Overview of the Artificial Reefs Regulatory Framework

Keith Mille, Biological Administrator

June 9, 2016

Florida Fish and Wildlife Conservation Commission

Division of Marine Fisheries Management

Purpose of Regulatory Requirements

'Do No Harm'

- Navigation
- Water quality
- Natural resources/habitat
- Protected species
- Historical resources
- Proprietary
- Overall public interest

Federal Regulatory Authority

- Section 10 of the *Rivers and Harbor Act*
  Deposition of materials

- Section 404 of the *Clean Water Act*
  Discharge of fill materials

Coordinated by the

US Army Corps of Engineers

US Army Corps of Engineers

Section 10 of the Rivers and Harbors Act of 1899

That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill,

Related Federal Laws

US Army Corps of Engineers

- Endangered Species Act, Section 7 (1973)
- Marine Mammal Protection Act (1972)
- National Environmental Policy Act (1969)
- Marine Protection Research and Sanctuaries Act (1972)
- National Historic Preservation Act (1966)
- Coastal Zone Management Act (1972)

Corps Regulations

- Section 322.5(b) Artificial Reefs… the district engineer reviews provisions for siting, construction, operating, maintaining…

US Army Corps of Engineers

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER II - CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY, DEPARTMENT OF DEFENSE

PART 322 - PERMITS FOR STRUCTURES OR WORK IN OR AFFECTING NAVIGABLE WATERS OF THE UNITED STATES

322.5 - Special policies.

The Secretary of the Army has delegated to the Chief of Engineers the authority to issue or deny section 10 permits. The following additional special policies and procedures shall also be applicable to the evaluation of permit applications under this regulation.

(a) General. DA permits are required for structures or work in or affecting navigable waters of the United States. However, certain structures or work specified in 33 CFR part 330 are permitted by that regulation. If a structure or work is not permitted by that regulation, an individual or regional section 10 permit will be required.

(b) Artificial Reefs. (1) When considering an application for an artificial reef, as defined in 33 CFR 322.2(g), the district engineer will review the applicant's provisions for siting, constructing, monitoring, operating, maintaining, and managing the proposed artificial reef and shall determine if those provisions are consistent with the following standards:

Corps Regulations - 33 CFR 322.5(b)

(i) **Enhancement of fishery resources** to the maximum extent practicable;

(ii) Facilitate access & utilization by **recreational and commercial fishermen**;

(iii) **Minimize conflicts** among competing uses of the navigable waters;

(iv) **Minimize environmental risks** and risks to personal health and property;

(v) Generally accepted principles of international law; and

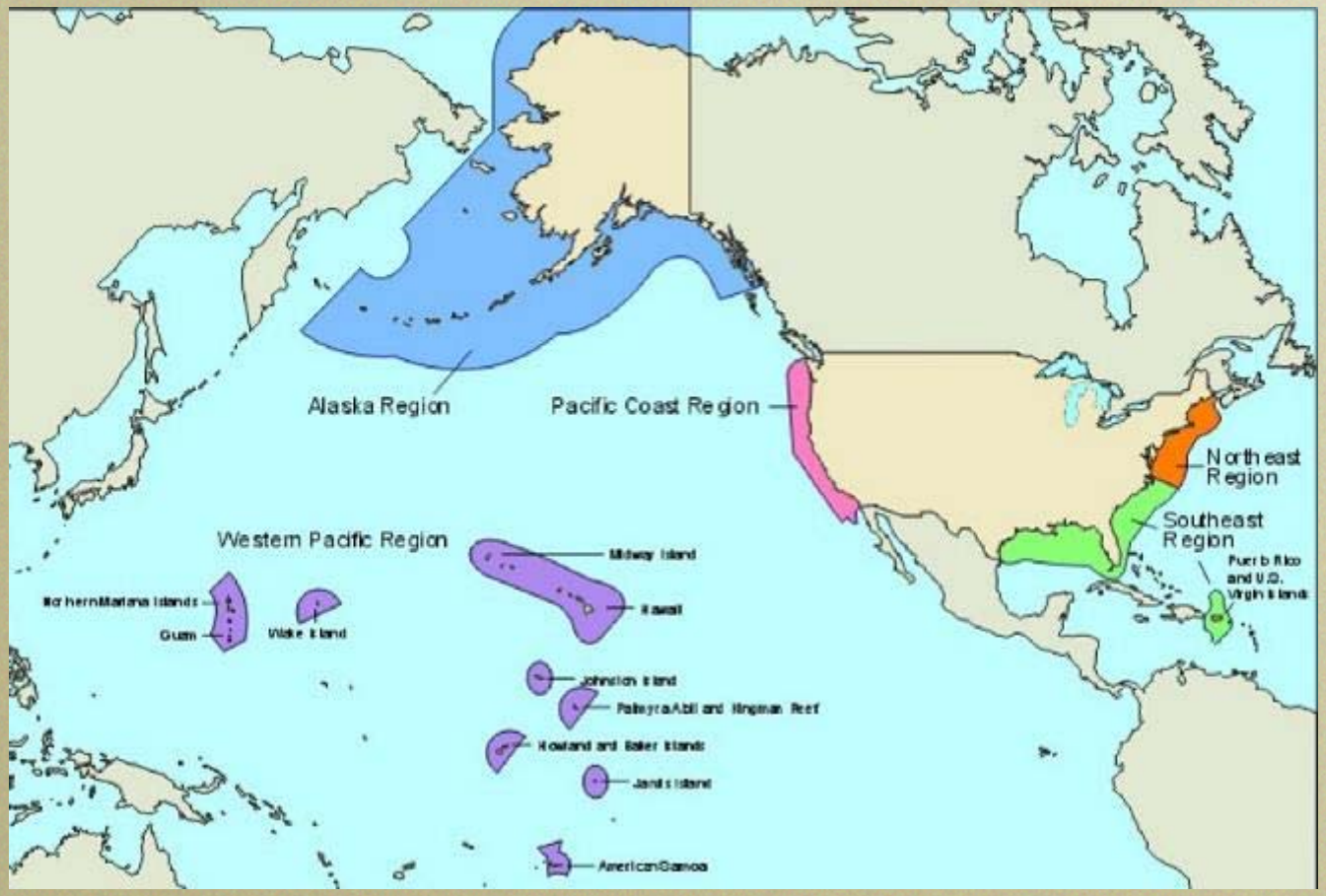
(vi) Prevention of any unreasonable **obstructions to navigation**. If the district engineer decides that the applicant's provisions are not consistent with these standards, he shall deny the permit. If the district engineer decides that the provisions are consistent with these standards, and if he decides to issue the permit **after the public interest review**, he shall make the provisions part of the permit.

(2) In addition, **consider the National Artificial Reef Plan** developed pursuant to section 204 of the National Fishing Enhancement Act of 1984, and if he decides to issue the permit, will notify the Secretary of Commerce of any need to deviate from that plan.

Federal Regulatory Jurisdiction

US Army Corps of Engineers

- Exclusive Economic Zone (EEZ) – where the U.S. has jurisdiction over natural resources (no more than 200 nm)



State Regulatory Jurisdiction

- Submerged Lands Act (1953) - Federal law that recognized the title of the states to submerged navigable lands within their boundaries at the time they entered the Union.

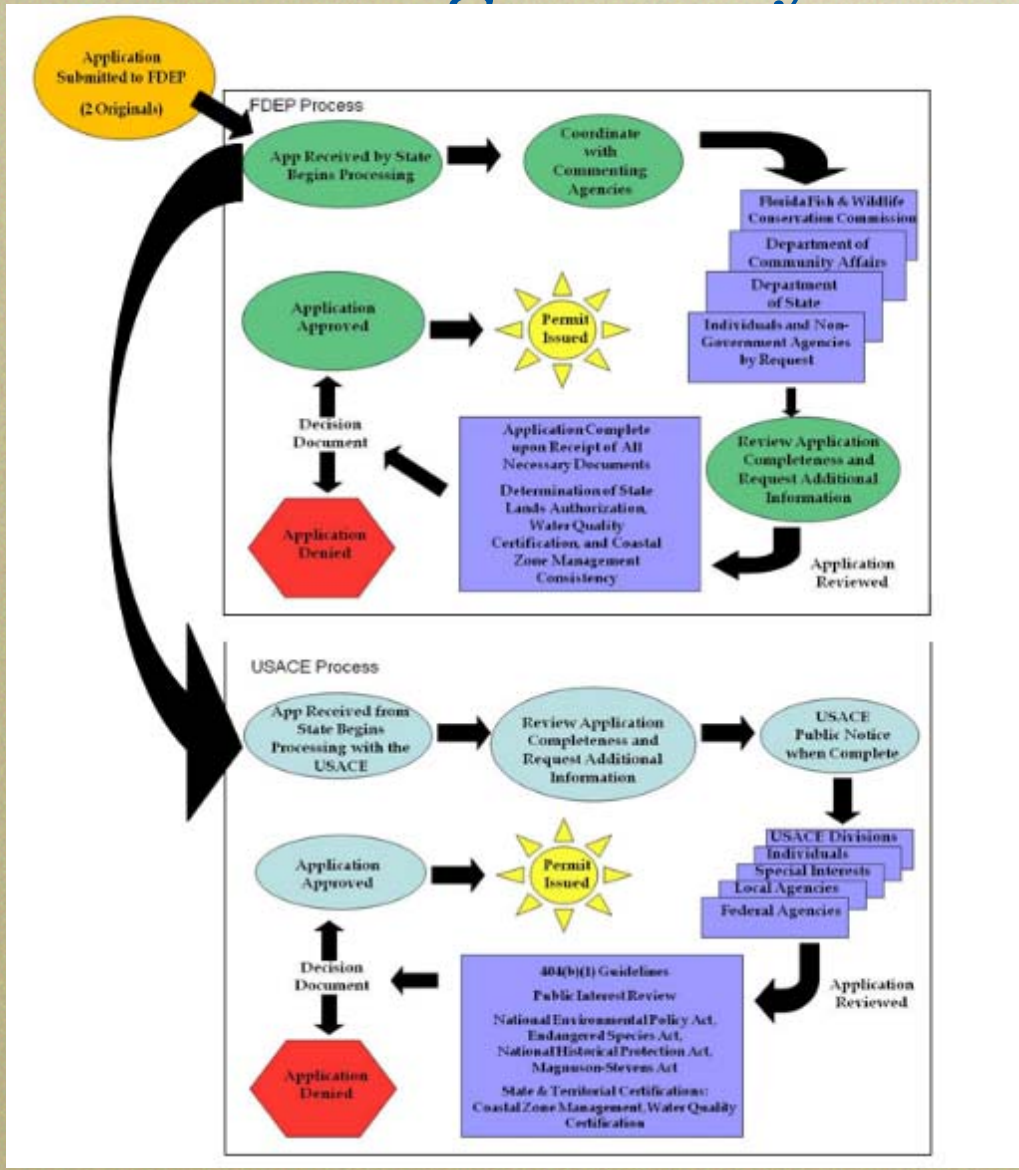
  Atlantic Ocean, 3nm

  Pacific Ocean, 3nm

  *Gulf of Mexico, 9nm (FL, TX), 3nm (AL, MS, LA)**

- State of Florida: Joint Environmental Resource Permit and Sovereign Submerged Lands Authorization
- Local municipalities may require additional permit (e.g. Florida's Miami-Dade and Broward Counties)

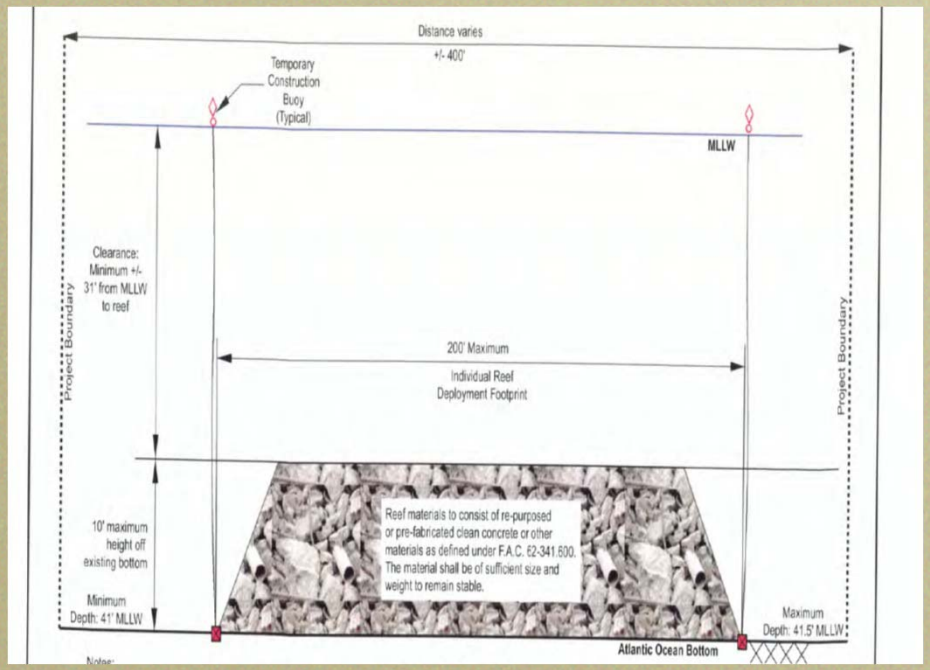
State/Fed Regulatory Process (Florida)



- State Process
  - *Coordinate upon receipt*
- Federal Process
  - *Coordinate after completeness review*
  - *NMFS Protected Species Consultation*

Regulatory Constraints/Boundaries for Artificial Reef Construction

- Spatial boundaries
  - Navigational requirements



- Channels, fairways
- Minimum clearance

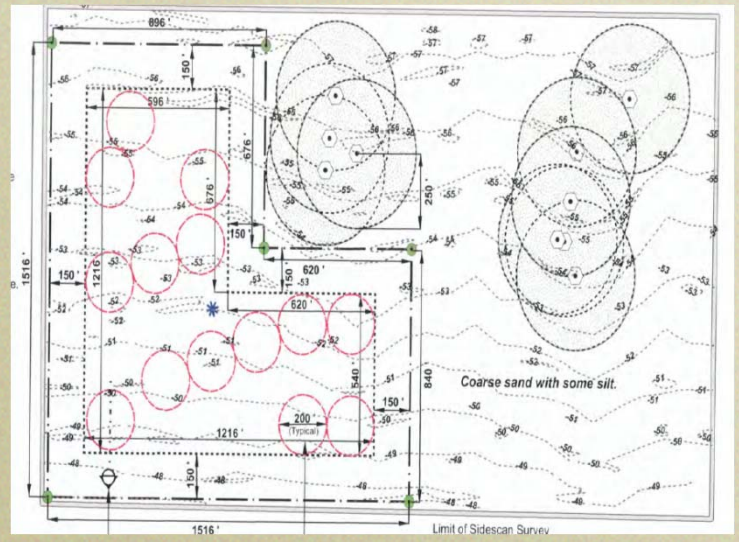
Regulatory Constraints for Artificial Reef Construction

- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources

- Submerged aquatic vegetation
- Natural hardbottom

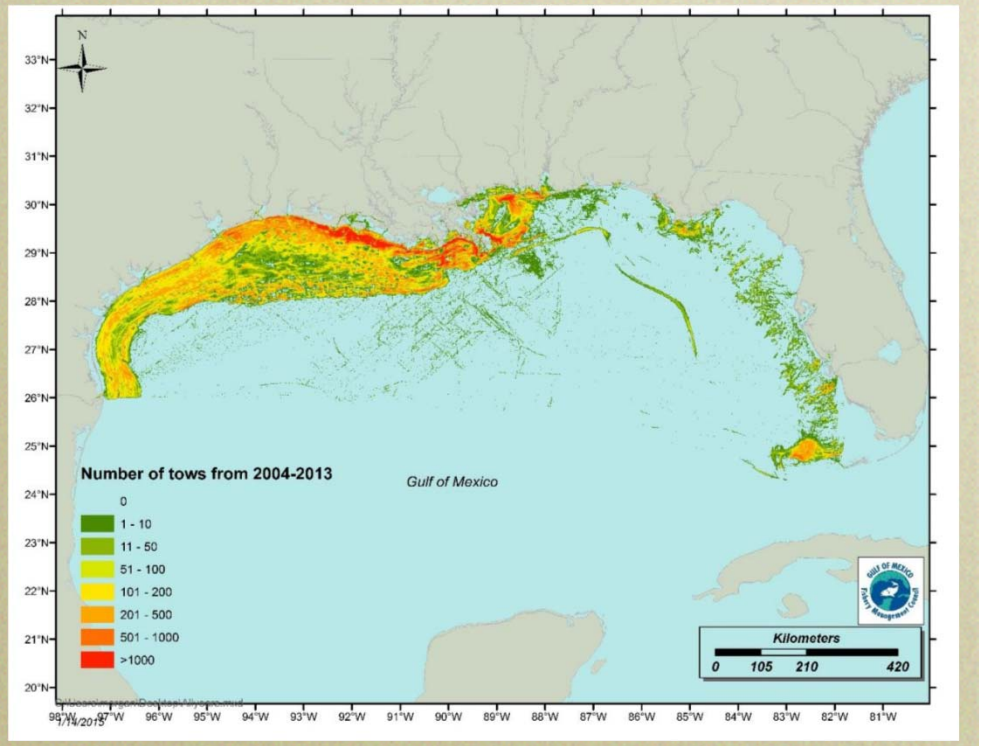
Regulatory Constraints for Artificial Reef Construction

- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources
  - Historical resources



Regulatory Constraints for Artificial Reef Construction

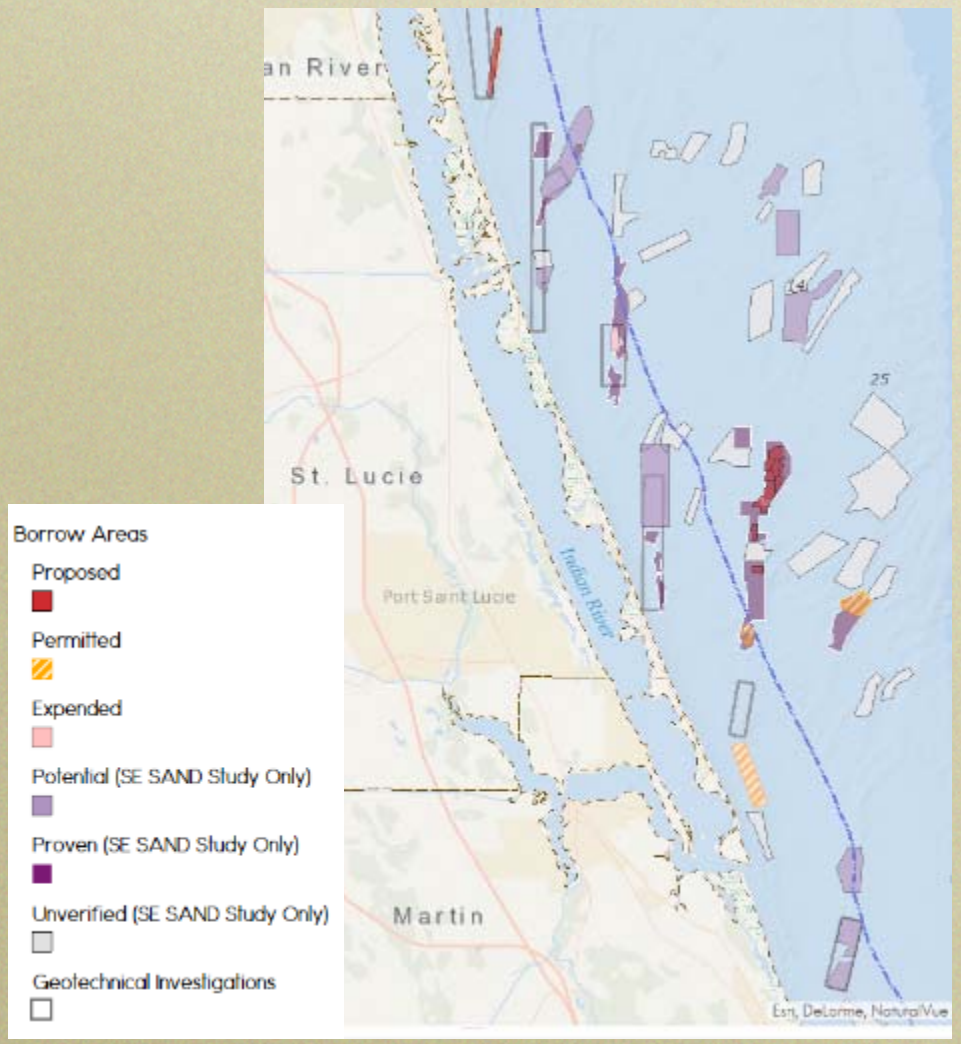
- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources
  - Historical resources
  - Shrimp trawl areas



- Cumulative shrimp tows from 2004-2013 (GSMFC, 2015)

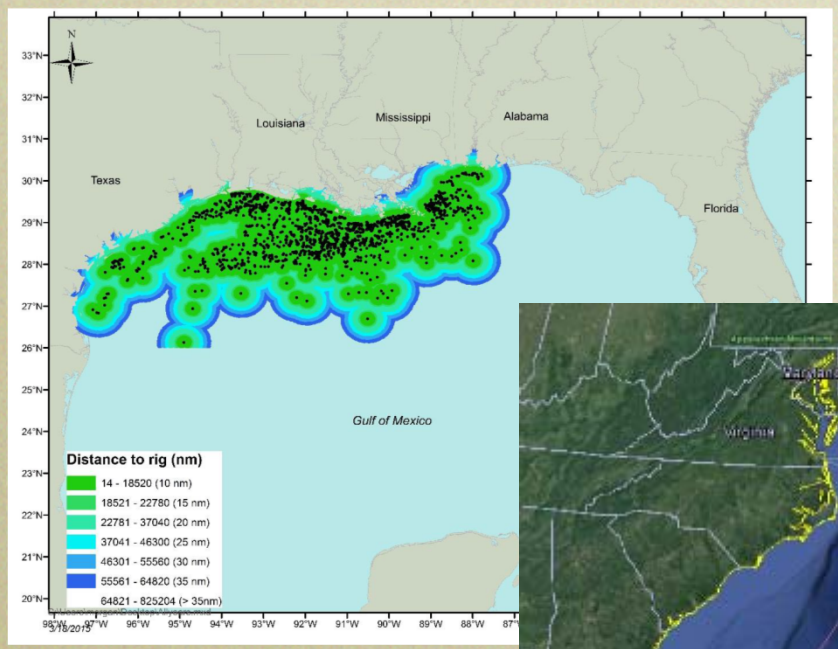
Regulatory Constraints for Artificial Reef Construction

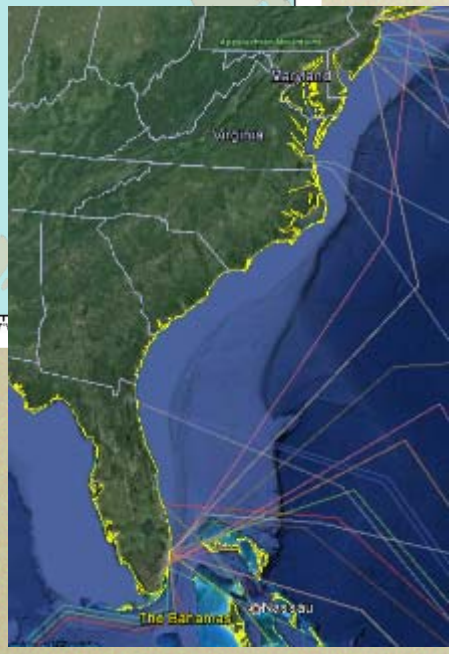
- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources
  - Historical resources
  - Shrimp trawl areas
  - Sand borrow areas



Regulatory Constraints for Artificial Reef Construction

- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources
  - Historical resources
  - Shrimp trawl areas
  - Sand borrow areas
  - Existing structures and leases





- Oil & gas
- Telecommunications

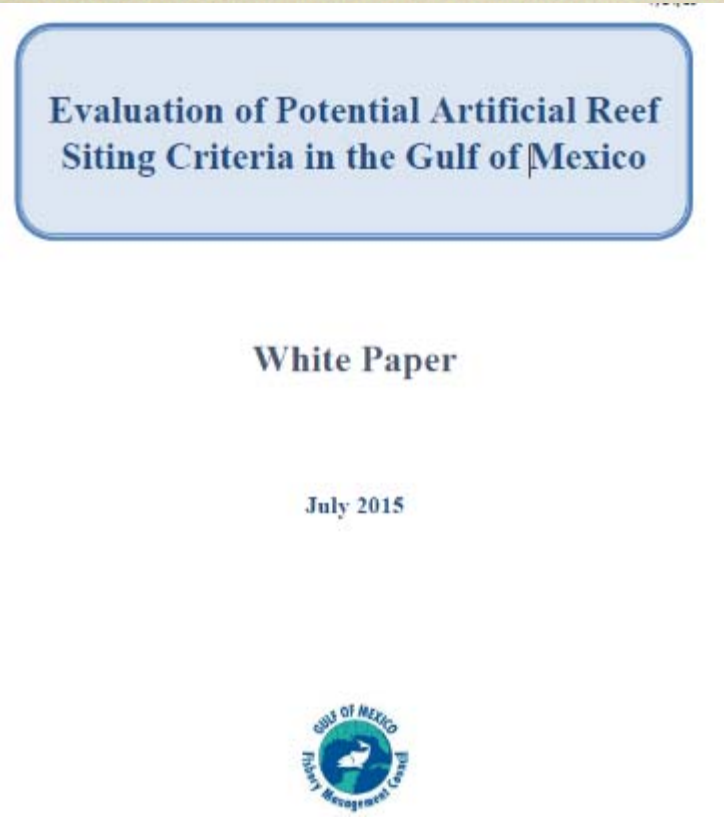
Regulatory Constraints for Artificial Reef Construction

- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources
  - Historical resources
  - Shrimp trawl areas
  - Sand borrow areas
  - Existing structures and leases
  - Protected Species (spatial & temporal)
    Sec 7 – Endangered Species Act

- Spatial: Critical habitat areas
- Temporal: Calving seasons

Regulatory Constraints for Artificial Reef Construction

- Spatial boundaries
  - Navigational requirements
  - Marine habitat resources
  - Historical resources
  - Shrimp trawl areas
  - Sand borrow areas
  - Existing structures and leases
  - Protected Species (spatial & temporal) Sec 7 – Endangered Species Act
  - Other uses of the seafloor


Evaluation of Potential Artificial Reef Siting Criteria in the Gulf of Mexico

White Paper

July 2015

http://geodata.myfwc.com/

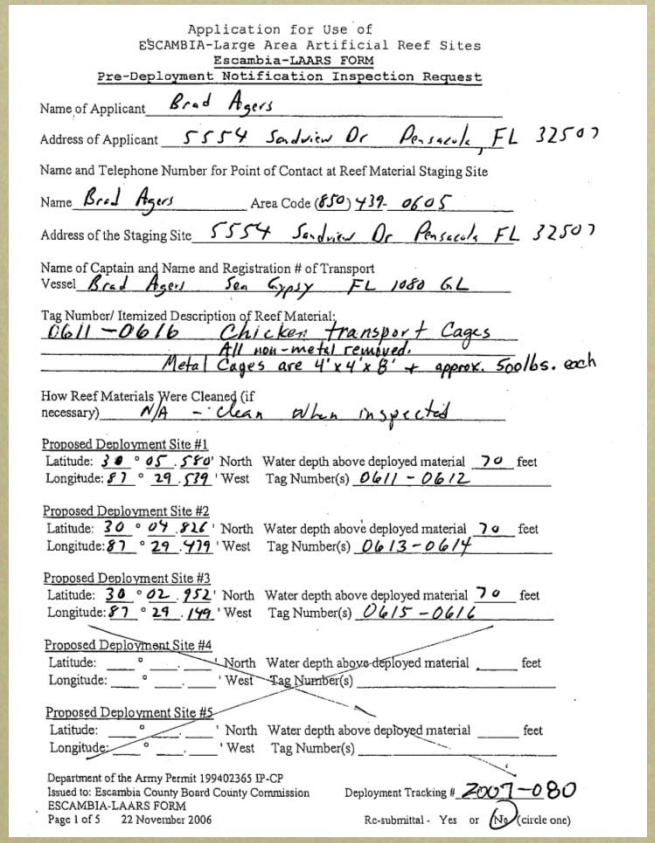
Regulatory Constraints for Artificial Reef Construction

- Material limitations
  - Durable and stable in a 20-yr storm event
  - Weigh at least 500 pounds
  - No free floating material
  - Clean – no oils, grease, asphalt or other toxic residues
  - No entrapping marine life – modules must have at least 36” opening for turtle escapement
  - No exposed rebar to minimize loss of fishing gear and marine debris
  - Steel vessels must be prepared in compliance with EPA BMPs

http://www.gsmfc.org/Guidelines_for_Marine_Artificial_Reef_Materials.pdf

Regulatory Constraints for Artificial Reef Construction

- Material limitations
  - ‘private reefs’



Application for Use of
ESCAMBIA-Large Area Artificial Reef Sites
Escambia-LAARS FORM
Pre-Deployment Notification Inspection Request

Name of Applicant Brad Agers

Address of Applicant 5554 Sandview Dr Pensacola, FL 32507

Name and Telephone Number for Point of Contact at Reef Material Staging Site

Name Brad Agers Area Code (850) 439-0605

Address of the Staging Site 5554 Sandview Dr Pensacola FL 32507

Name of Captain and Name and Registration # of Transport Vessel Brad Agers Sea Gypsy FL 1080 GL

Tag Number/ Itemized Description of Reef Material:
0611 – 0616 Chicken transport Cages
All non-metal removed.
Metal Cages are 4'x4'x8' + approx. 500lbs. each

How Reef Materials Were Cleaned (if necessary) NA – clean when inspected

Proposed Deployment Site #1
Latitude: 30 ° 05 . 580' North Water depth above deployed material 70 feet
Longitude: 87 ° 29 . 579 ' West Tag Number(s) 0611 – 0612

Proposed Deployment Site #2
Latitude: 30 ° 04 . 826 ' North Water depth above deployed material 70 feet
Longitude: 87 ° 29 . 479 ' West Tag Number(s) 0613 – 0614

Proposed Deployment Site #3
Latitude: 30 ° 02 . 952 ' North Water depth above deployed material 70 feet
Longitude: 87 ° 29 . 149 ' West Tag Number(s) 0615 – 0616

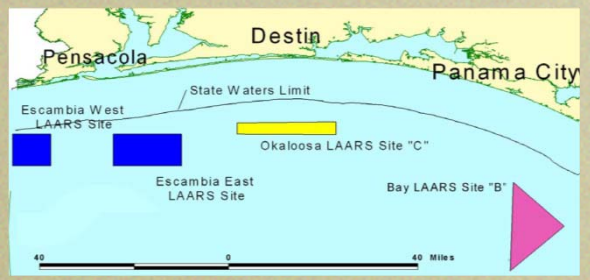
Proposed Deployment Site #4
Latitude: ___ ° ___ . ___ ' North Water depth above deployed material ____ feet
Longitude: ___ ° ___ . ___ ' West Tag Number(s) ____

Proposed Deployment Site #5
Latitude: ___ ° ___ . ___ ' North Water depth above deployed material ____ feet
Longitude: ___ ° ___ . ___ ' West Tag Number(s) ____

Department of the Army Permit 199402365 IP-CP
Issued to: Escambia County Board County Commission
ESCAMBIA-LAARS FORM
Page 1 of 5 22 November 2006

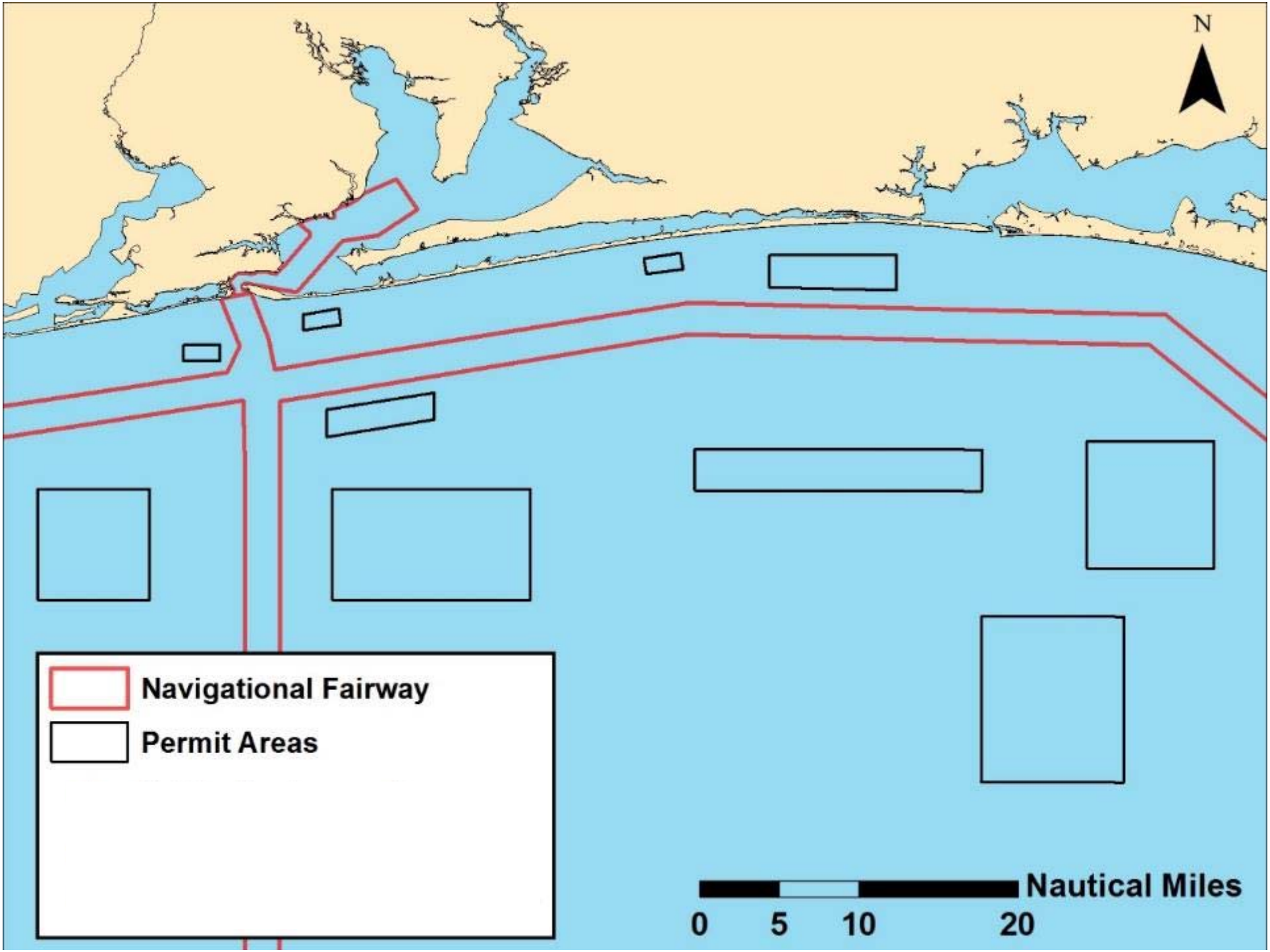
Deployment Tracking # 2007-080

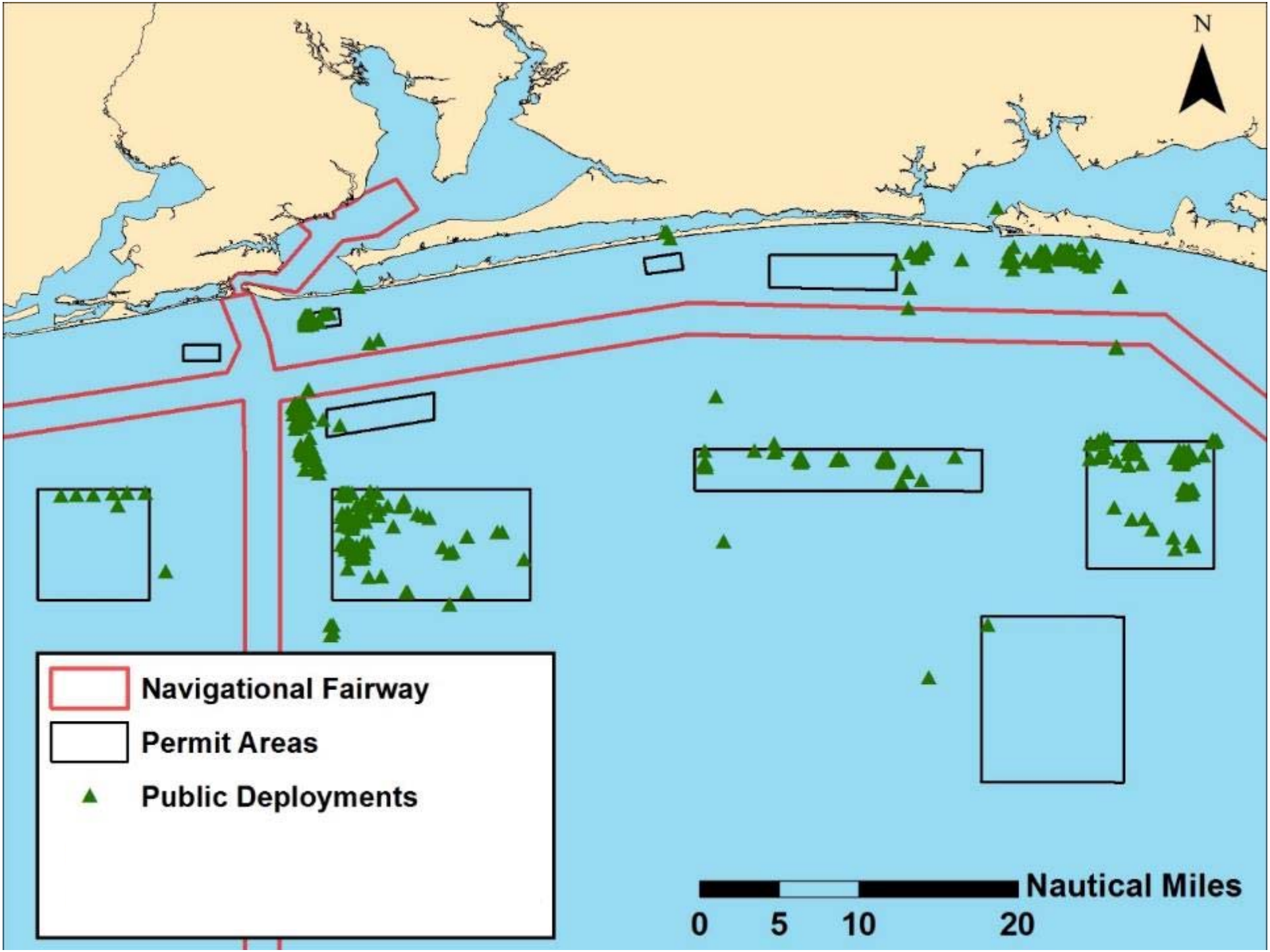
Re-submittal - Yes or No (circle one)

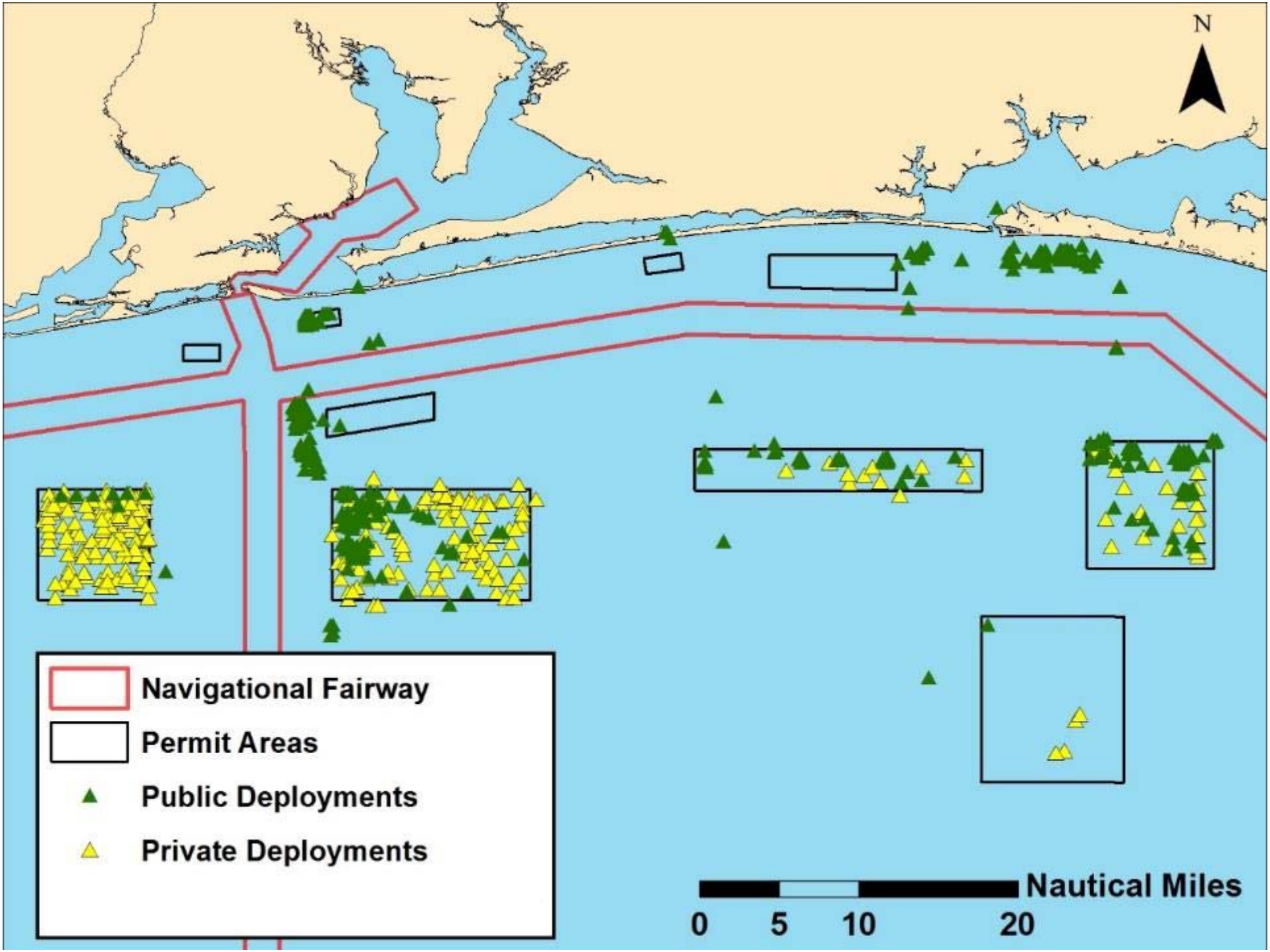


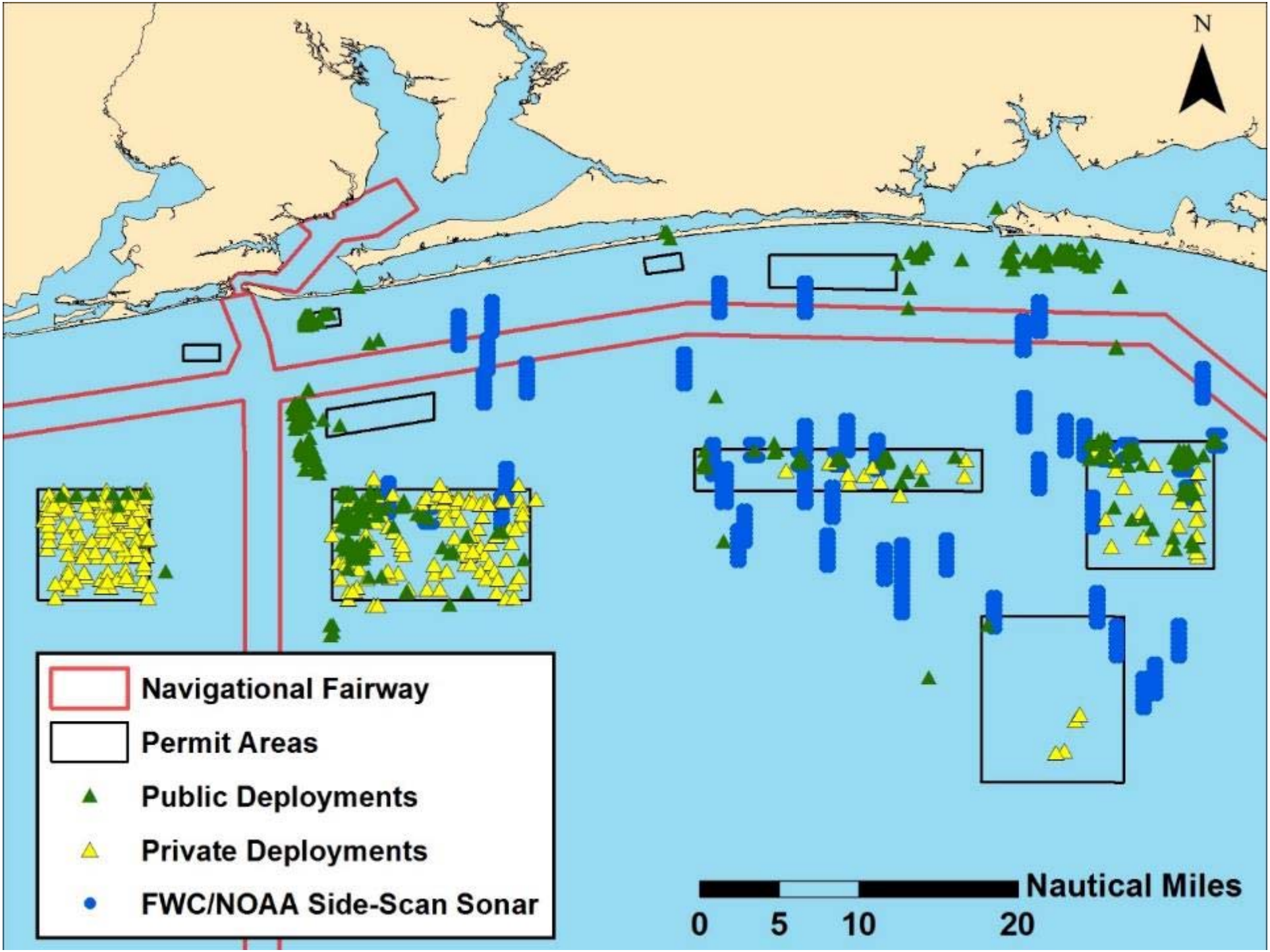
Regulatory Implications of Unpermitted or Past Problematic Materials

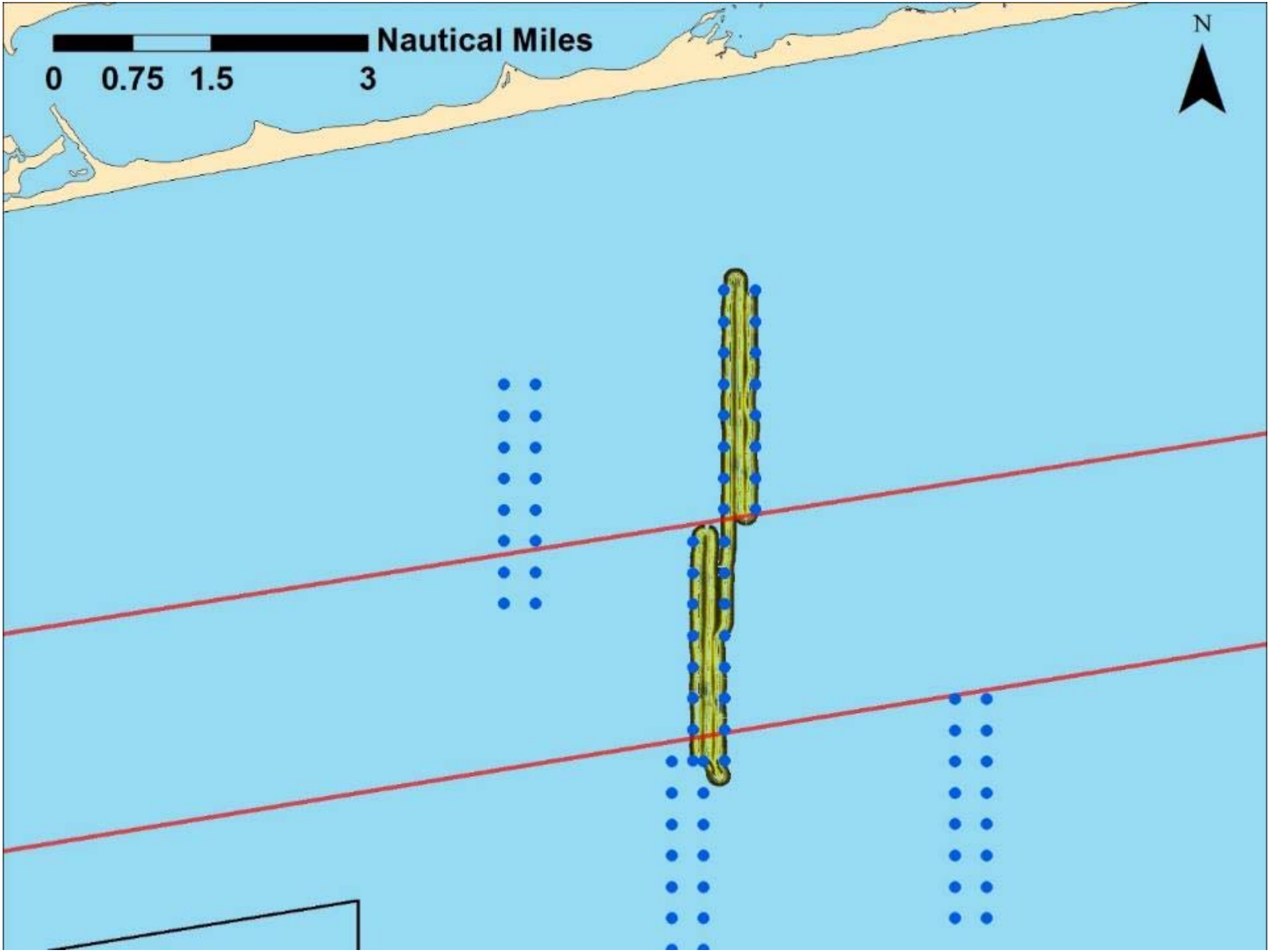
- Unpermitted (illegal) materials
  - Unpermitted material types
  - Unauthorized locations

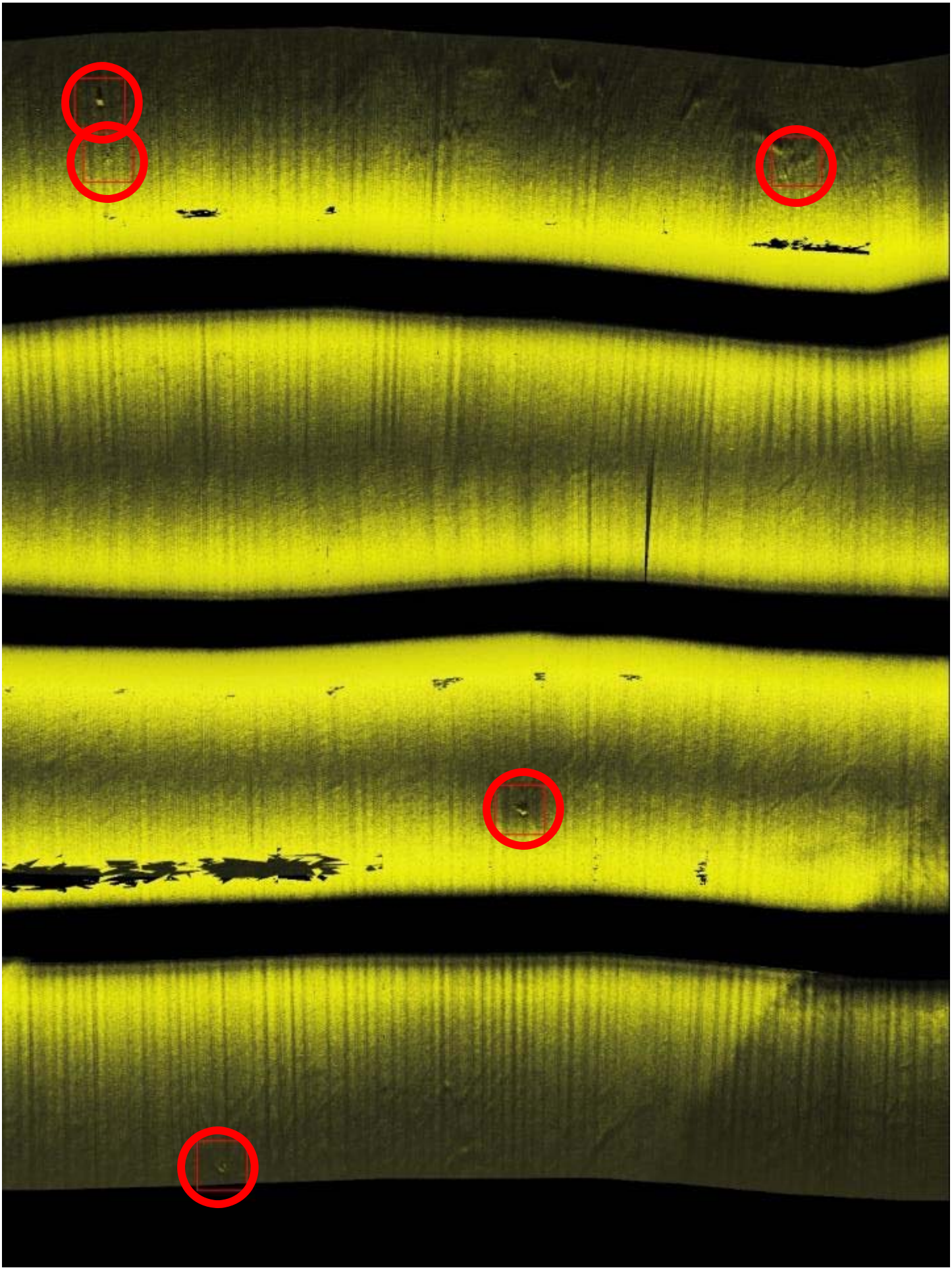

N
Navigational Fairway
Permit Areas
Nautical Miles
0
5
10
20


N
Navigational Fairway
Permit Areas
Public Deployments
Nautical Miles
0
5
10
20

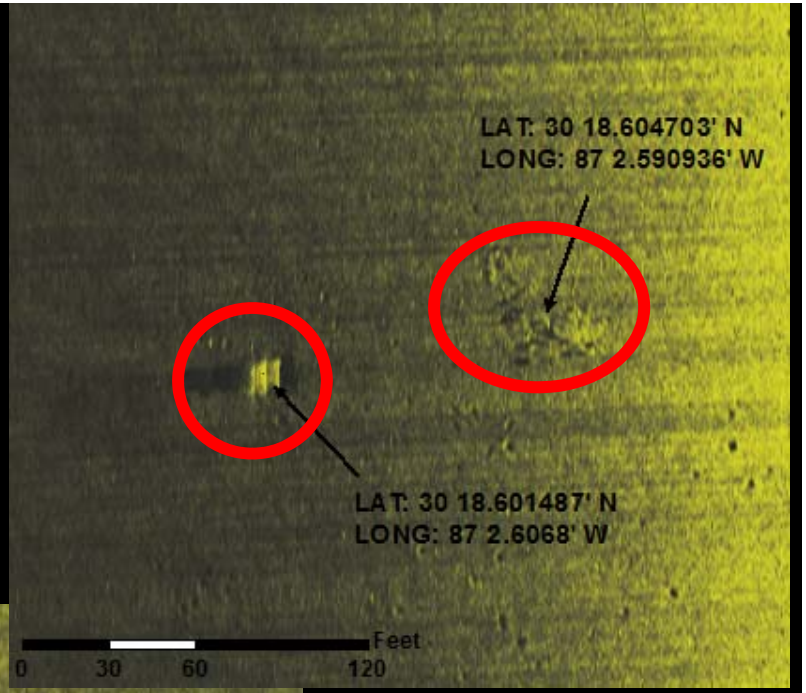

N
Navigational Fairway
Permit Areas
Public Deployments
Private Deployments
Nautical Miles
0
5
10
20

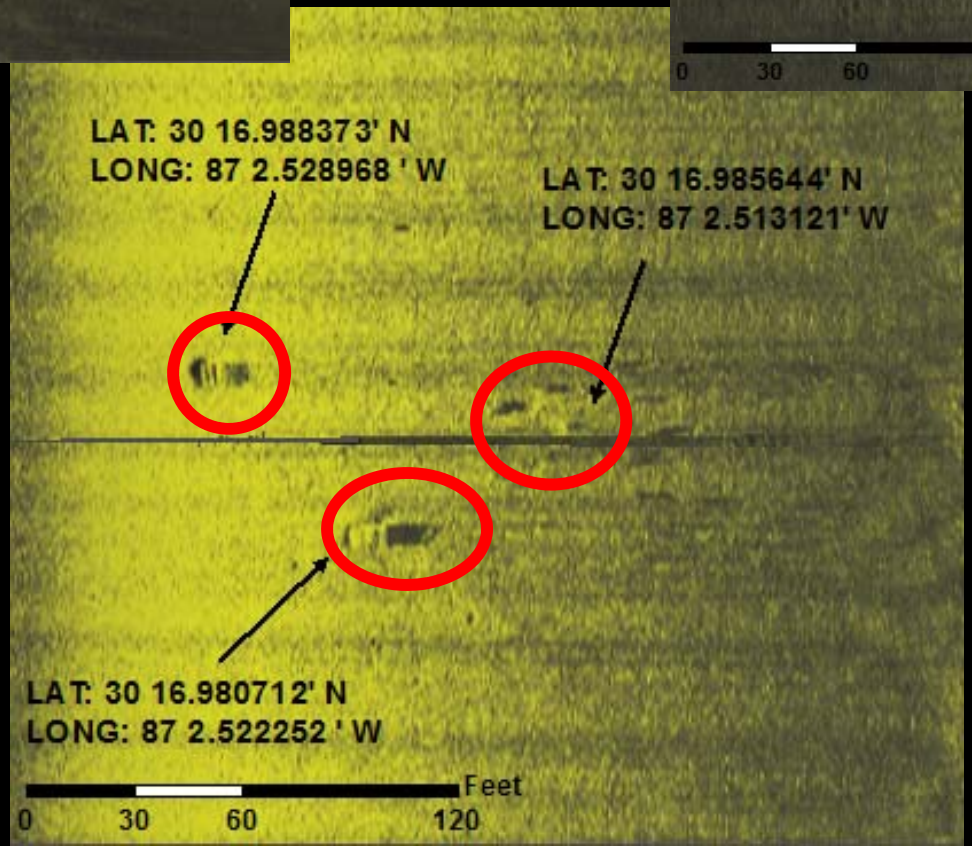

N
Navigational Fairway
Permit Areas
Public Deployments
Private Deployments
FWC/NOAA Side-Scan Sonar
Nautical Miles
0
5
10
20


Nautical Miles
0
0.75
1.5
3
N



LAT: 30 17.10077' N
LONG: 87 02.284748' W
Feet
0 30 60 120

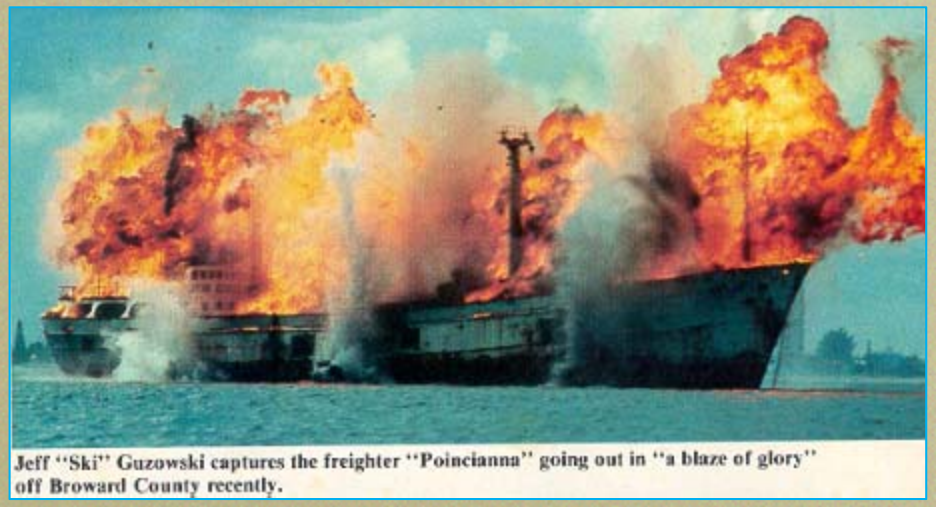

LAT: 30 18.604703' N
LONG: 87 2.590936' W
LAT: 30 18.601487' N
LONG: 87 2.6068' W
Feet
0 30 60 120


LAT: 30 16.988373' N
LONG: 87 2.528968 ' W
LAT: 30 16.985644' N
LONG: 87 2.513121' W
LAT: 30 16.980712' N
LONG: 87 2.522252 ' W
Feet
0 30 60 120

Regulatory Implications of Unpermitted or Past Problematic Materials

- Past (now prohibited) materials/methods
  - Tires (1970s - 1980s)
  - Pyrotechnics (1980s – early 1990s)
  - Aircraft & auto bodies (1970s – early 1990s)

Pine Knoll Shores, NC, 2003



Jeff "Ski" Guzowski captures the freighter "Poincianna" going out in "a blaze of glory" off Broward County recently.

Ft. Lauderdale, FL, 1987

Pensacola, FL, 1992

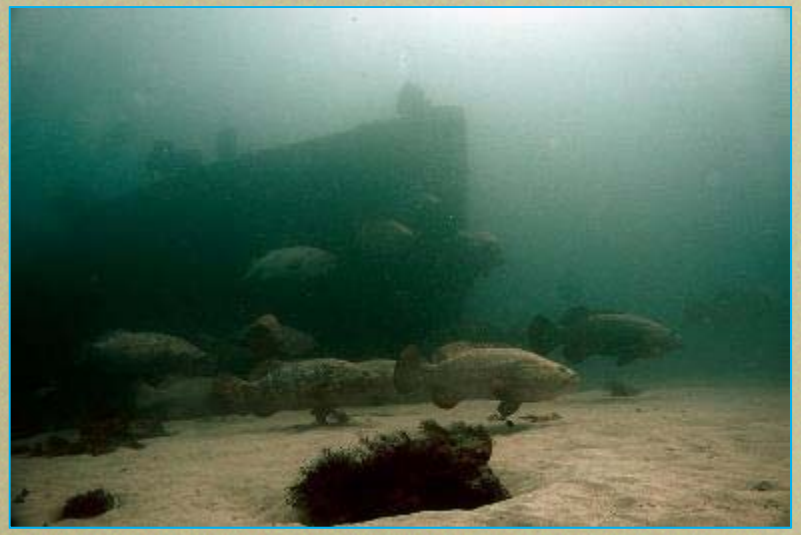
Continue to generate press and persist misconceptions about modern artificial reef program objectives.

Opportunities for improved coordination/collaboration

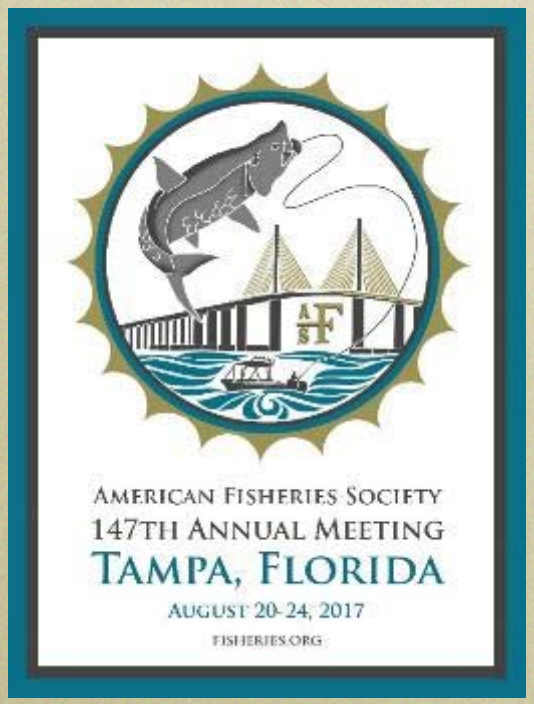
- Improve planning and pre-deployment information
  - Leverage technology (side scan, ROV, GoPro, GIS)
- Increase feedback on material performance
  - Reduce regulatory decisions based on limited information
- Encourage pre-application consultations
- Stop unpermitted/illegal activities
  - Increase compliance, enforcement and foster stewardship

Artificial Reefs Regulatory Framework

- Permit issuance and compliance with permit conditions, does not necessarily mean fisheries management objectives achieved



Questions?

Save the Date!

- AFS 2017 National Meeting
- Hosted by FWC
- Possible Artificial Reef Symposium