae toxin, ammonium, chlorophyll, conductivity, hydrology (description), nitrate+nitrite, pH, soil bulk density, soil chemistry, soil enzymes, soil stable isotopes, total nitrogen, total phosphorus, USA Rapid Assessment Method, vegetation native/alien species, vegetation species composition and abundance, vegetation structure	http://pa.f... l-aq... resc...

Record: 1 of 4

Datasheet View

NUM LOCK

SQL

Number of stations

Scroll Bar to see more information

Results from Station Search: Individual Format (1 of 2)

Organization
Name

Monitoring
Program

Two Tabs to
View
Information

1

Station
Details

- Wetland Type
- Methods
- Web Links

Station Information

* Use the navigation buttons at the bottom of this form to page through each station and view the station detail

Organization Name: Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

Program Name: Coastal Habitat Integrated Mapping and Monitoring Program

Site Code: Mangrove 1

Site Name: Clam Bayou Mangrove 1

Description: SWFWMD restoration site. Hydrologic restoration for adjacent mangroves

State: FL County: Pinellas

Latitude (DD): 27.739233 Longitude (DD): -82.692233

Station Details | Station Parameter List

Property Ownership: Southwest Florida Water Management District (SWFWMD)

HUC8: 03100207 HUC12: 031002070500

Waterbody Name: Clam Bayou

Waterbody Classification: Is it a wetland? unknown

Wetland Category: Wetland Type: Mangrove

Cowardin Type: estuarine intertidal scrub-shrub wetland broad-leaved evergreen

HGM Type: Tidal fringe

Other Information: SWFWMD restoration site. Hydrologic restoration for mangroves

Date Start: 12/8/14 Date End: ongoing

Sample Design:

Station URL:

Data URL:

Record: 1 of 6 Filtered Search

Station
Location

Results from Station Search: Individual Format (2 of 2)

Two Tabs to
View
Information

2

List of
parameters
collected at
this station

Station Information

* Use the navigation buttons at the bottom of this form to page through each station and view the station detail

Organization Name

Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

Close Form

Program Name

Coastal Habitat Integrated Mapping and Monitoring Program

Site Code

Mangrove 1

Site Name

Clam Bayou Mangrove 1

Description

SWFWMD restoration site. Hydrologic restoration for adjacent mangroves

State

FL

County

Pinellas

Latitude (DD)

27.739233

Longitude (DD)

-82.692233

Station Details

Station Parameter List

Parameter Name

Parameter Category

adjacent surface water DO

Physical/Chemical Water Properties

canopy cover

Biology

PCQ sampling

Biology

pH

Physical/Chemical Water Properties

porewater salinity

Porewater

salinity

Physical/Chemical Water Properties

soil pH

Soils and Elevation

temperature

Physical/Chemical Water Properties

tree height

Biology

vegetation cover

Biology

Record: 1 of 6

Filtered

Search

Additional Controls

Search GSAA Coastal Wetlands Monitoring Metadata Portal

Organization Search *No criteria selected returns all

Organization Name: ?

OR Organization name containing:

Organization Type: ? View/Find Organizations

Monitoring Program Search

Program Name: ?

OR Program name containing:

Program Scale: ? View/Find Programs

Station Search (includes search criteria above)

State: ?

County: ?

HUC8: ?

HUC12: ?

Waterbody Name: ?

OR Waterbody name containing:

Station Type: ?

Parameter Category: ?

View/Find Stations

Tabular Format

Individual Format

Export Stations (Excel)

Exit Database

Clear Criteria

Add or edit data in this database -- Add New Data Edit Data

Version 1.1 October 27, 2016

Exit
database

Re-start the
search

Add New or Edit Existing Information

The screenshot shows a web application window titled "GSAA Coastal Wetlands Monitoring Metadata Portal -- Data Entry". The interface is divided into two main sections. The top section, titled "Enter New Organizations, Programs, and/or Stations", contains three numbered steps: 1. "Enter the organization:" with an "Add New Organization" button; 2. "Enter a program for an existing organization:" with an "Add New Program" button; and 3. "Enter stations for an existing program:" with an "Add New Station" button. A "Return to Search Form" button is located in the top right corner of this section. The bottom section, titled "Enter New Look-up Table Values", contains five buttons: "Add New Organization Type", "Add New Scale", "Add New Parameter", "Add New State", and "Add New Parameter Category".

GSAA Coastal Wetlands Monitoring Metadata Portal -- Data Entry

Enter New Organizations, Programs, and/or Stations

1. Enter the organization: Add New Organization

2. Enter a program for an existing organization: Add New Program

3. Enter stations for an existing program: Add New Station

Return to Search Form

Enter New Look-up Table Values

Add New Organization Type Add New Scale

Add New Parameter Add New State

Add New Parameter Category

Add Organization

The screenshot shows a web form titled "Enter Organization Information". The form contains the following fields:

- Organization Name (required)
- Organization Acronym (required)
- Organization Description (required)
- Organization Type (dropdown menu, required)
- Type Details
- Organization Web Page
- Contact Names
- Email
- Phone
- Mailing Address
- City
- State (dropdown menu)
- Zip Code

At the top right of the form are two buttons: "Close Form" and "Add Organization". A question mark icon is located next to the "Organization Name" field. At the bottom of the form is a status bar with the text "Record: 22 of 22", a "No Filter" button, and a "Search" button.

Callouts from the text boxes on the right point to the "Add Organization" button and the "Close Form" button.

Description
of Fields

After you
enter new
information,
"Close
Form" will
save your
information.

"Add
Organization"
will provide a
blank form.

Note: All Required fields must be completed to save the record.

Add Monitoring Program

Description
of Fields

The screenshot shows a web form titled "Enter Program Information". The form contains several input fields, some of which are marked as required. The fields are: Organization (required), Program Name (required), Program Acronym (required), Program Description (required), Purpose, Quality of Data, Contact Information, Funding Source, Data Collected By, and Program Web Page. There is also a "Scale of Program (reqd.)" dropdown menu. The form has a "Close Form" button and an "Add Program" button. A help icon (?) is located next to the "Close Form" button. The form is part of a larger application, as indicated by the "Record: 36 of 36" and "No Filter" text at the bottom.

Organization (required)

Program Name (required)

Program Acronym (required)

Program Description (required)

Purpose

Quality of Data

Contact Information

Funding Source

Data Collected By

Program Web Page

Scale of Program (reqd.)

Close Form

Add Program

Record: 36 of 36

No Filter

Search

After you enter new information, "Close Form" will save your information.

Note: All Required fields must be completed to save the record.

Add Station Information

Enter Station Information

* Enter the station information below and then click the Station Parameter List tab to enter the parameters for the station

Program Name (required)

Site Code (required) ?

Site Name (required)

Description

State (required) County

Latitude (DD) Longitude (DD) (both required)

Property Ownership

HUC8 HUC12

Waterbody Name

Waterbody Classification Is it a wetland? (required)

Wetland Category Wetland Type

Cowardin Type

HGM Type

Other Information

Date Start Date End

Sample Design

Station URL

Data URL

Record: 785 of 785 Unfiltered Search

Two Tabs to
Enter
Information

Decimal
Degrees

Enter New Look-up Table Values

- Look-up tables are pre-populated fields that allow the user to select options from the drop down box. New options can be added for:
 - Organization Type
 - Program Scale
 - State
 - Parameter Category
- Each new parameter added to the database must be assigned to a Parameter Category

GSAA Coastal Wetlands Monitoring Metadata Portal -- Data Entry

Enter New Organizations, Programs, and/or Stations

1. Enter the organization: [Add New Organization](#)
2. Enter a program for an existing organization: [Add New Program](#)
3. Enter stations for an existing program: [Add New Station](#)

Return to Search Form

Enter New Look-up Table Values

[Add New Organization Type](#) [Add New Scale](#)

[Add New Parameter](#) [Add New State](#)

[Add New Parameter Category](#)

Metadata

Organization Field Descriptions

Field Name	Data Type	Character Limit
Organization Name	Text	150
Organization Acronym	Text	25
Organization Description	Memo	65,536
Organization Type	Selection List	-
Type Details	Text	50
Organization Web Page	Hyperlink	-
Contact Names	Text	100
Email	Text	150
Phone	Text	50
Mailing Address	Text	255
City	Text	50
State	Selection List	-
Zip Code	Text	25

Monitoring Program Field Descriptions

Field Name	Data Type	Character Limit	Description
Organization	Selection List	-	Organization associated with the program
Program Name	Text	150	
Program Acronym	Text	60	
Program Description	Memo	65,536	
Purpose	Memo	65,536	
Quality of Data	Memo	65,536	
Contact Information	Text	255	Contact information (if different than organization)
Funding Source	Text	150	
Data Collected By	Memo	65,536	
Program Web Page	Hyperlink	-	
Scale of Program	Selection List	-	Associated geographic scales – local, national, regional, state, multiple states

Station Field Descriptions

Field Name	Data Type	Character Limit	Description
Program Name	Selection List	-	Program associated with each station
Site Code	Text	50	
Site Name	Text	100	
Description	Memo	65,536	
State	Section List	-	State in which site is located
County	Text	50	County in which site is located
Latitude (DD)	Numeric	-	Site latitude in decimal degrees
Longitude (DD)	Numeric	-	Site longitude in decimal degrees
Property Ownership	Text	150	
HUC8	Text	8	USGS82-digit Hydrologic Unit Code where the monitoring station is located
HUC12	Text	12	USGS 12-digit Hydrologic Unit Code where the monitoring station is located
Waterbody Name	Text	100	Name of the USGS waterbody associated with the HUC12 where the monitoring station is located.
Waterbody Classification	Text	50	
Is it a wetland?	Selection List	-	Is this site associated with a wetland? (yes, no, unknown)
Wetland Type	Text		Wetland type based on NC Wetland Assessment Method classification system. If the monitoring station is a not a wetland, the user can enter another name or use "not applicable" for this field. More information: https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-quality-program-development/ncwam-manual
Cowardin Type	Text		Wetland classification codes are a series of letters and numbers that are used by the National Wetlands Inventory and defined by Cowardin et al (1979). From drop down or enter other. More information: http://www.fws.gov/wetlands/data/wetland-codes.html
HGM Type	Text		The hydrogeomorphic approach to assessing wetland function. Seven wetland classes defined by Brinson (1993): depression, riverine, mineral flats, organic flats, tidal fringe, lacustrine fringe, slopes. From drop down list. More information: http://el.erdc.usace.army.mil/wetlands/class.html