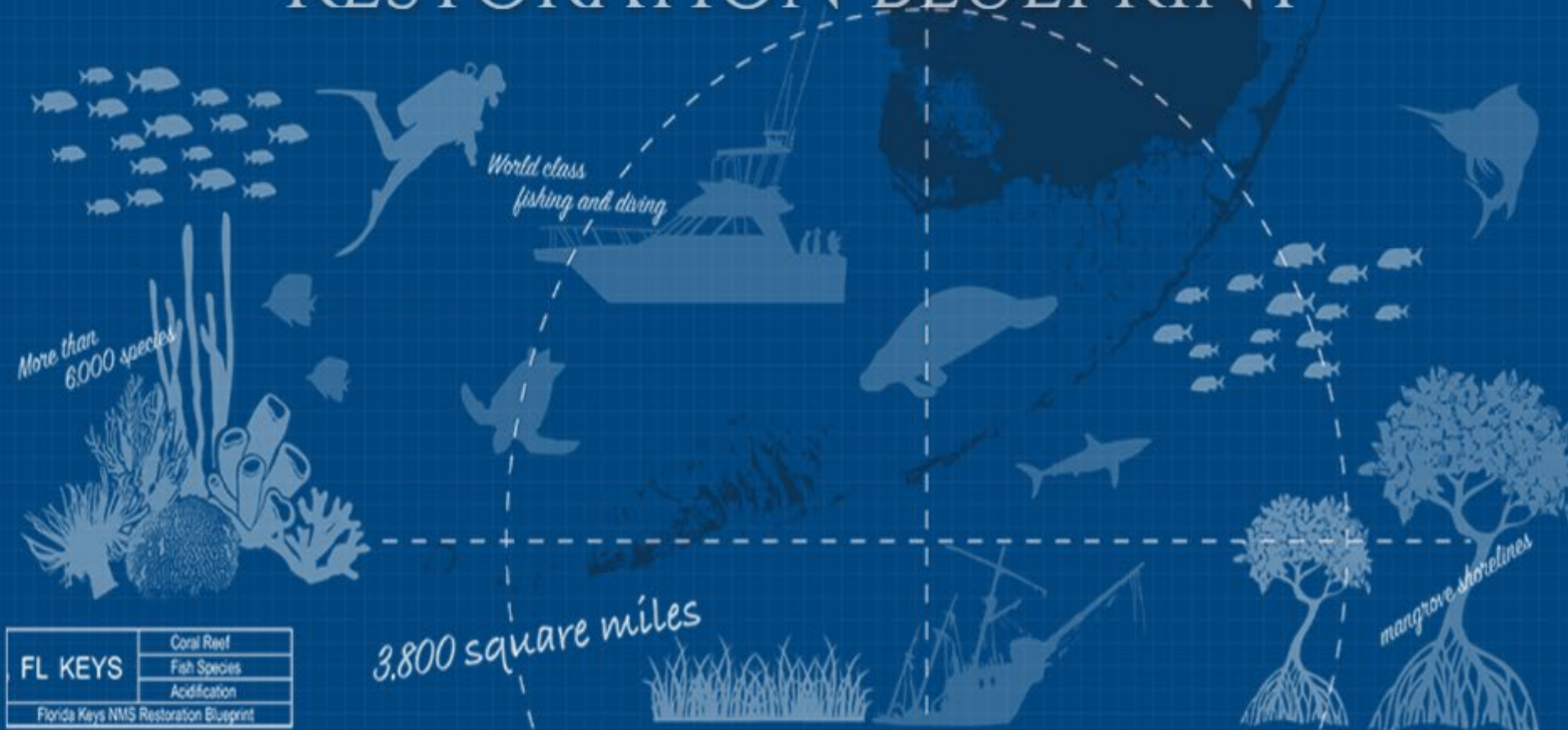




# FLORIDA KEYS NATIONAL MARINE SANCTUARY RESTORATION BLUEPRINT



FL KEYS	Coral Reef
	Fish Species
	Acidification
	Florida Keys NMS Restoration Blueprint



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# Presentation Outline

- Restoration Blueprint Status & Timeline
- Proposed Rule highlights specific to Gulf of Mexico Fishery Management Council comment letter and authorities
  - Sanctuary boundary
  - Sanctuary-wide regulations
  - Marine zones & associated regulations
- Socio-Economic Analysis
- Management Plan
- Public outreach products and tools



Photo Credit: Catlin Seaview Survey

# Restoration Blueprint Timeline and Status

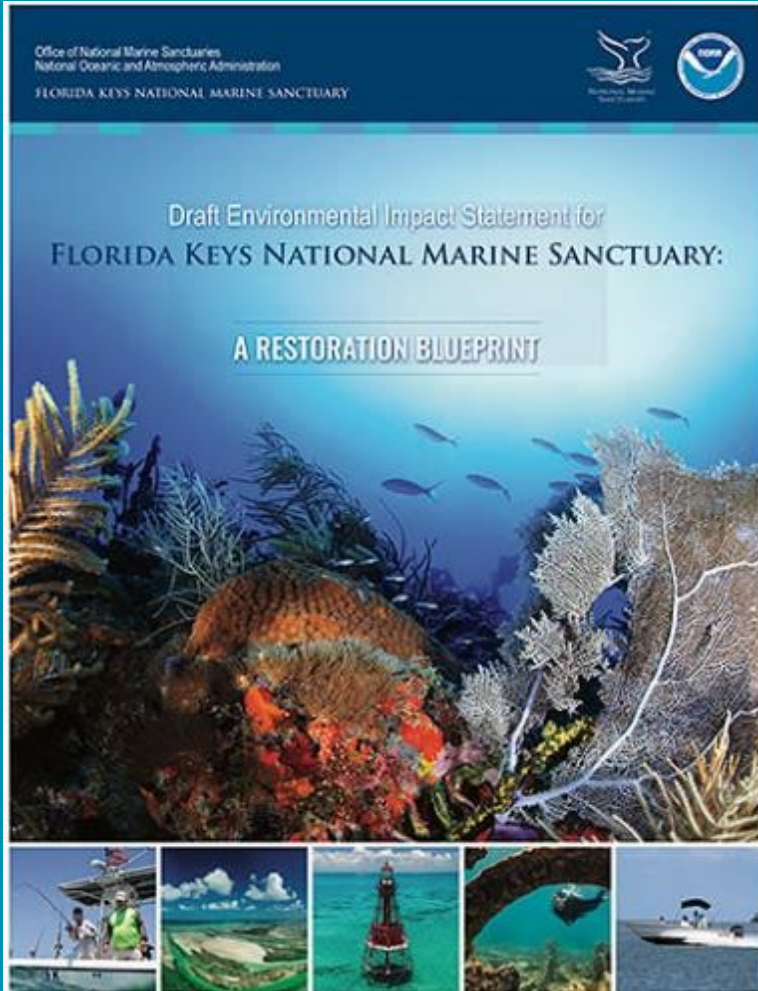






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# Notice of Proposed Rulemaking



Proposed regulations for:

- Sanctuary boundary
- Sanctuary-wide regulations
- Marine zones & zone-specific regulations

Proposed Rule is informed by:

- Public and agency comment
- Updated socio-economic and environmental data

Pulls from all four alternatives included in the Draft Environmental Impact Statement

\*Management Plan is a separate document

# GMFMC comment letter topics & FKNMS proposed rule content

Topics in 2020 GMFMC comment letter	Included in the proposed rule
<i>Tortugas Corridor marine zone</i>	<i>Not included</i>
<i>Idle speed no wake in all SPAs</i>	<i>Not included</i>
<i>FKNMS Live Rock Aquaculture permit</i>	<i>Not included</i>
Boundary expansion at Pulley Ridge	Included
Temporary Regulation for Emergency & Adaptive Management	Included
Traditional Fishing definition and process for coordination	Included
Baitfishing permits in Sanctuary Preservation Areas	Included
Water Quality and FKNMS role	Included in draft management plan



## Florida Keys National Marine Sanctuary Restoration Blueprint: Revised Draft Management Plan



[floridakeys.noaa.gov/blueprint/](https://floridakeys.noaa.gov/blueprint/)

# Management Plan

**Focuses on understanding and improving the condition of sanctuary resources through reducing threats and addressing emerging issues**

Proposed actions focus on:

- targeted research
- updated and adaptive management efforts
- regulatory compliance
- community involvement
- stewardship



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# Management Plan: Priority Themes

- Management Effectiveness and Adaptive Management
- Water Quality
- Restoration
- Visitor Use Management
- Enforcement
- Stewardship and Engagement





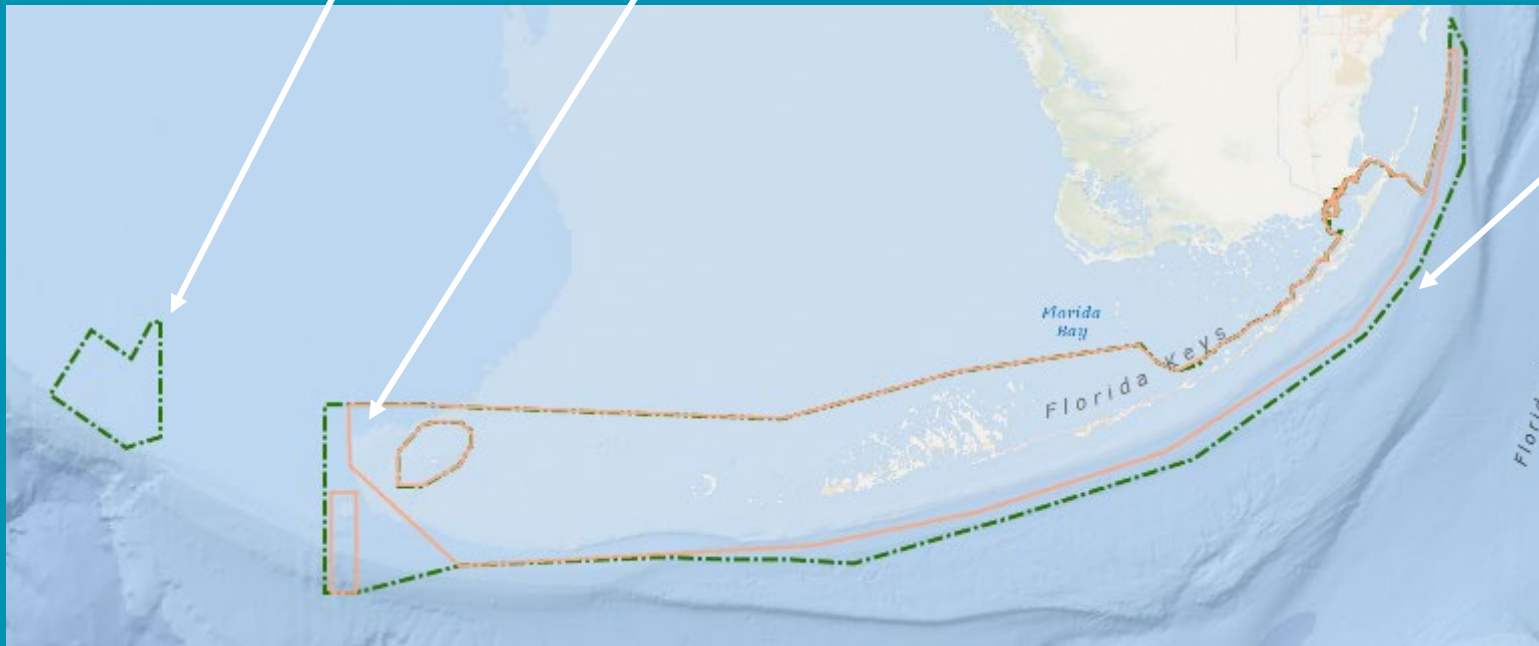
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# Sanctuary Boundary: Proposed Expansion

Nationally Significant - Pulley Ridge

Connectivity - Tortugas Region

*Connect & Preserve Special Habitats*



**Consistent regulation** - Expand boundary to include areas already closed to large vessel traffic



Existing: 3,800 sq miles



Proposed: 4,800 sq miles





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# TEMPORARY REGULATION EMERGENCY & ADAPTIVE MANAGEMENT

*Act Quickly to Respond & Protect*

Proposed regulation:

180-day action + optional 186-day extension

3 Categories:

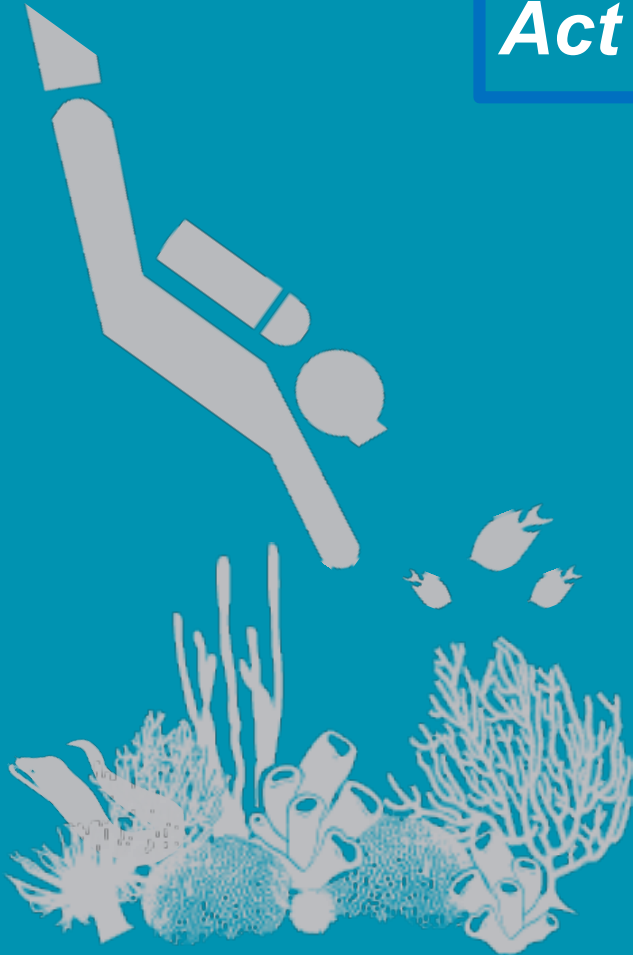
Minimize  
resources  
impacts

Initiate  
restoration

Facilitate  
timely  
research



Sets process for implementation





# Traditional Fishing

*Traditional fishing* means those commercial or recreational fishing activities that were customarily conducted within the sanctuary prior to its designation as identified in the 1996 Environmental Impact Statement and Management Plan for this sanctuary.

## Next Steps and Implementation:

- Work with NMFS, FWC, and the Gulf of Mexico and South Atlantic FMCs on an updated Protocol for Cooperative Fisheries Management to:
  - clarify traditional fishing activities, and
  - develop a transparent process to evaluate new or modified fishing activities and other relevant changes to fisheries management.

# Marine Zones & Associated Regulations: Proposal Goals

- Protect sensitive habitats and ecological functions
- Facilitate ecosystem restoration
- Simplify and create consistent regulations

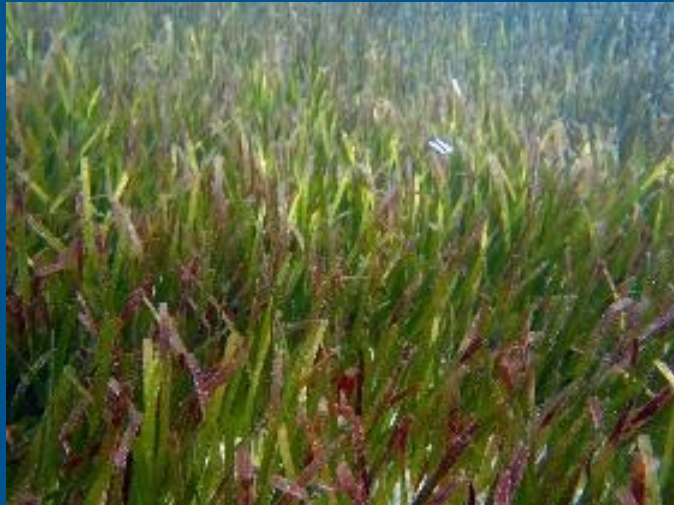


Photo Credit: Shawn  
Verne



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# SANCTUARY PRESERVATION AREAS

*Separate Conflicting Uses, Protect Habitats, Create Consistency*

## 17 SPAs:

- 2 new
- Combine 2 existing
- Eliminate 2 existing



## Prohibit:

- Discharge
- Fishing or taking marine life
- Anchoring





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# CONSERVATION AREAS

## *Protect Contiguous, Diverse Habitats & Facilitate Research*

### 6 Conservation Areas:

- All existing
- Eliminate Looe Key Special Use Area



### Prohibit:

- Discharge
- Fishing or taking marine life
- Anchoring, *except* in Western Sambo shoreward of reef line
- Entering except for continuous transit; stopping in Western Sambo is *allowed*

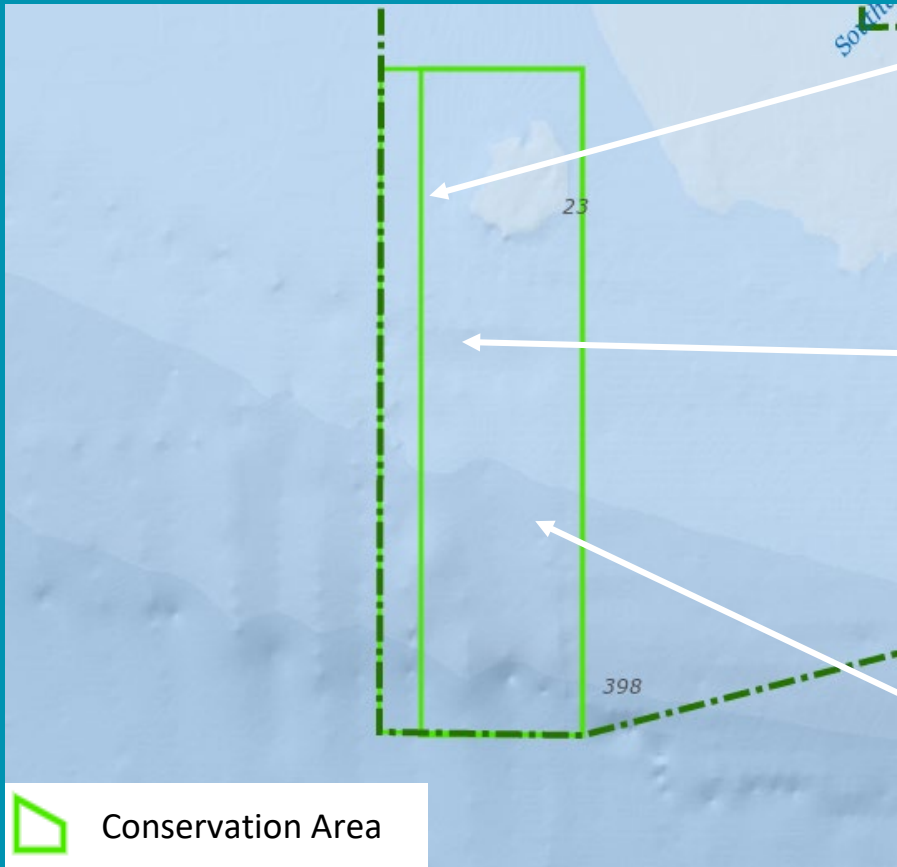




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# CONSERVATION AREAS

**Modified:**  
**Tortugas South (90.38 sq miles)**



***Protect Additional  
Fish Spawning  
Habitat***

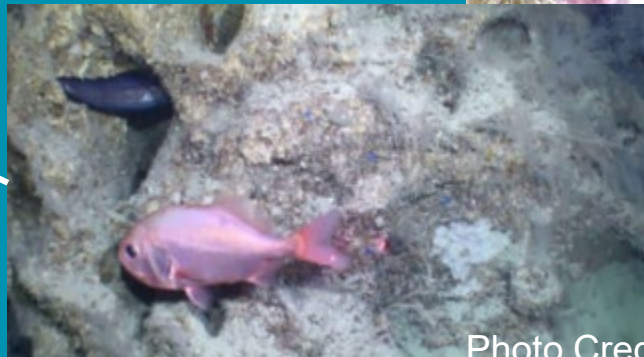


Photo Credit: NOAA NCCOS/UNCW UVP





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# RESTORATION AREAS

## *Protect Nurseries & Facilitate Restoration*

Proposed new zone type

Create a restoration permit category



### 4 Habitat Restoration Areas

- Same as SPAs - no discharge, no take, no anchor



### 9 Nursery Restoration Areas

- Same as SPAs + transit only





# WILDLIFE MANAGEMENT AREAS

## *Protect & Minimize Wildlife Disturbance*

### Wildlife Management Areas

#### 47 Wildlife Management Areas

- 23 proposed new
- 2 existing combined into one
- 2 existing proposed eliminated

#### Regulations vary:

- Access and use restrictions address location-specific resource goals
  - Idle speed no wake
  - No motor
  - No anchor
  - No entry

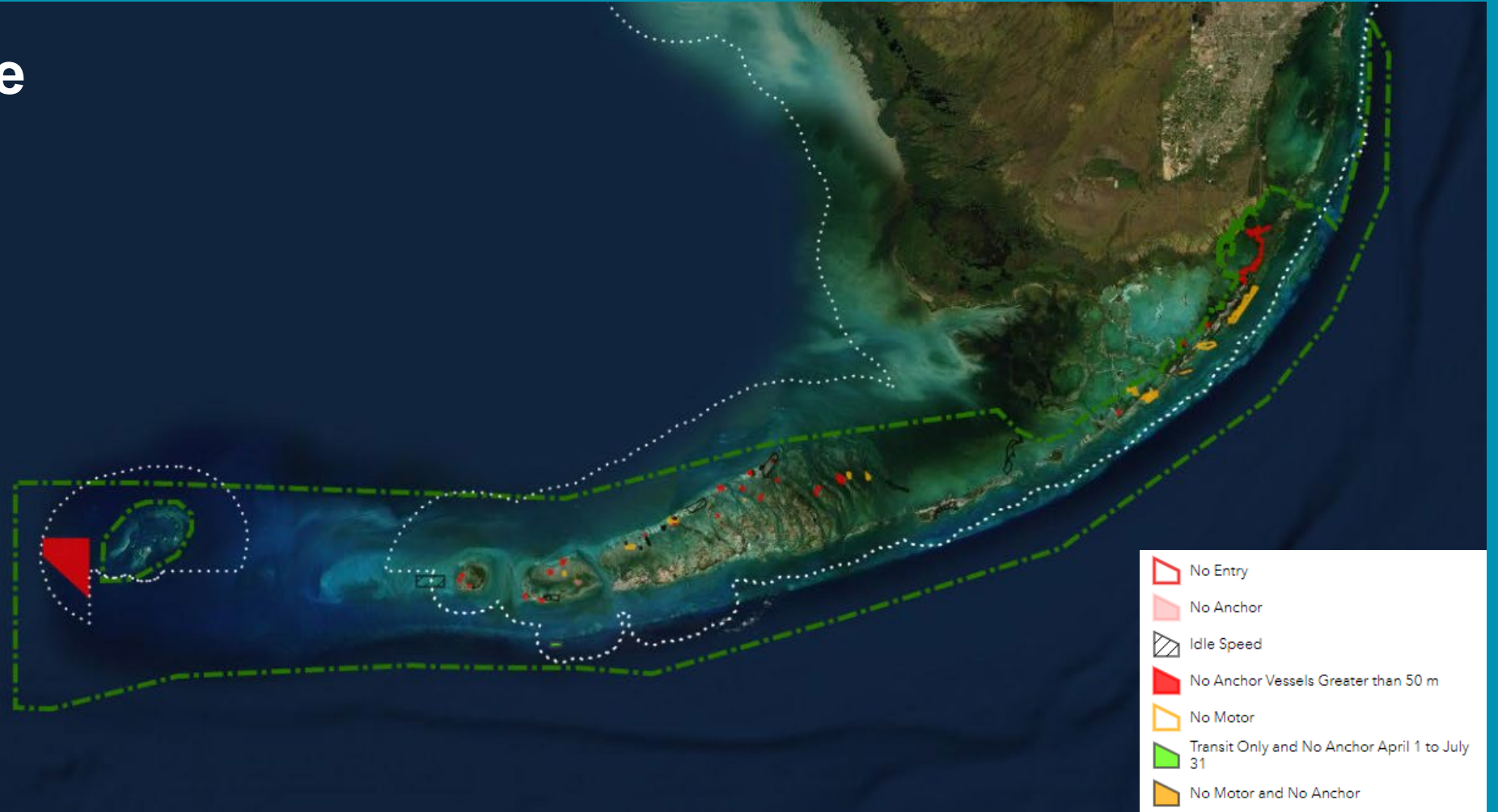




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# WILDLIFE MANAGEMENT AREAS

## Proposed Rule





# Socio-Economic Analysis



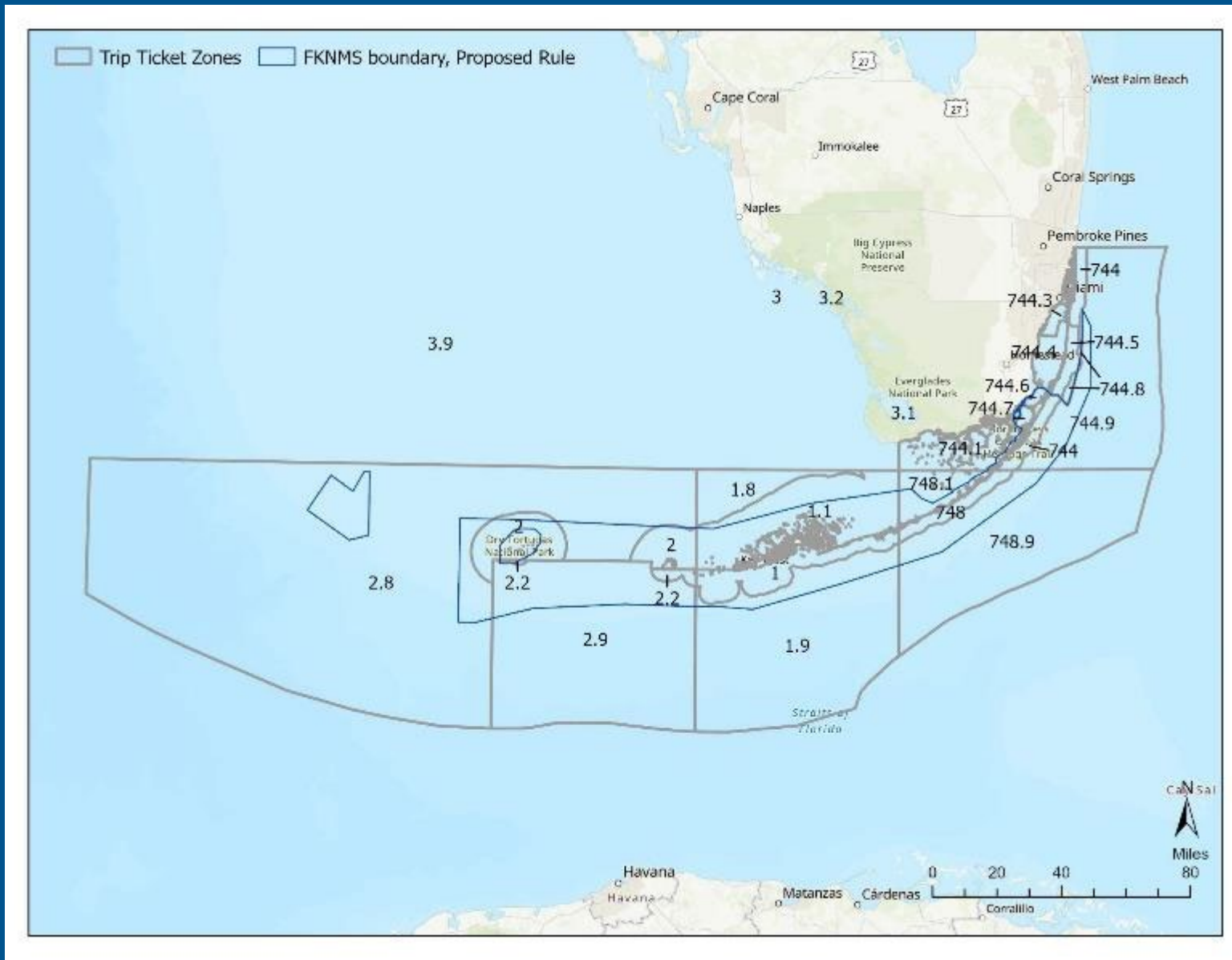
## Updated Data

- Commercial Fishing: 2015-2019
  - *source: FWC*
- Recreational Fishing: 2014-2018
  - *source: MRIP (NMFS)*
- \*the latest date available at the time of analysis

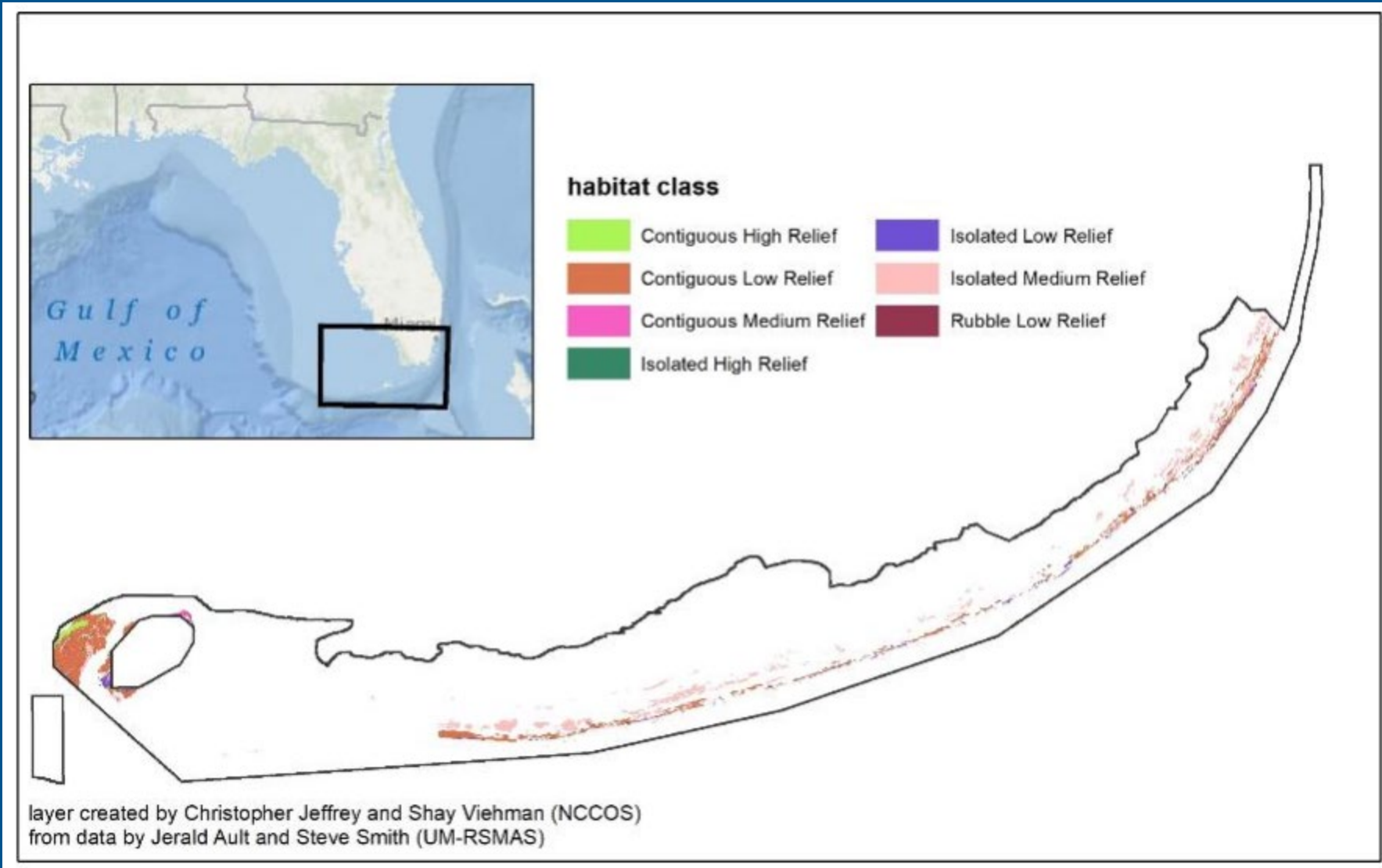
## Updated Methodology

- Align with NMFS methods to analyze economic effects of regulatory changes

# Socio-Economic Analysis - Statistical Areas



# Socio-Economic Analysis - Habitat Map

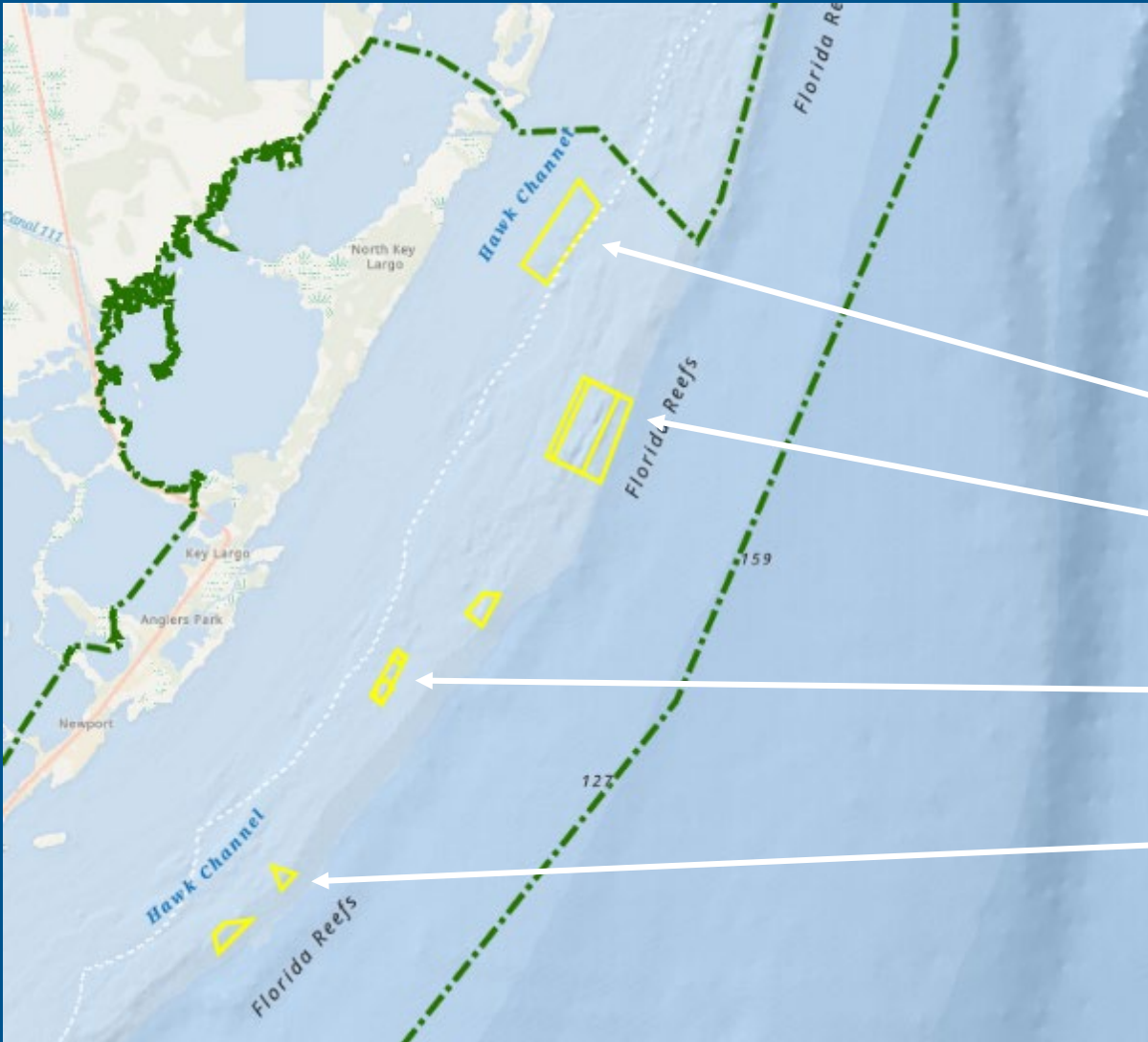




# Socio-Economic Analysis - Fish & Invertebrate Habitat Utilization



# Socio-Economic Analysis - Change in Fishing Access



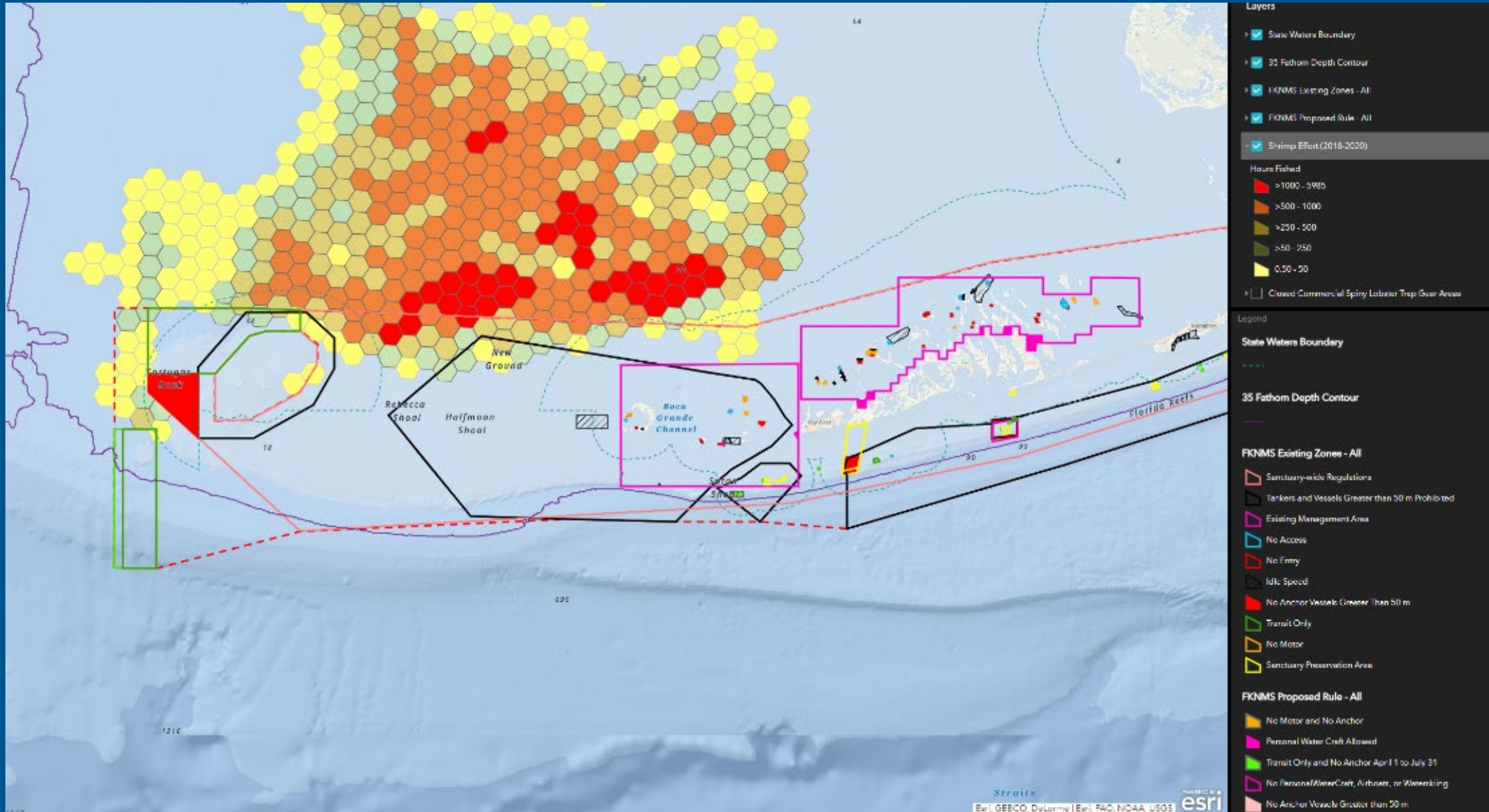
This map shows existing and proposed Sanctuary Preservation Areas.

Highlights:

- Turtle Rocks - proposed new zone
- Carysfort Reef - proposed expansion
- Grecian Rocks & Key Largo Dry Rocks - proposed expansion
- French Reef - proposed elimination



# Shrimp Fishing Effort & Interactive Map



# Socio-Economic Analysis - Summary Steps

## Data Used:

1. Fishery statistical area maps and relevant fisheries data
2. Biogeographic habitat maps
3. Species distribution per habitat type
4. Habitat distribution within existing and proposed modified/new marine zones (only considered those that prohibit fishing or change the fishing status)

## Analysis Conducted:

1. Estimate potential catch per habitat within each statistical area
2. Estimate potential change in fishing harvest and revenue for habitat in modified/new marine zones



# Existing and Proposed No Take Marine Zones: comparison of number and area of zones

Zone Type	Status Quo	Proposed Rule
Sanctuary Preservation Areas	18 (6.4 sq miles)	17 (12.1 sq miles)
Conservation Areas	7 (193.9 sq miles)	6 (213.1 sq miles)
Restoration Areas (Habitat and Nursery)	0	13 (1.4 sq miles)
Wildlife Management Areas	15 (1.14 sq miles)*	24 (2.8 sq miles)**

\*Includes closed or no-access buffer wildlife management areas, or those that have a portion that is closed or no access buffer

\*\*Includes proposed no entry and transit only wildlife management areas, or those that have a portion that is no entry



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# Existing and Proposed No Take Marine Zones: comparison of area and percentage of area within state vs. federal waters

	Status Quo	Proposed Rule	Change
Total area	201.4 sq miles 5.3%	229.5 sq miles 4.78%	+ 28.1 sq miles
Federal waters	94 sq miles 2.47%	115.7 sq miles 2.41%	+ 21.7 sq miles
State waters	107.4 sq miles 2.82%	113.8 sq miles 2.37%	+ 6.4 sq miles

Note: The overall sanctuary boundary is expanded by 1,000 square miles so percentages are not directly comparable.



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# Socio-Economic Analysis

## Benefits

Maintaining the flow of services afforded by healthy marine ecosystems:

- productive fisheries
- tourism
- recreational opportunities
- non-market value

## Costs

Maximum potential loss (assuming no replacement):

- less than 1% of annual revenue for all affected fisheries (commercial and recreational)
  - Excepting lobster fishery (~2% annual loss)





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[FloridaKeys.noaa.gov/blueprint](https://FloridaKeys.noaa.gov/blueprint)