

BOEM - Florida Renewable Energy Task Force Offshore State/Federal Resource Data Overview SE Florida

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Fish and Wildlife Research Institute
Saint Petersburg, Florida
Presented: Dec 11, 2014



MyFWC.com

FWC-FWRI Web GIS Resources

<http://myfwc.com/research/gis/>

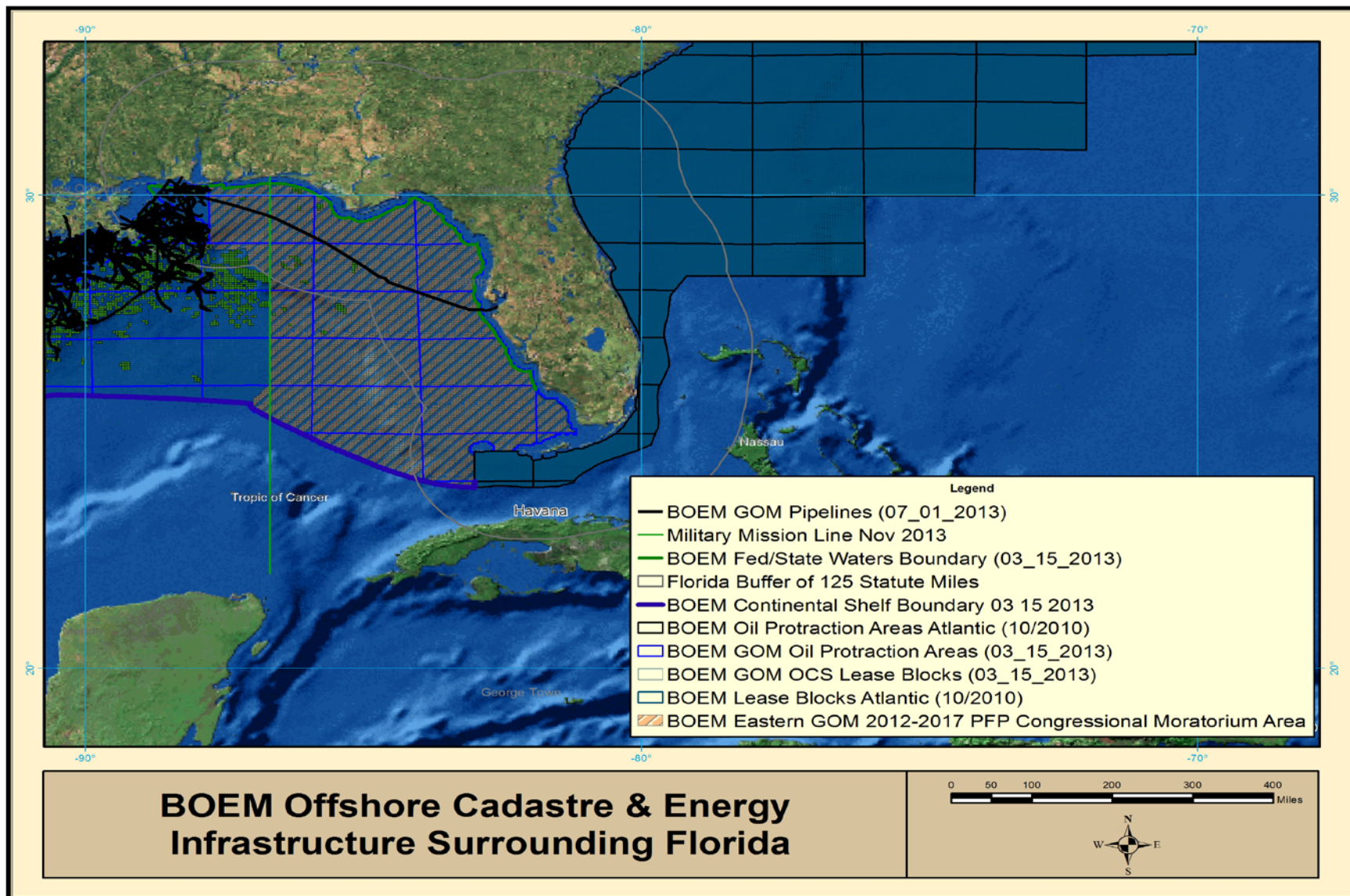
The screenshot shows the homepage of the Florida Fish and Wildlife Conservation Commission. The header includes the FWC logo and navigation links such as 'Fishing', 'Boating', 'Hunting', 'Licenses & Permits', 'Wildlife Viewing', 'Wildlife & Habitats', 'Research', 'Education', and 'Conservation'. A search bar and a 'Sign up for updates' button are also present. The main content area features a 'Fish and Wildlife Research Institute' section with a 'GIS and Mapping' link. Below this, there are several informational boxes: 'About FWRI', 'Florida Manatee', 'Florida Panther', 'Freshwater', 'GIS and Mapping', 'Habitat', 'Red Tide', 'Saltwater', 'Wildlife', and 'Publications'. A 'FWC Facts' section is visible at the bottom.

This screenshot displays the website for the Florida Fish and Wildlife Research Institute's Information Science and Management Center for Spatial Analysis. The page has a navigation menu with 'Home', 'Marine', 'Terrestrial', and 'Freshwater' tabs. The 'Home' section is active, showing 'Marine Resources GIS' and 'Other Targeted Applications'. The 'Marine Resources GIS' section describes the MGIS Internet Map Server and lists various data layers. The 'Other Targeted Applications' section includes links to 'USCG Geographic Response Plan Mapping', 'Unified Florida Reef Tract Map', 'NECORA Biological & Habitat GIS', and 'SECORA Fisheries Alert Tool'. There are also links to 'Florida Reef Tract Temperatures', 'GAME Metadata Mapper', 'GAME Aquatic Toxins Database Mapper', and 'SAFMC Essential Fish Habitat Viewer'. A 'Marine Data and Map Products' section is also visible, detailing 'Quick Maps - Google Earth Data' and 'Marine Resources GIS (MGIS) - Downloadable Data and Maps'.

The screenshot shows the Marine Resources GIS web application interface. The browser address bar indicates the URL 'http://ocean.floridamarine.org/mgls/'. The page title is 'Marine Resources GIS'. The main content area features a map of the Florida coast and surrounding waters, including the West Florida Escarpment, Florida Bay, and the Straits of Florida. A 'Search MGIS' panel is open on the left, showing a search layer set to 'Counties 24K' and a search term 'Nashua'. A 'Map Contents' panel is also open, listing various data layers such as 'BING5', 'AOD Events - Harmful Algal Blooms', 'Marine Mammals', 'Sea Turtles', 'Sealings Layers', 'Coastal and Marine Habitats and Cover Layers', 'Marine Managed Areas', and 'Bass Layers'. The map includes a scale bar (0 to 30 km) and coordinates (Latitude: 30.886178, Longitude: 82.452615). The FWC logo is visible in the bottom right corner of the map area.



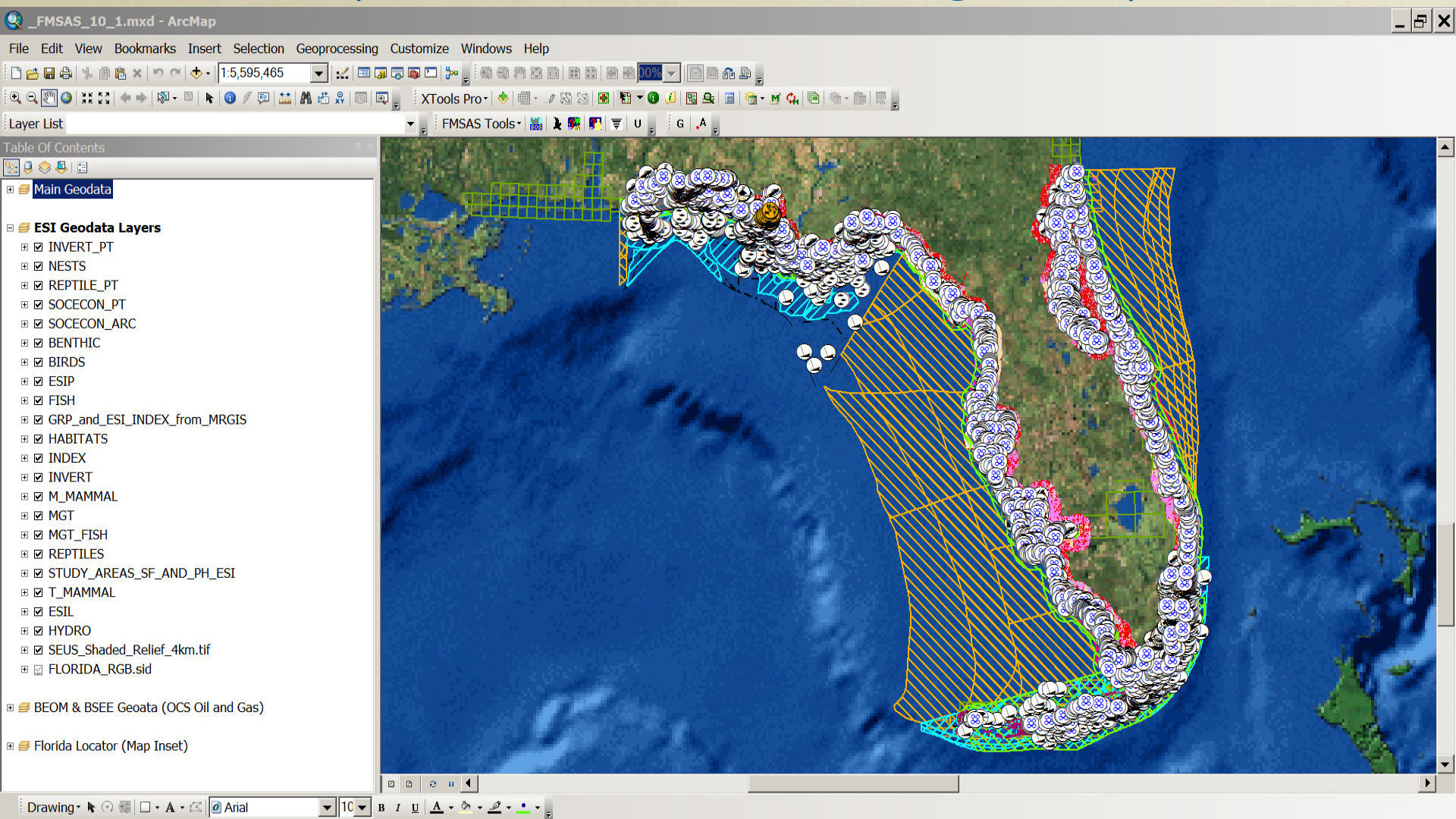
Marine Cadastre/Offshore Energy Infrastructure



Environmental Sensitivity Index (ESI)

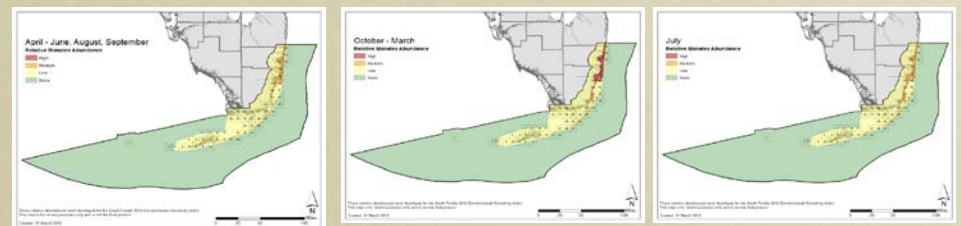
Statewide GIS Data

<http://ocean.floridamarine.org/esimaps>



Manatee Data Sets From SE Florida

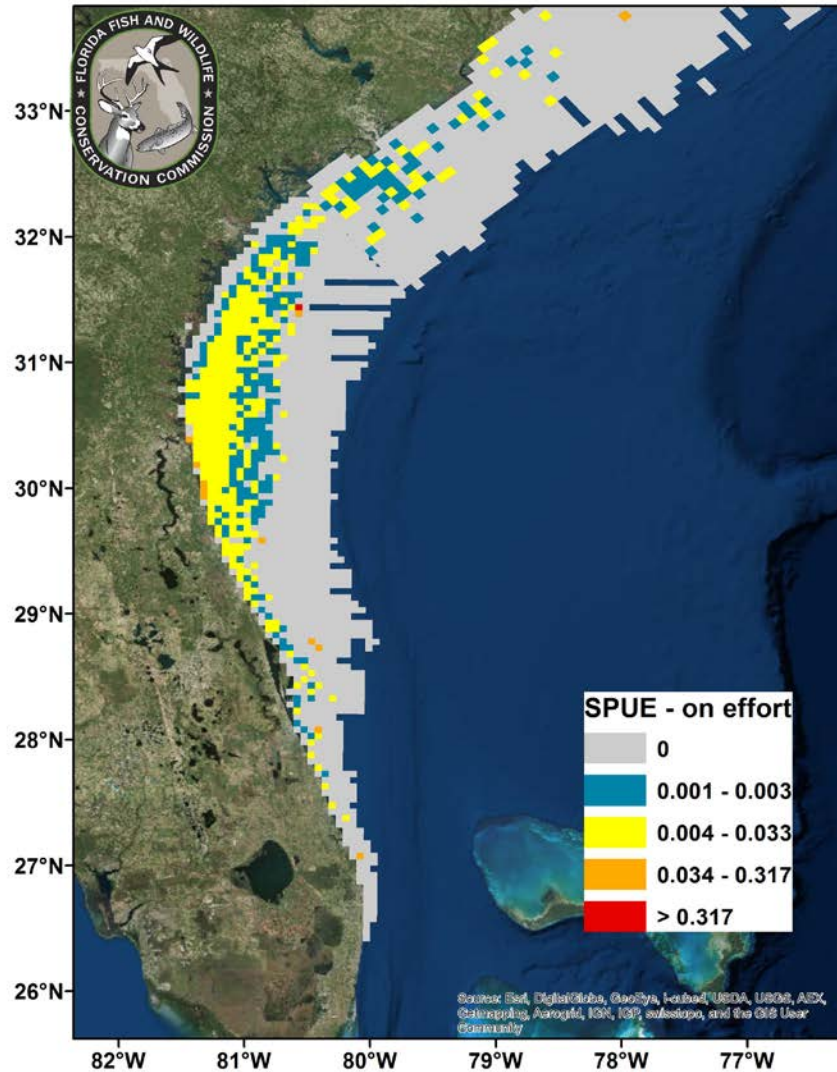
http://ocean.floridamarine.org/mrgis/Description_Layers_Marine.htm#marmam



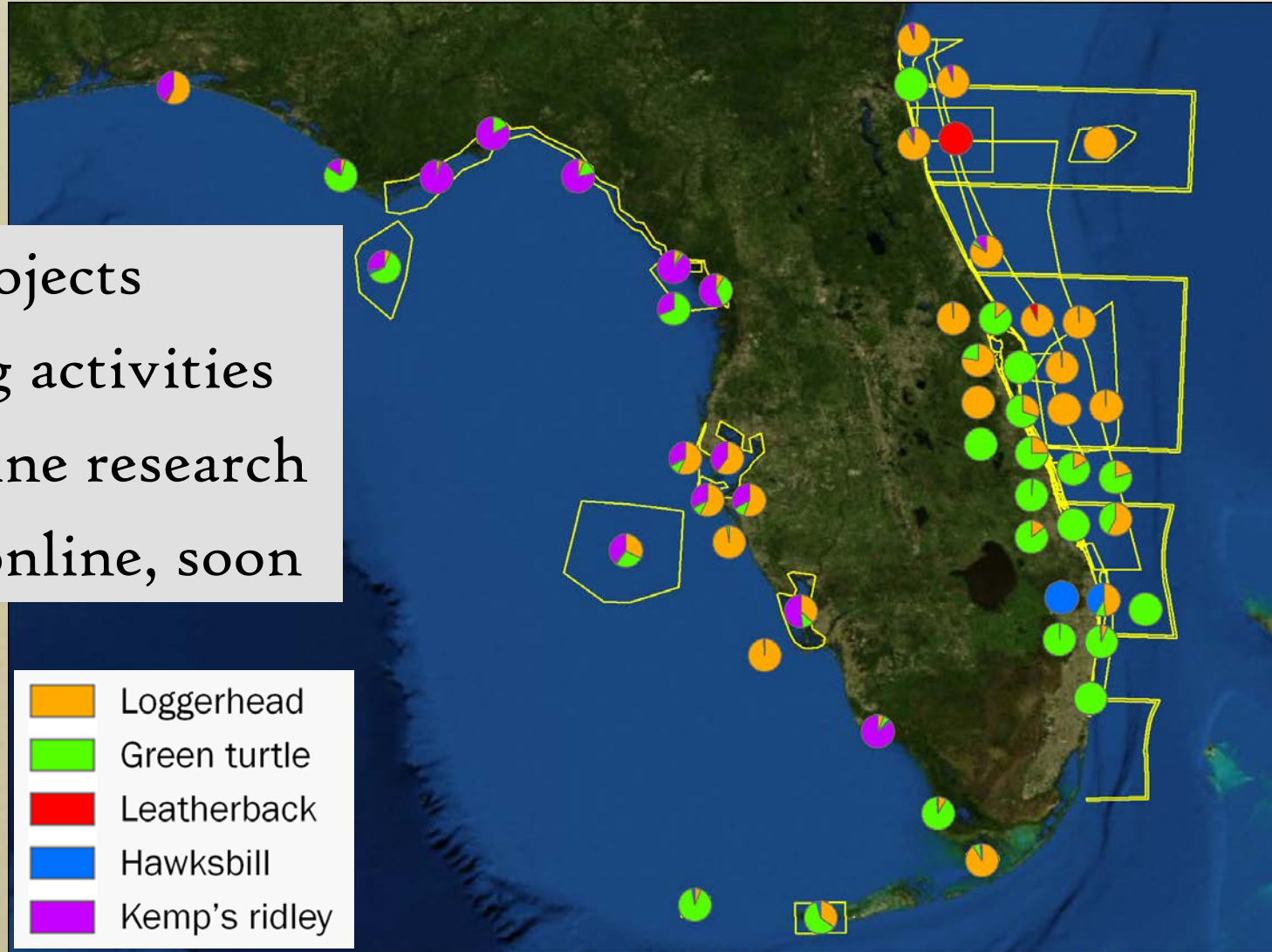
ESI Manatee Data - by months

North Atlantic Right Whales






Right Whale Aerial Survey
Sightings per unit effort
1991/1992 - 2013/2014



FWRI Inventory of in-water sea turtle research



- Over 60 projects
- Monitoring activities
- Other marine research
- Available online, soon

	Loggerhead
	Green turtle
	Leatherback
	Hawksbill
	Kemp's ridley



Statewide atlas of sea turtle nesting activity

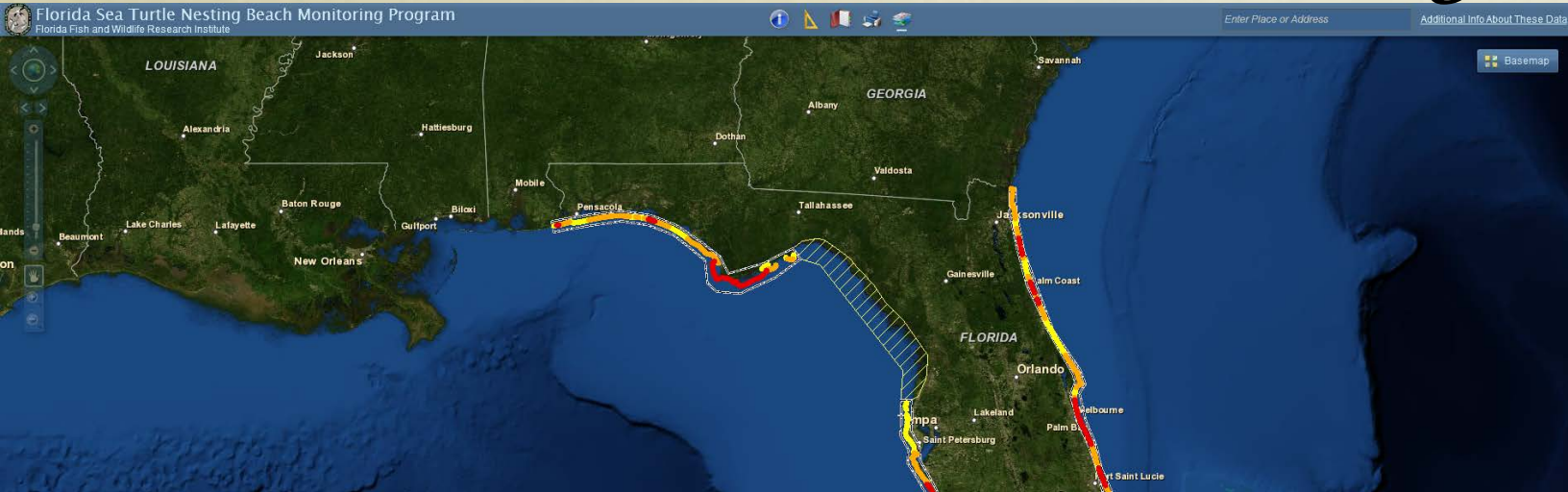
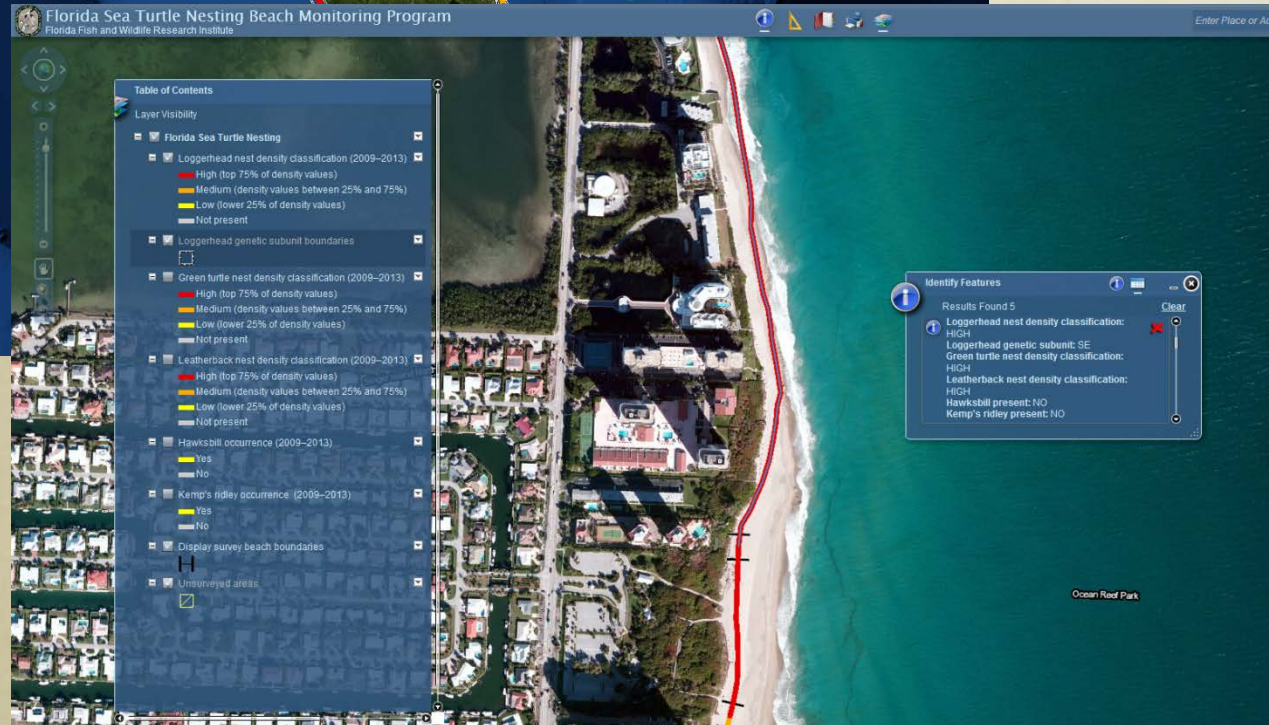
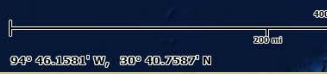


Table of Contents

Layer Visibility

- Florida Sea Turtle Nesting
 - Loggerhead nest density classification (2009–2013)
 - High (top 75% of density values)
 - Medium (density values between 25% and 75%)
 - Low (lower 25% of density values)
 - Not present
 - Loggerhead genetic subunit boundaries
- Green turtle nest density classification (2009–2013)
 - High (top 75% of density values)



Identify Features

Results Found 5

Loggerhead nest density classification: HIGH

Loggerhead genetic subunit: SE

Green turtle nest density classification: HIGH

Leatherback nest density classification: HIGH

Hawksbill present: NO

Kemp's ridley present: NO



<http://ocean.floridamarine.org/SeaTurtle/nesting/FlexViewer/>

SAFMC Digital Dashboard

The entry page for the dashboard serves as a launch pad for the main SAFMC web mapping applications:

1. Fisheries and Species Occurrence
2. Regulations and Managed Areas
3. EFH and EFH-HAPC
4. Habitat and Ecosystem



The screenshot shows the SAFMC Digital Dashboard website. At the top, the title "SAFMC Digital Dashboard" is displayed in blue, with navigation links for "Home", "GIS Data", "Partners", and "Contact Us". Below the title, a main heading reads "Explore the marine and fishery resources of the South Atlantic Bight." A large banner image shows a sunset over a beach with a boat in the water. Below the banner, a section titled "Web Mapping Applications" features four interactive map tiles, each with a "View Project" button. The tiles are: "Fisheries" (red button), "Managed Areas" (blue button), "Essential Fish Habitat" (orange button), and "SAFMC Habitat and Ecosystem Atlas" (green button). The bottom of the page has a dark grey footer with sections for "Links" (listing various organizations), "Connect With Us" (with Facebook and Twitter icons), and "Subscribe" (with an email icon).

Map Services

The map services page provides a brief description of the core, complementary, and external map services used in SAFMC mapping applications. The images are linked to each of the map service's REST endpoint.



Map Services

Core Services



Managed Areas

Contains data for the Allowable Golden Crab Fishery Areas, Shrimp Fishery Access Areas, Deepwater Coral HAPCs, SAFMC Restrictors, Marine Protected Areas, Danger Zones, and other Federal Marine Managed Areas.



Fisheries

Serves SEAMAP species data, MARMAP species data, MARMAP gear types, bathymetry, and boundaries for the continental shelf, US Federal State and US Territorial Seas.



Essential Fish Habitat (EFH)

Displays Essential Fish Habitat (EFH) and Essential Fish Habitat-Habitat Areas of Particular Concern (EFH-HAPCs) for several species under SAFMC's jurisdiction.

Complementary Services



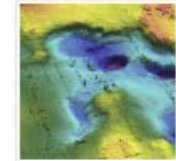
Habitats

Displays habitat data collected by SEADESC, Harbor Branch Oceanographic Institute (HBOI) and Ocean Exploration dives, as well as the SEAMAP shallow and ESDM deepwater bottom mapping projects, multibeam imagery, and scientific cruise data.



Nautical Charts

Displays coastal, general, and overview nautical charts for the SAFMC's jurisdictional area. Although updated charts are available from NOAA's [RNC map service](#), SAFMC has found the LORAN lines displayed on other charts helpful in public workshop forums.



Multibeam

Displays a variety of multibeam data sources and scanned bathymetry charts. Data sets from NOAA's Deep Sea Coral Missions, Southeast Fishery-Independent Survey (SEFIS), and Harbor Branch Oceanographic Institute (HBOI) are included.

External Services



NOAA's Estuarine Bathymetry

Estuarine Bathymetry was developed by the Special Projects Office of the National Ocean Service (NOS) as part of a project to produce readily available bathymetry. Seventy of the approximately 130 estuaries within the continental U.S. are available from this site.



South Carolina Energy

A task force has been convened by the Department of Interior's Bureau of Ocean Energy Management to discuss the designation of wind energy planning areas in federal waters off the coast of South Carolina. This map includes many of the data layers being used by the South Carolina Renewable Energy Task Force in their decision making process.



DEM Hillshade

Hillshade visualizations for high-resolution digital elevation models (DEMs) of select U.S. coastal regions. These integrated bathymetric-topographic DEMs are used to support bunnys forecasting and modeling efforts at the NOAA Center for Tsunami Research, Pacific Marine Environmental Laboratory (PMEL).

Links

[The South Atlantic Fishery Management Council](#)
[Fish and Wildlife Research Institute](#)
[Marine State Marine Fisheries Commission](#)
[Southeast Regional Fisheries Council](#)

Connect With Us

The South Atlantic Fishery Management Council is now on Facebook and Twitter!



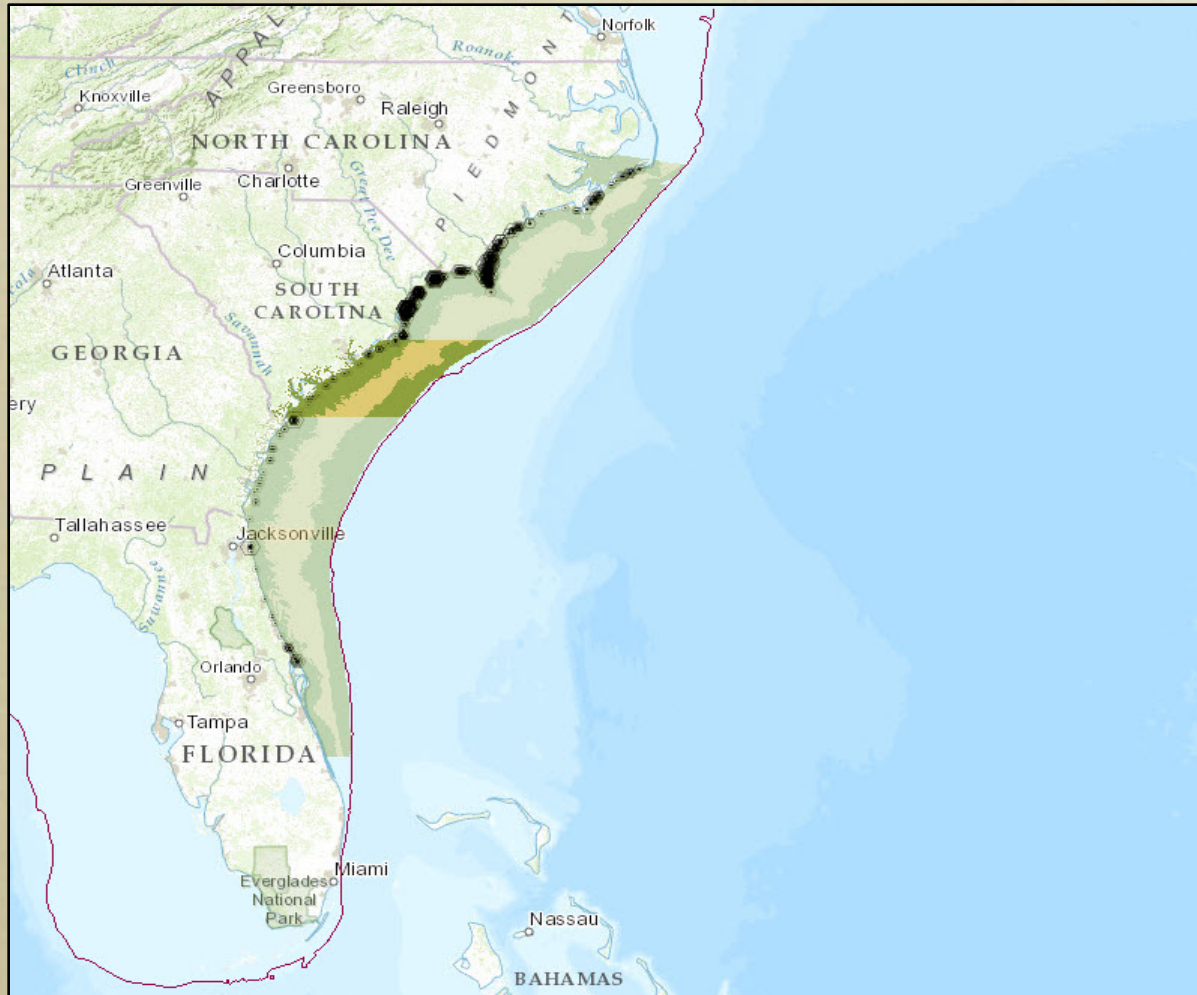
Subscribe

Subscribe to our newsletter to get the latest news!

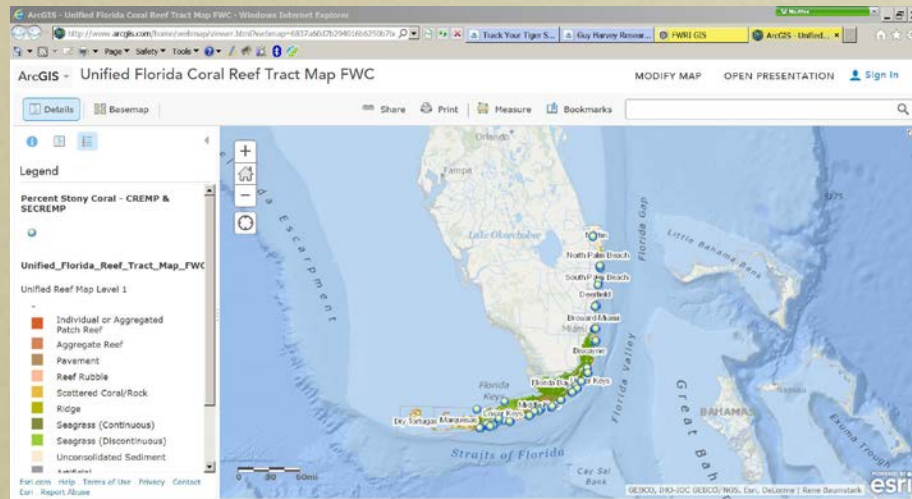


SEAMAP-SA Fisheries Data

SAFMC Species Level Mapping

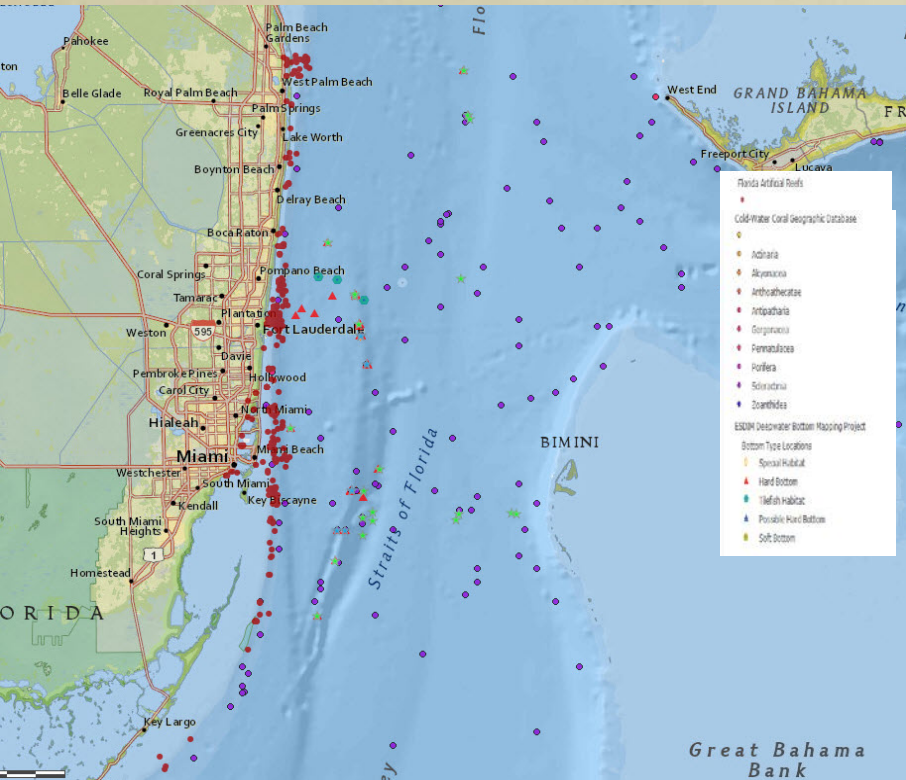


Benthic Reef/Hardbottom Unified Florida Coral Reef Tract Map

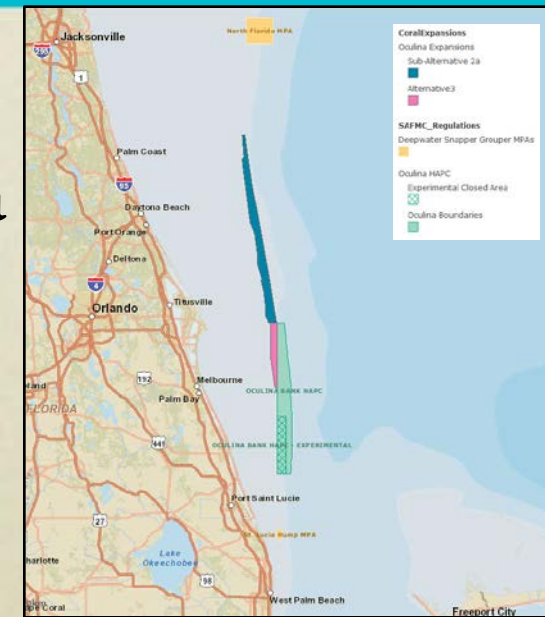


More Benthic

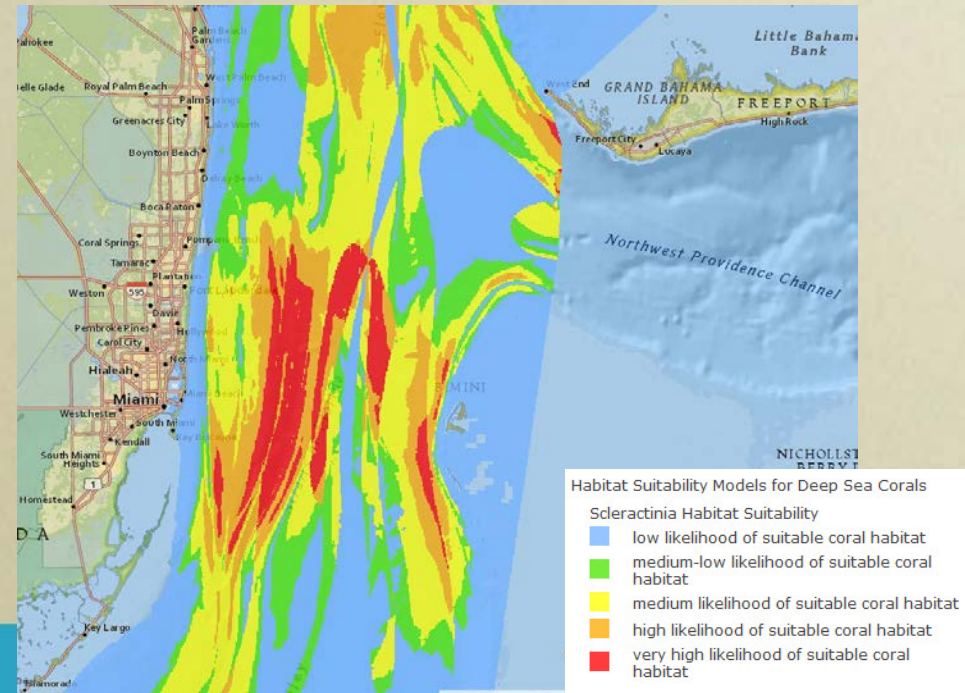
USGS Cold-Water Coral



Oculina Bank HAPC



Scleractinia Habitat Model



Geospatial Assessment of Marine Ecosystems

<http://research.myfwc.com/GAME/Search.aspx>

GAME Dataset Multiple Criteria Search

You may select as many or as few search criteria as you like. To choose more than one, hold down the CTRL key while making your selection.

Keyword	Data Collection Techniques	Status
ALL KEYWORDS Abundance Aerial Photography Air-sea Fluxes	ALL TECHNIQUES Acoustic Optical Photographic	ALL STATUSES Complete In Work Planned
Class	Sector	
ALL CLASSES Biological Chemical Earth Measurements/Geomorphological	ALL SECTORS FL East (Georgia border) FL East FL South	
GIS Ready	Dataset ID (range)	
<input checked="" type="radio"/> All <input type="radio"/> GIS Ready <input type="radio"/> Not GIS Ready	From:	To:

Total records returned: 1109

Contact Person	1 2 3 4 5 6 7 8 9 10 ... >>					
First Name:	Dataset Name	Dataset ID	Keywords	Sectors	Classes	Status
	FWRI - HSM Pink Shrimp: Grain Size	43	Grain Size	FL South, FL West	Earth Measurements/Geomorphological	Complete
Organization	CSC - Dry Tortugas Acoustic Data Set	53	Bottom Type	FL South	Earth Measurements/Geomorphological	Complete
	CSC - Florida Bay Composite Benthic Habitat Data Set	55	Bottom Type	FL South	Earth Measurements/Geomorphological	Complete
View Organization Acronyms	USGS - Florida Bay Bottom Types	57	Bottom Type	FL South	Earth Measurements/Geomorphological	Complete
<input type="button" value="Search"/>	USGS - High Resolution Bathymetry of Florida Bay	58	Bathymetry	FL South	Earth Measurements/Geomorphological	Complete
	USGS - Florida's Deep Water Coral Reefs	88	Bottom Type, Seafloor Topography	FL South	Earth Measurements/Geomorphological	Complete
	USGS - Coral Growth Rates, a record of environmental changes	98	Corals	FL South	Biological	Complete
	USGS - Groundwater characterization of marine portions of Biscayne National Park	99	Seafloor Topography	FL South	Earth Measurements/Geomorphological	Complete
	USGS - Ecosystem Restoration and Management	107	Sediments, Bottom Type	FL South	Earth Measurements/Geomorphological	Complete
	USGS - Growth Rate Change	112	Corals	FL South	Biological	Complete
	1 2 3 4 5 6 7 8 9 10 ... >>					



FWRI Fisheries Data



**FLORIDA
FISH AND WILDLIFE
CONSERVATION
COMMISSION**

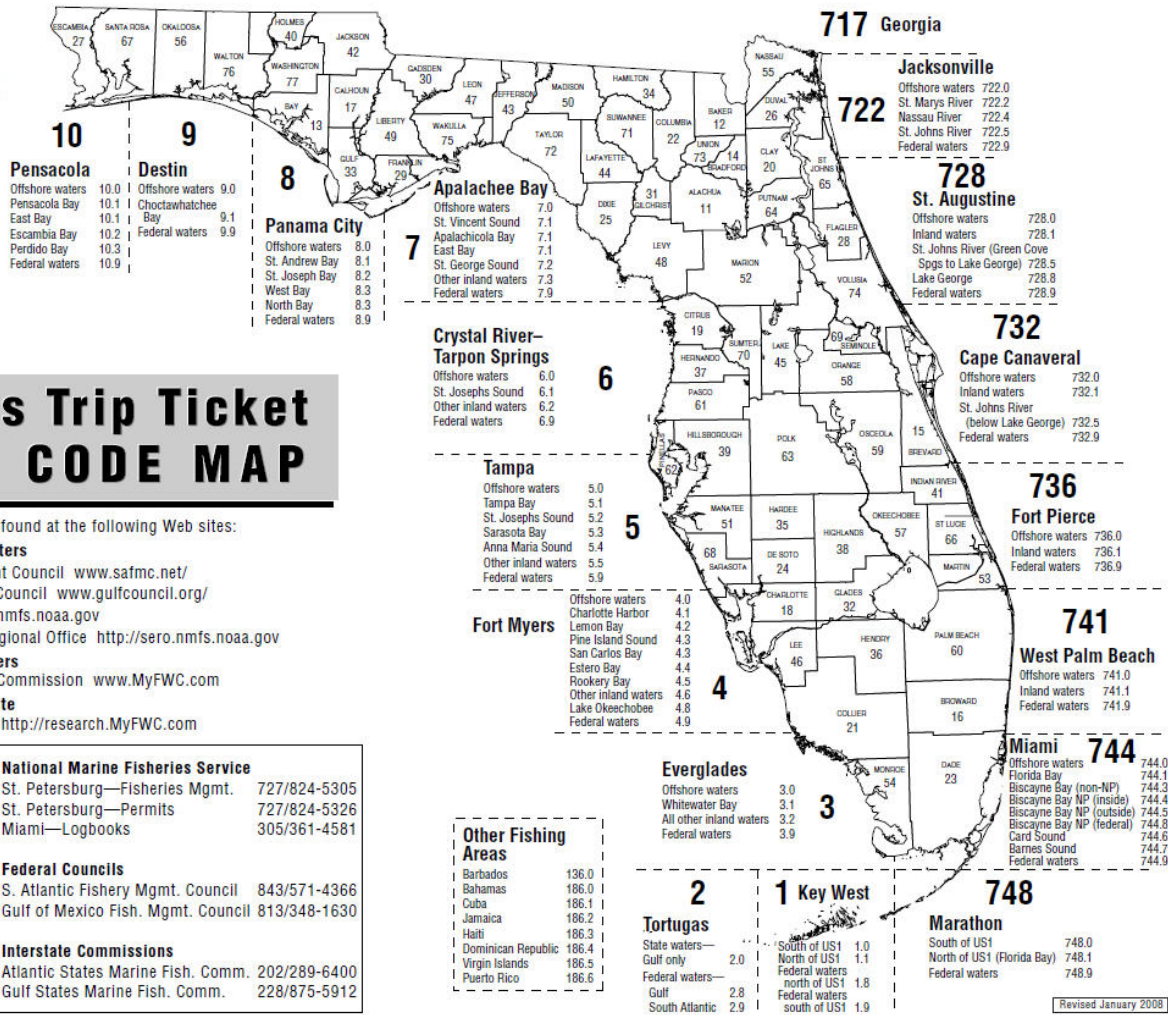
**Fish and Wildlife Research Institute
Marine Fisheries Trip Ticket Office**
100 8th Ave. SE, St. Petersburg, FL 33701-5020
Telephone 727/822-8783 Fax 727/894-6181
TOLL-FREE:
Telephone 866/447-5515 Fax 866/447-5514

Marine Fisheries Trip Ticket FISHING AREA CODE MAP

Fishery Management Regulations can be found at the following Web sites:

- Federal Waters**
South Atlantic Fishery Management Council www.safmc.net/
Gulf of Mexico Fishery Management Council www.gulfcouncil.org/
NOAA Fisheries www.nmfs.noaa.gov
National Marine Fisheries Service Southeast Regional Office <http://sero.nmfs.noaa.gov>
- State Waters**
Florida Fish and Wildlife Conservation Commission www.MyFWC.com
- Our Website**
Fish and Wildlife Research Institute <http://research.MyFWC.com>

FWC—FWRI St Petersburg		National Marine Fisheries Service	
Marine Fisheries Trip Ticket Office	727/822-8783	St. Petersburg—Fisheries Mgmt.	727/824-5305
Trip Ticket Office Fax	727/894-6181	St. Petersburg—Permits	727/824-5326
Trip Ticket Office Toll-Free Telephone	866/447-5515	Miami—Logbooks	305/361-4581
Trip Ticket Office Toll-Free Fax	866/447-5514		
Fish and Wildlife Research Institute	727/896-8626		
FWC Tallahassee		Federal Councils	
Division of Marine Fisheries	850/487-0554	S. Atlantic Fishery Mgmt. Council	843/571-4366
Licenses and Permits Section	850/487-3122	Gulf of Mexico Fish. Mgmt. Council	813/348-1630
Marine Fisheries Management	850/488-6058		
Marine Fisheries Services	850/922-4340	Interstate Commissions	
LAW ENFORCEMENT	888/404-3922	Atlantic States Marine Fish. Comm.	202/289-6400
		Gulf States Marine Fish. Comm.	228/875-5912

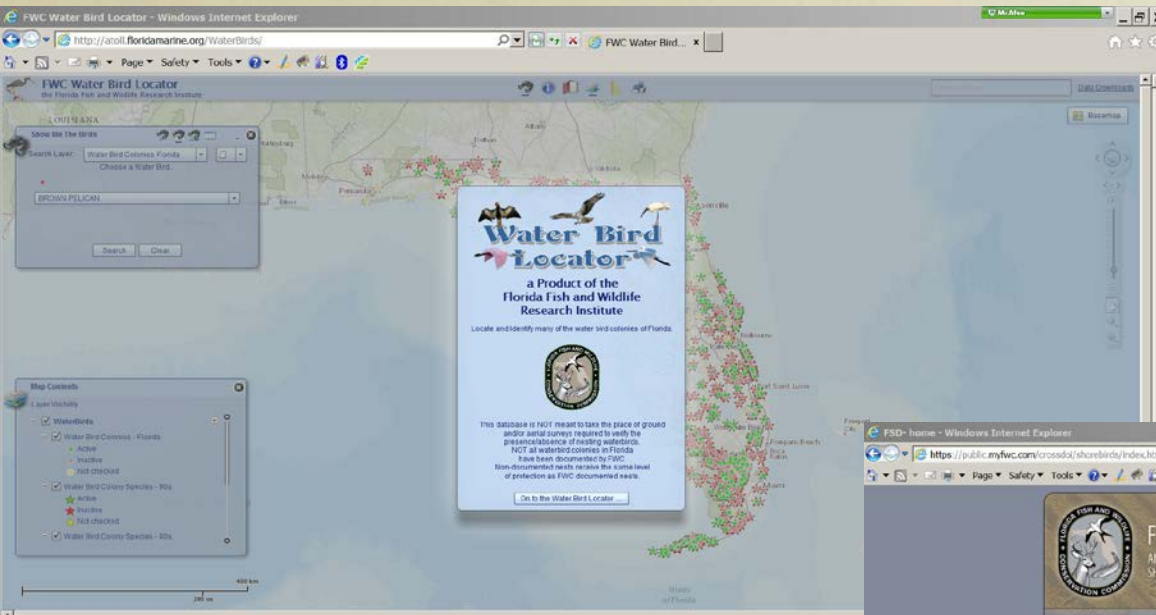


Revised January 2008

<http://myfwc.com/research/saltwater>



FWRI Bird (Avian) Data



Shark/Large Pelagics Tracking

Guy Harvey Research Institute/Nova Southeastern University

Guy Harvey Research Institute Tracking Website - Windows Internet Explorer

McAfee

http://www.nova.edu/ocean/ghri/tracking/

Track Your Tiger S... Guy Harvey Res...

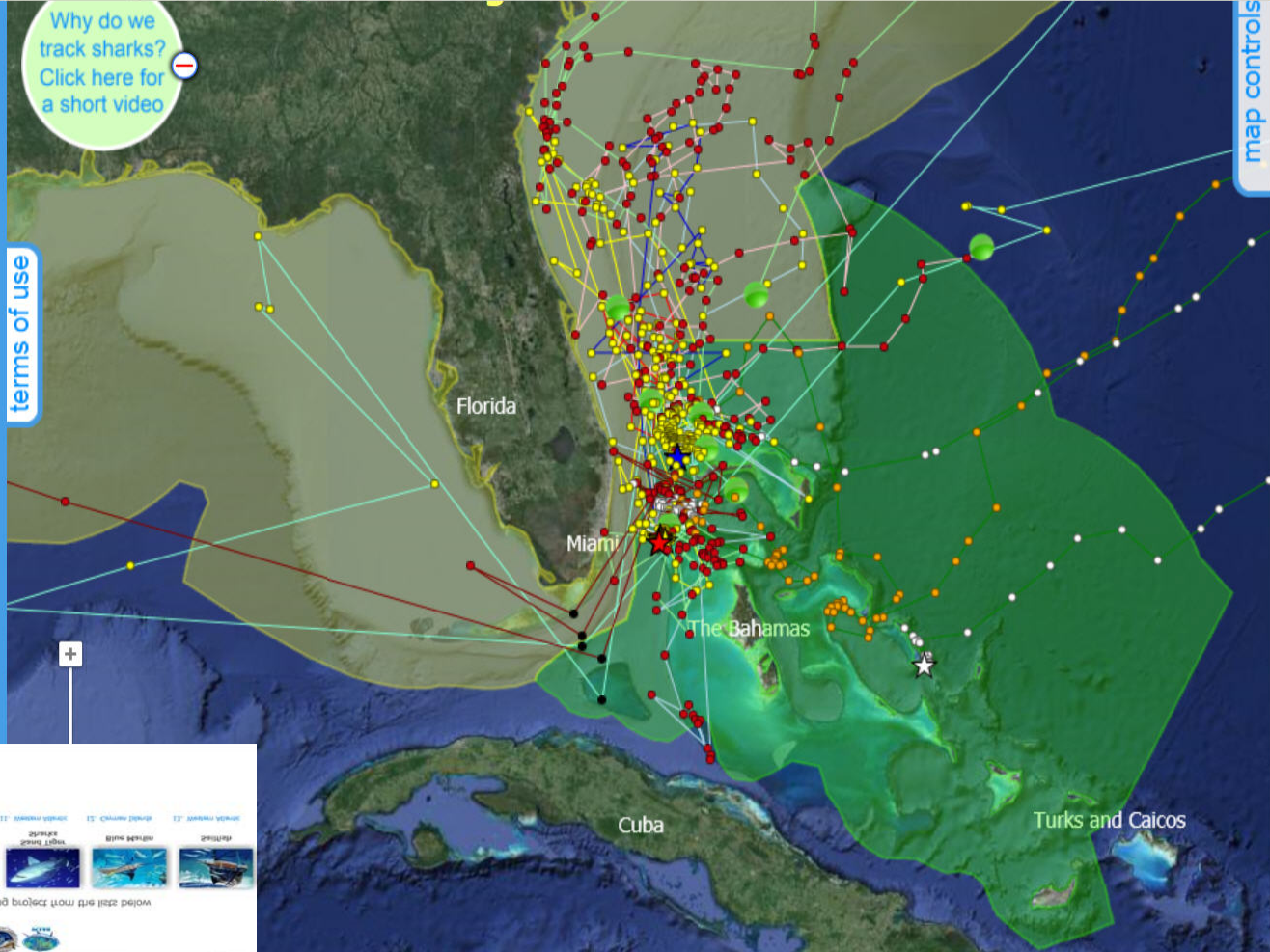
Page Safety Tools

NOVA SOUTHEASTERN UNIVERSITY
Oceanographic Center




Contact GHRI

Select a different tracking project



Sponsors and Partners
Tiger Shark

View Tracks:
Select a name(s). Click "Animate" to see where I have traveled. Animals reporting in the last 14 days are marked with a 

-  Anna S ?
-  Christina ?
-  CV Bethel ?
-  Emily ?
-  Greg ?
-  Jamin ?
-  John S ?
-  Michael ?
-  Nikole ?
-  Wyatt ?

Animate Tracks

- View EEZs:**
-  Bahamas
 -  Bermuda
 -  United States

Timeline:

Lightblue	-	2010
Yellow	-	2011
Red	-	2012
White	-	2013
Orange	-	2014

Small images of various shark species, including a tiger shark, a hammerhead, and a bonnethead.

NOAA Digital Coast



Data

Tools

Training

Stories

Apply It

GeoZone Blog



DATA

TOOLS

TRAINING

STORIES

What is the Digital Coast?

This NOAA-sponsored website is focused on helping communities address coastal issues and has become one of the most-used resources in the coastal management community. The dynamic Digital Coast Partnership, whose members represent the website's primary user groups, keeps the effort focused on customer needs.

Learn more in our About section, or just dive in. And please provide feedback as often as possible. Hearing from you is what makes the Digital Coast work.

Learn More about the Digital Coast

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Top: [Data](#) [Tools](#) [Training](#) [Stories](#)

- 1 [Coastal Lidar](#)
- 2 [Coastal Change Analysis Program](#)
- 3 [Economics: National Ocean Watch](#)
- 4 [Electronic Navigational Charts](#)
- 5 [Emergency Response Imagery](#)

<http://coast.noaa.gov/digitalcoast/>

[View more](#)

Questions???

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Kathleen.Okeife@MyFWC.com

Henry.Norris@MyFWC.com

Phone (727) 896-8626

FWRI Center for Spatial Analysis

<http://ocean.floridamarine.org/csa>

Thank You!

