



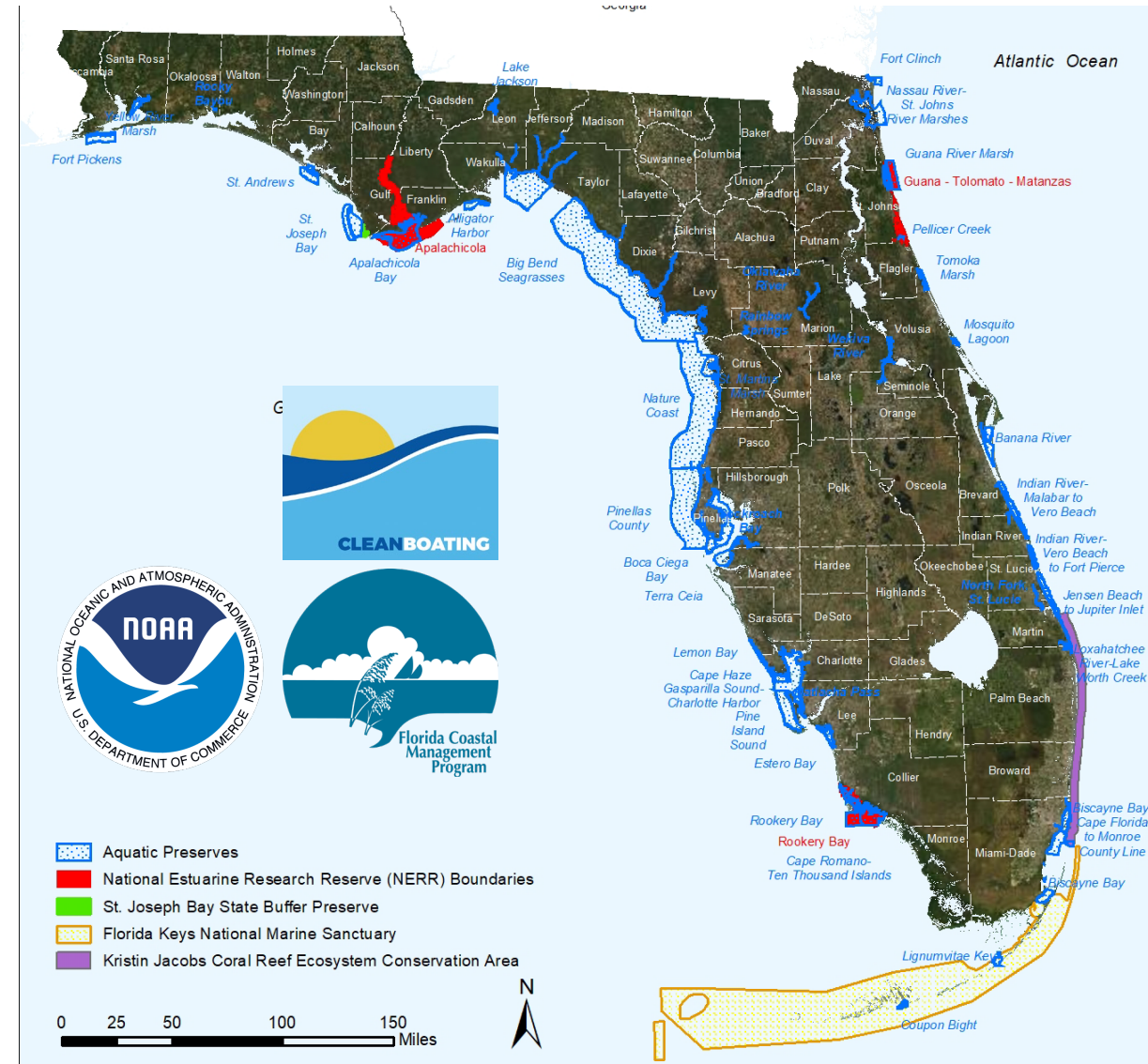
Nature Coast Aquatic Preserve ***Designated in 2020***

Florida Department of Environmental Protection
Office of Resilience and Coastal Protection



Office of Resilience and Coastal Protection

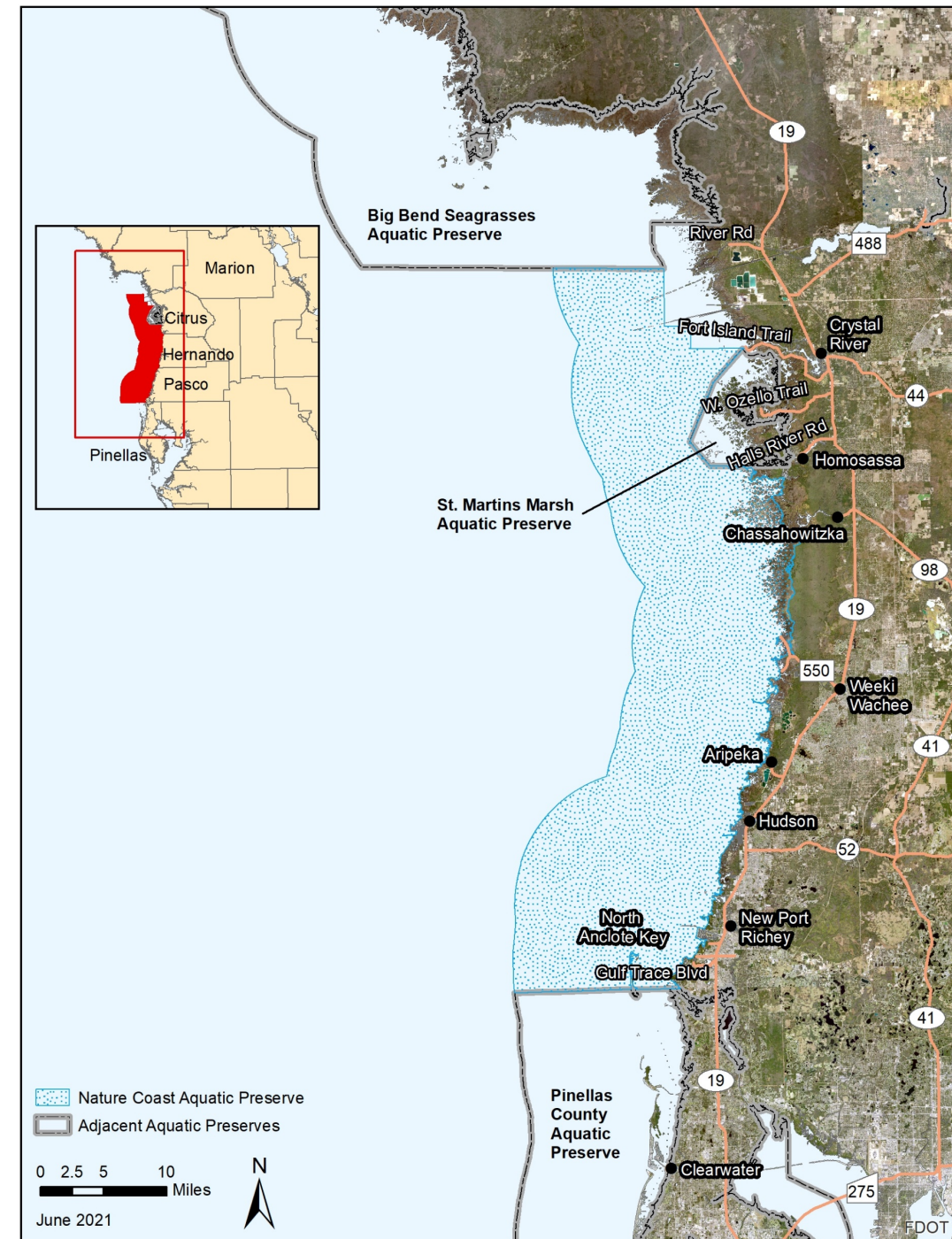
- 42 Aquatic Preserves.
- 1 State Buffer Preserve.
- 3 NERRs.
- Co-Manage Florida Keys NMS.
- Coral Reef Conservation Program.
- Florida Coastal Management.
- Offshore/Outer Continental Shelf.
- Florida Resilient Coastlines.
- Clean Boating and Clean Vessel Act.
- Beach and Inlet Management.
- Coral Protection and Restoration.





Nature Coast Aquatic Preserve Map

- Designated Date: July 1, 2020.
- Size: 455,000 acres.
- Aquatic Preserve and Outstanding Florida Waters.





Aquatic Preserve Management Overview

- 10-Year Management Plan.
- Adaptive Management .
- Science-Based:
 - Monitor, maintain and improve water quality.
 - Monitor, protect and restore submerged communities.
 - Monitor, protect, restore and increase the resiliency of adjacent shorelines.
 - Assist with listed species and keystone species monitoring.
 - Protect cultural resources within the aquatic preserve.
 - Reduce the amount of marine debris in the aquatic preserve.
 - Monitor and manage invasive species in the aquatic preserve.
 - Enhance low impact recreational use and access.





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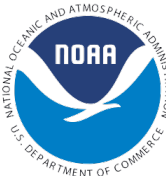
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Aquatic Preserve Management Plan Development

- Public Scoping Meeting – September 28, 2021.
- Management Plan Development:
 - Advisory Committee Meeting 1 – September 30, 2021.
 - Advisory Committee Meeting 2 – November 30, 2021.
 - Advisory Committee Meeting 3 – January 19, 2022.
 - Advisory Committee Meeting 4 – March 31, 2022.
- Draft Plan Published.
- Formal Public Meetings – May 19 & May 24, 2022.
- Final Advisory Committee Meeting – May 26, 2022.
- Presented to the Acquisition and Restoration Council.
- Presented to the Board of Trustees.





Statewide Ecosystem Assessment of Coastal and Aquatic Resources (SEACAR)

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floridadep.gov/SEACAR





SEACAR Strategy

SEACAR is a collaborative process using current knowledge of coastal processes and scientific data obtained from inventory and monitoring programs around the state to identify ecological indicators which will help determine coastal and aquatic habitat status and trends.





Policy and Management

- Provide consistent data for multiple habitats in one location.
- Translate valuable data into publicly available documents capable of informing Florida's diverse population of coastal stakeholders.
- Inform management planning.
- Increase awareness and improve environmental literacy.





Bringing Stakeholders Together

DEP Steering Team

Project Staff and DEP Leadership

- Provide guidance and ensure successful management and implementation of the assessment.

Resource Assessment Partner Team

Natural Resource Managers, Planners and Elected Officials

- Provide management and policy perspective to identifying indicators and product formats for the assessment.

Resource Assessment Data Team

Agencies, Land Managers, NGOs and Universities

- Provide scientific knowledge and expertise to identify data and information needs and recommend indicators.

Resource Assessment Teams.

- Over 75 organizations:
 - Academic institutions.
 - Non-governmental Organizations.
 - Local, state and federal partners.





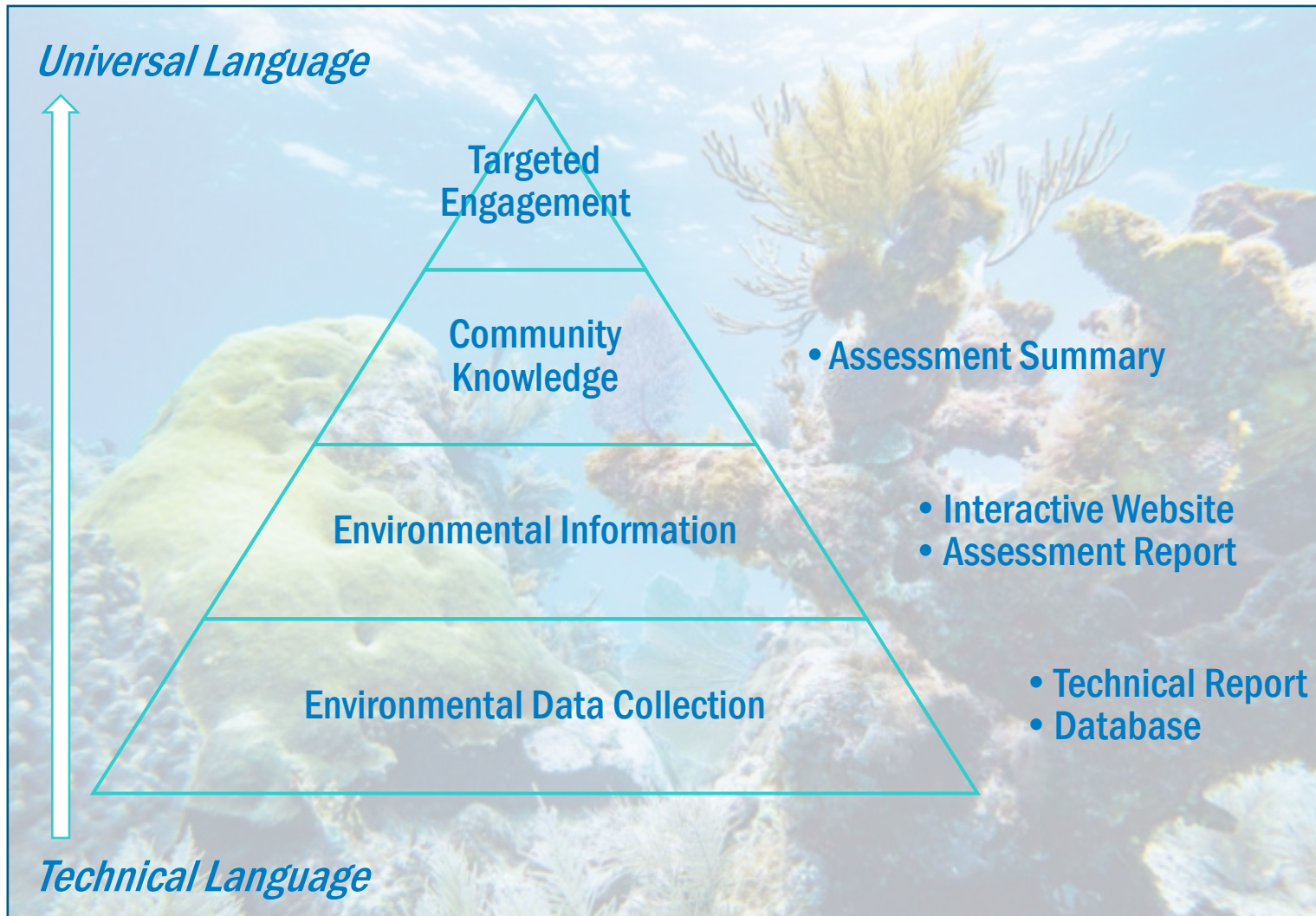
Habitats and Indicators

Submerged Aquatic Vegetation	<ul style="list-style-type: none">• Percent Cover (<i>by species and including algae</i>).• Acreage.• Water Clarity (<i>chlorophyll a, turbidity, secchi and light attenuation</i>).
Water Column	<ul style="list-style-type: none">• Nutrients.• Water Quality (<i>Dissolved oxygen, salinity, temperature and pH</i>).• Water Clarity (<i>chlorophyll a, turbidity, secchi and light attenuation</i>).• Nekton (<i>fisheries data and species composition</i>).
Coral Reef	<ul style="list-style-type: none">• Community Composition (<i>percent cover and density of gorgonians and corals</i>).• Grazers and Reef Dependent Species.• Percent Cover.
Oyster Reef	<ul style="list-style-type: none">• Density.• Acreage.• Percent Live.• Size Class.
Coastal Wetlands	<ul style="list-style-type: none">• Acreage (<i>mangrove and salt marsh</i>).• Species Composition.





Products for Coastal Managers



Tiered product format:

- Designed for wide variety of stakeholders.
- Provides the best available science.
- Support policy, management and restoration efforts.
- Educate the public.





SEACAR Data Discovery Interface (DDI)



SEACAR Data Discovery

Statewide Ecosystem Assessment of Coastal and Aquatic Resources

[Welcome](#)[Home](#)[Monitoring Programs](#)[Program Matrix](#)[Data Discovery Interface](#)[Maps](#)

SEACAR Data Discovery

SEACAR Monitoring Programs

Browse the list of monitoring programs.

[Go to Monitoring Programs](#)

Access to Program Information

Data Discovery Interface

Password-protected system for the administration of the data discovery and data collection interface

[Log in to DDI](#)

The *Statewide Ecosystem Assessment of Coastal and Aquatic Resources (SEACAR)* is a collaborative process which involves local, state and federal natural resource managers, data providers, researchers and partners to identify and assess ecological indicators and to develop a decision support tool to better understand the status of aquatic resources throughout the Office of Resilience and Coastal Protection managed areas.

SEACAR will inform and develop planning and restoration tools through a collaborative process involving assessment teams comprised of local, state and federal natural resource managers, data providers, researchers and partners. These assessment team members will guide the project, establish indicators that best assess the status of our aquatic resources and develop public-friendly product formats that are usable for science based management. Current knowledge of coastal processes and scientific data obtained from inventory and monitoring programs around the state will be used to identify these ecological indicators and assist in the analysis of ecosystem status and trends.

Documents and information available through the SEACAR Data Discovery are owned by the data provider(s) and users are expected to provide appropriate credit following accepted citation formats. Users are encouraged to access data to maximize utilization of gained knowledge, reducing redundant research and facilitating partnerships and scientific innovation.

With respect to documents and information available from this site, neither the State of Florida nor the Florida Department of Environmental Protection makes any warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose arising out of the use or inability to use the data, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.


This website was funded in part, through a grant agreement from the Florida Department of Environmental Protection, Florida Coastal Management Program, by a grant provided by the Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act of 1972, as amended, National Oceanic and Atmospheric Administration Award No. NA16NOS4190120. The views, statements, findings, conclusions and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida, NOAA or any of their subagencies.



<https://dev.seacar.waterinstitute.usf.edu/>



SEACAR Data Discovery Interface (DDI)



SEACAR Data Discovery
Statewide Ecosystem Assessment of Coastal and Aquatic Resources

DDI

DDI-Home

Monitoring Programs

Contacts

Reports

Program Matrix

Maps

Feature Requests

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SEACAR Data Discovery
Statewide Ecosystem Assessment of Coastal and Aquatic Resources

Welcome

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Program Matrix

Data Discovery Interface

Maps

Home / Programs / Program 560

Big Bend Seagrasses & Nature Coast Aquatic Preserves - Seagrass Monitoring 560

Florida Department of Environmental Protection (DEP); Office of Resilience and Coastal Protection (RCP); Big Bend Seagrasses Aquatic Preserves; University of Florida (Nature Coast Aquatic Preserve)

Program Info

Website

https://floridadep.gov/fco/aquatic-preserve/locations/big-bend-seagrasses-aquatic-preserve/

Region(s)

NW

Summary

Seagrass Monitoring

Parameters

Seagrass and macroalgal cover by species (modified Braun-Blanquet), presence, density of bay scallops and sea urchins, epiphyte density on seagrass blades, bottom sediment type, Temperature (C), Salinity (ppt), Dissolved Oxygen (mg/L), and pH (Su) included since 2016. Depth (m) and canopy height (cm) are additional parameters recorded in the Nature Coast AP seagrass data.

Notes

SEACAR program ID 563 was deleted and is included as part of this one program. This program contains seagrass data for three Aquatic Preserves Big Bend Seagrasses and St. Martins Marsh APs - data compiled in BSAP files, and Nature Coast AP - data compiled in NCAP files.

Application

To collect baseline conditions within Big Bend Seagrasses Aquatic Preserve, St. Martins Marsh Aquatic Preserve and Nature Coast Aquatic Preserve for post-impact comparisons and to help address management issues of the resource.

Publications

Reports Big Bend Seagrasses Aquatic Preserves Annual Seagrass Monitoring Report and PWC SIMM report chapters: Northern Big Bend; Southern Big Bend; Suwannee Sound, Cedar Key, and Waccassassa Bay; and Springs Coast.

Start

1997

End

Current

Frequency

Annual

Method

Four randomly placed 1-m² quadrats at each site are assessed using the Braun-Blanquet method in nine geographic areas (PDEP methods). Additional documented observations via Big Bend Seagrasses Aquatic Preserve monitoring include epiphyte density, sediment type, sediment depth, presence of urchins and bay scallops and presence of prop scars or "blowouts". Abiotic water quality parameters (temperature, salinity, dissolved oxygen and pH) are recorded at each sample site using a YSI 650 MDS datalogger, historically, and post-2020, an EX01 datalogger. The Nature Coast Aquatic Preserve monitoring include: epiphyte density, sediment type, station depth, presence of urchins and bay scallops and presence of prop scars or "blowouts". Abiotic water quality parameters (temperature, salinity, dissolved oxygen and pH) are recorded at each sample site using a YSI 650 MDS datalogger.

Discontinuity

Cedar Key: 2011; Delisle Beach / Keaton Beach: 2016; St. Marks: 2012 & 2013; Steinhatchee: 2005, 2012 & 2015.

Data Location

Data Format

Excel Files

Habitats

Submerged Aquatic Vegetation | Water Column

Contacts

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Environmental Specialist

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Seagrass - Nature Coast Aquatic Preserve

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Jamie Hammond

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Program Extent

Map of Sample Locations

Data Download

Habitat(s) : Indicator(s)

Submerged Aquatic Vegetation : Percent Cover (by species), Area Indicators

Geodatabase File

Office of Resilience and Coastal Protection Map

Big Bend Seagrasses, St. Martins Marsh, Nature Coast

Map of Florida showing sample locations

ID	Program Name	Region	Method
560	Big Bend Seagrasses & Nature Coast Aquatic Preserves - Seagrass Monitoring	NW	Four randomly placed 1 m ² quadrats at each site are assessed using the Braun-Blanquet method in nine geographic areas (PDEP methods). Additional documented observations via Big Bend Seagrasses Aquatic Preserve monitoring include epiphyte density, sediment type, sediment depth, presence of urchins and bay scallops and presence of prop scars or "blowouts". Abiotic water quality parameters (temperature, salinity, dissolved oxygen and pH) are recorded at each sample site using a YSI 650 MDS datalogger, historically, and post-2020, an EX01 datalogger. The Nature Coast Aquatic Preserve monitoring include: epiphyte density, sediment type, station depth, presence of urchins and bay scallops and presence of prop scars or "blowouts". Abiotic water quality parameters (temperature, salinity, dissolved oxygen and pH) are recorded at each sample site using a YSI 650 MDS datalogger.
564	Western Pinellas County Seagrass Monitoring	SW	30m transects are laid generally north-to-south. At 0m, 5m, 10m, 15m, 20m, 25m and 30m, species present, % coverage, visual appearance, depth, epiphytic coverage and type and sediment are recorded. At 0m, 15m and 30m, 3 10cmX10cm square short shoot counts are made for each species present and 5 blade lengths are measured.
5059	FWC-FWRI GIS Data Layers	NE, NW, SE, SW	Data compilations from various sources, dates, and methods. In cases of overlapping maps, the newest data were used such that all polygons are the most current data available for the particular area being mapped.

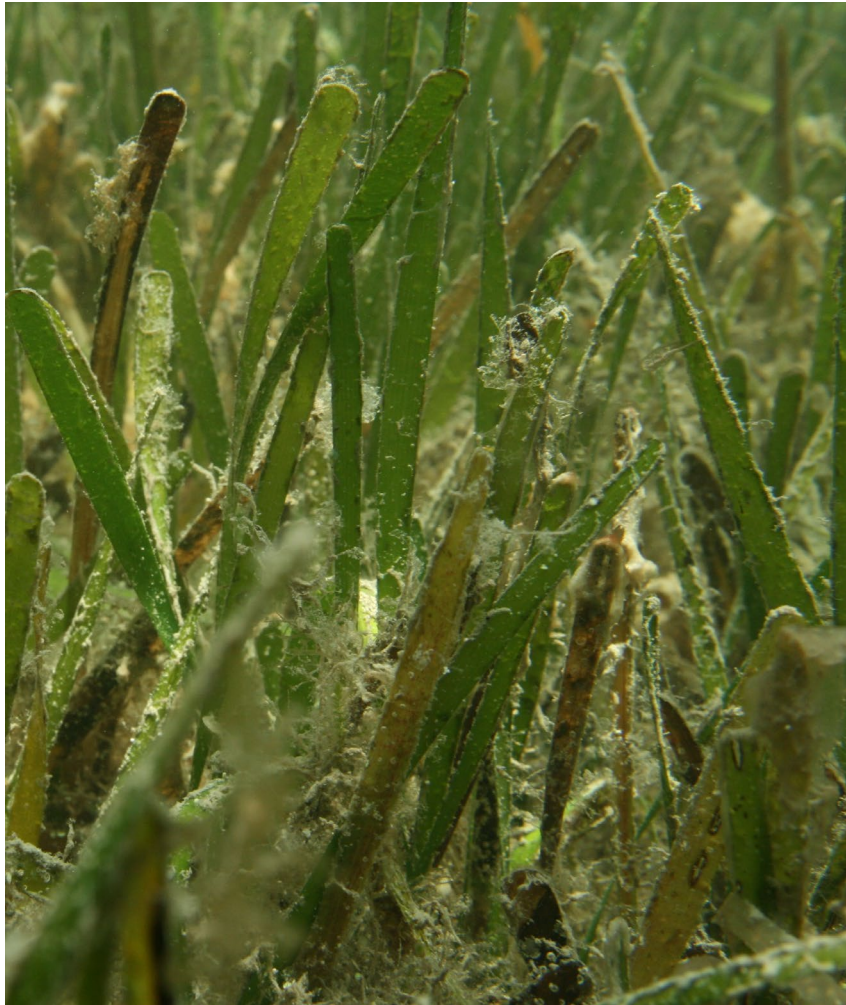
Excel

PDF

Print



Gaps



- Algae*
- Anthropogenic drivers/baseline data
- Coastal wetlands*
- Ecosystem services evaluations
- Hardbottom habitat
- Long-term data collection*
- Mapping
- Nekton*
- Oyster*
- Plankton
- SAV propeller scars
- Sediment elevation table
- Sponge density and sponge species diversity *





Next Steps

- Section 309 Final Assessment and Strategies:
 - SEACAR
 - Finalize report products.
 - Create interactive web application.
 - Outreach.
 - SEACAR Expansion
 - Improved data collection and analysis for integrated management, monitoring and permitting.





Resource Assessment Teams

- Apalachee Regional Planning Council
- Apalachicola Riverkeeper
- Audubon
- Brevard County
- Brevard Zoo
- Broward County
- Centralized Data Management Office
- Charlotte County
- Charlotte Harbor NEP
- City of Miami-Beach
- City of Naples
- City of Palm Coast
- City of Punta Gorda
- City of Sanibel
- Collier County
- Dauphin Island Sea Lab
- Department of Agriculture and Consumer Services
- Department of Environmental Protection
- Escambia County
- Flagler College
- Flagler County
- Florida A&M University
- Florida Atlantic University
- Florida Fish and Wildlife Conservation Commission
- Florida Gulf Coast University
- Florida International University
- Florida Oceanographic Society
- Florida State University
- Gulf Coast State College
- Harbor Branch Oceanographic Institution
- Hillsborough County
- Indian River Land Trust
- Inwater Research Group Inc.
- Jacksonville University
- Keep America Beautiful
- Lee County
- Leon County
- Manatee County
- Martin County
- Miami-Dade County
- Mote Marine Laboratory
- National Oceanic and Atmospheric Administration
- National Park Service
- NatureServe
- Northeast Florida Regional Planning Council
- Northwest Florida Water Management District
- Nova Southeastern University
- Ocean Conservancy
- Ocean Research and Conservation Association
- Paleontological Research Institution
- Peninsular Florida Landscape Conservation Cooperative
- Pinellas County
- Sanibel-Captiva Conservation Foundation
- Sarasota County
- Sea Grant
- Smithsonian Marine Station
- South Florida Water Management District
- Southwest Florida Regional Planning Council
- Southwest Florida Water Management District
- St. Johns County
- St. Johns River Water Management District
- St. Lucie County
- Tampa Bay National Estuary Program
- Tampa Bay Regional Planning Council
- The Nature Conservancy
- The Pew Charitable Trusts
- Town of Fort Myers Beach
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- University of Florida
- University of Maryland Center for Environmental Science
- University of Miami
- University of South Florida
- University of Tampa
- University of West Florida
- Washington High School Marine Science Academy
- West Coast Inland Navigation District



Thank you!

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