

# Coastal Wetlands Monitoring Workgroup

August 2016



Pictures from the June Meeting at Guana Tolomato Matanzas National Estuarine Research Reserve

# Agenda

- Roll Call
- Response to Comments on Database Design
- Summary of Monitoring Programs and data
- Missing monitoring programs
- Comparability of Monitoring Programs
- In-person meeting Logistics

# General Comments

- **Issues with MS Access DB not compatible with Macintosh and MS 360**
  - Solutions: Provide final database information in tabular form and create a version compatible to MS computers
- **How will the user edit data after it has been entered into the database?**
  - Solution: Modify the “Add Data” forms to edit records]
- **Are there any options for locating the database where it can be edited and shared by a user?**
  - Solution: Still in progress
- **Need a better user guide that explains what type of data is in the portal.**
  - Solution: Add a text and graphics to show what is a wetland and what other associated data may be in the database.
- **Add Descriptions and text box character limitations to the data fields in the search page as a “?” box or something similar**
  - Solution: Add “?” box to all pages

# Coastal Wetlands Monitoring Metadata Portal

The screenshot shows a web browser window titled "Search GSAA Coastal Wetlands Monitoring Metadata Portal". The interface is divided into two main sections: "Organization/Program Search Parameters" and "Station Search Parameters".

**Organization/Program Search Parameters** (Note: \*No criteria selected returns all)

- Organization Name: [Text Input]
- Organization Type: [Dropdown]
- View/Find Organizations: [Button]
- Program Name: [Text Input]
- Program Scale: [Dropdown]
- View/Find Programs: [Button]

**Station Search Parameters** (includes search parameters above)

- State: [Dropdown]
- County: [Dropdown]
- HUC8: [Dropdown]
- HUC12: [Dropdown]
- Waterbody Name: [Text Input]
- OR waterbody name containing: [Text Input]
- Is it a wetland?: [Dropdown]
- Parameter Category: [Dropdown] [?]

Buttons on the right side of the Station Search Parameters section include: View/Find Stations, Export Stations (Excel), Exit Database, and Clear Criteria.

## Higher Priority

- Revise headings
- Org and program names search “name containing...”
- Remove “is it a wetland”
- Add search by Station Type
- Add blank or none option
- Add option to View Stations as table or record

## Lower Priority

- HUC 2, 4, 6, etc.
- Link state, county, HUC

# Results: Organization Name

Organization Information

Organization Name: Guana Tolomato Matanzas National Estuarine Research Reserve Close Form

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](http://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](http://www.gtmnerr.org)

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

Email: [nikki.dix@dep.state.fl.us](mailto: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

## Higher Priority

- Revise options for Org Type
- Define "Type Details"
- Revise Organization Program to Monitoring Programs
- Add link to Monitoring Program

# Results: Program Information

Program Information

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

Program Acronym: GTMNERR-SWMP

Program Description: Permanent plots and transects are established throughout the Reserve to study the changes in emergent vegetation structure and sediment elevation over time. This program is part of the National Estuarine Research Reserve System-Wide Monitoring Program, which involves a consistent protocol for monitoring vegetation across the nation's estuaries to complement

Purpose: The primary goal of this project is to conduct long-term monitoring of emergent intertidal vegetation within the GTMNERR to provide a better understanding of the ecological characteristics of this dynamic community and discern the impacts of local and global environmental changes on the

Scale of Program: National

Quality of Data: use standard NERR protocol for data collection; data are reviewed by a NERRS Biomonitoring Workgroup member and the Centralized Data Management Office

Contact Information:

Funding Source: NOAA and FL DEP

Data Collected By: Guana Tolomato Matanzas National Estuarine Research Reserve

Program Web Page: <http://nerrsdata.org>

Record: 1 of 1 | Filtered | Search

## Higher Priority

- Add the Organization associated with Monitoring Program

# Results: Stations

Search\_Stations - Access

Matthews, Kimberly

Program Name	Site Code	Site Name	State	County	Waterbody Name	Is it a Wetland	Cowardin	Station Parameters	Station Details
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	<a href="#">http://...</a>
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	<a href="#">http://...</a>
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	<a href="#">http://...</a>
National Wetland Condition Assessment	5808	NWCA11-3069	FL	St. Johns	Tolomato River	yes	E2EM	algae species, nitrate+nitrite, pH, soil bulk density, soil chemistry, soil enzymes, soil stable isotopes, total nitrogen, total phosphorus	<a href="#">http://...</a>

## Higher Priority

- View station as table or record
- Standardize Cowardin types
- Revise Wetland Categories
- Review data

## Lower Priority

- Add contact information for each station
- Export station as KMZ file
- Add geospatial data – generate a static list of geospatial data

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)

Station Details | Station Parameter List

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:

Record: 1 of 590 | Unfiltered | Search

# Organizations (n=14)

OrgID	Name	State
EPA-OWOW-NARS	Environmental Protection Agency - Office of Wetlands, Oceans, and Watersheds - National Aquatic Resource Surveys	DC
USFWS-I&M	U.S. Fish and Wildlife Service, Southeast Region Inventory and Monitoring	SC
NPS-WRD*	National Park Service Water Resources Division	NA
GTMNERR	Guana Tolomato Matanzas National Estuarine Research Reserve	FL
SINERR	Sapelo Island National Estuarine Research Reserve	GA
NC NERR	North Carolina National Estuarine Research Reserve	NC
TBEP	Tampa Bay Estuary Program	FL
FWC-FWRI	Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute	FL
NCDWR	North Carolina Division of Water Resources	NC
SCDHEC*	South Carolina Department of Health and Environmental Control	SC
SCDNR*	South Carolina Division of Natural Resources	SC
SJRWMD	St. Johns River Water Management District	FL
BWB-IMCS	Belle W. Baruch Institute for Marine and Coastal Sciences	SC
GCE-LTER*	Georgia Coastal Ecosystems Long Term Ecological Research	GA



# Remaining Targeted Monitoring Programs

- GA Adopt-A-Wetland Program
- USACE
- GA CRD (Jan MacKinnon)
- NOAA Center for Coastal Fisheries and Habitat Research (Carolyn Currin)
- Defense Coastal Estuarine Research Program (Department of Defense; RTI)
- The Nature Conservancy (Mary Conley)
- NCSU (Mike Burchall)
- Duke University (Curt Richardson)
- East Carolina University (Marcelo Ardon-Sayao)
- UNC-IMS (Mike Piehler)
- Coastal Carolina University (Rich Viso)

# Snapshot of Monitoring Programs

Organization	Partners	Staff	Volunteers	Annual Budget
APENP	Federal, state, local agencies, academia,	5	Many	\$600,000
SCDEHC	None	None	None	None
Bethune -Cookman University	Marine Discovery Center and FL DEP Aquatic Preserves	PI, two Graduate Students including Outreach/Education Coordinator, one Postdoc	MDC staff, Contractors	TBD
GTM NERR	NOAA, DEP, NPS	3	10	\$53,000
Florida Fish & Wildlife Conservation Commission's Fish & Wildlife Research Institute	ESA Assoc.; Guana Tolomato Matanzas NERR; Nature Conservancy; Restore America's Estuaries; Rutgers U.; SW FL Water Management District; Tampa Bay Estuary Program; Tufts U.; Univ. of Rhode Island; Univ. of South Florida; US Fish & Wildlife Service; US Geological Survey; Villanova U.; Xylem/YSI	1 FTE; 1 Full-time OPS; 2 part-time OPS;	10	Varies - dependent on grants
Sapelo Island NERR	GA DNR; Wildlife Resources, Game Management	10.5	130 (Friends of Sapelo)	\$850,000
University of Georgia, Marine Extension & Georgia Sea Grant	NOAA, DNR, SINERR, JIA, KGIB, etc.	35 (4 locations)	27	\$1.2 million
ACE NERRS/SCDNR	None	1 part-time; 2 biologists, 1 tech	No; use other staff	
NC DEQ	Other state agencies	none	none	none

# Comparability of Programs

Survey Topics	NC	SC	GA	FL
EPA-approved Wetland Program Plan	In process	In process	Yes	yes
State Wetlands Evaluation Method	Yes	No	No	No
Formal Monitoring Program	No	No	In process	No
State Wetland Mapping	Yes	Yes	Yes	Yes
Have state wetlands WQ standards	Yes	No	No	No
Addressing climate change	No	Some	Some	Some
Integration with watershed planning	None	Some	yes	Some
Integration with TMDL program	No	Yes	No	Yes
Integration with flood hazard mitigation	No	Some	Some	yes
2014 FTE (for monitoring)	1-4	<1	No data	No Data

Source: ASWM. (2015). Status and Trends Report on State Wetland Programs in the United States

[http://www.aswm.org/pdf\\_lib/state\\_summaries/status\\_and\\_trends\\_report\\_on\\_state\\_wetland\\_programs\\_in\\_the\\_united\\_states\\_102015.pdf](http://www.aswm.org/pdf_lib/state_summaries/status_and_trends_report_on_state_wetland_programs_in_the_united_states_102015.pdf)

# Focus of Comparability Assessment

- Comparison of monitoring programs based on database
- Focus on methods and purpose
- Program/organization limitations
- Future needs
- Include review of national methods
- Other suggestions?

# November Meeting Logistics

- Vote on location
  - Jekyll Island, GA
  - Near Charleston, SC
  - Wilmington, NC
  
- Target Week: November 14 – 18 or November 29 – Dec 2
  
- Purpose:
  - Present findings from survey and assessment of programs
  - Discuss potential opportunities for future collaborations/partnerships
  - Final release of database

# Schedule

- September 15: Demonstrate updates to Database (Teleconference)
- September 30: Distribute Database including User Guide
- October 4: ASWM webinar
- October 21: Present preliminary findings from comparability assessment (Teleconference)
- November 10: Distribute Draft Report
- November/December: In-person meeting
- December 15: Deliver final report and database

# Contact Information

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