

# Restoration Blueprint

An Effort to Restore Critical Marine Habitats in the Florida Keys

Consultation with the Gulf of Mexico Fishery Management Council

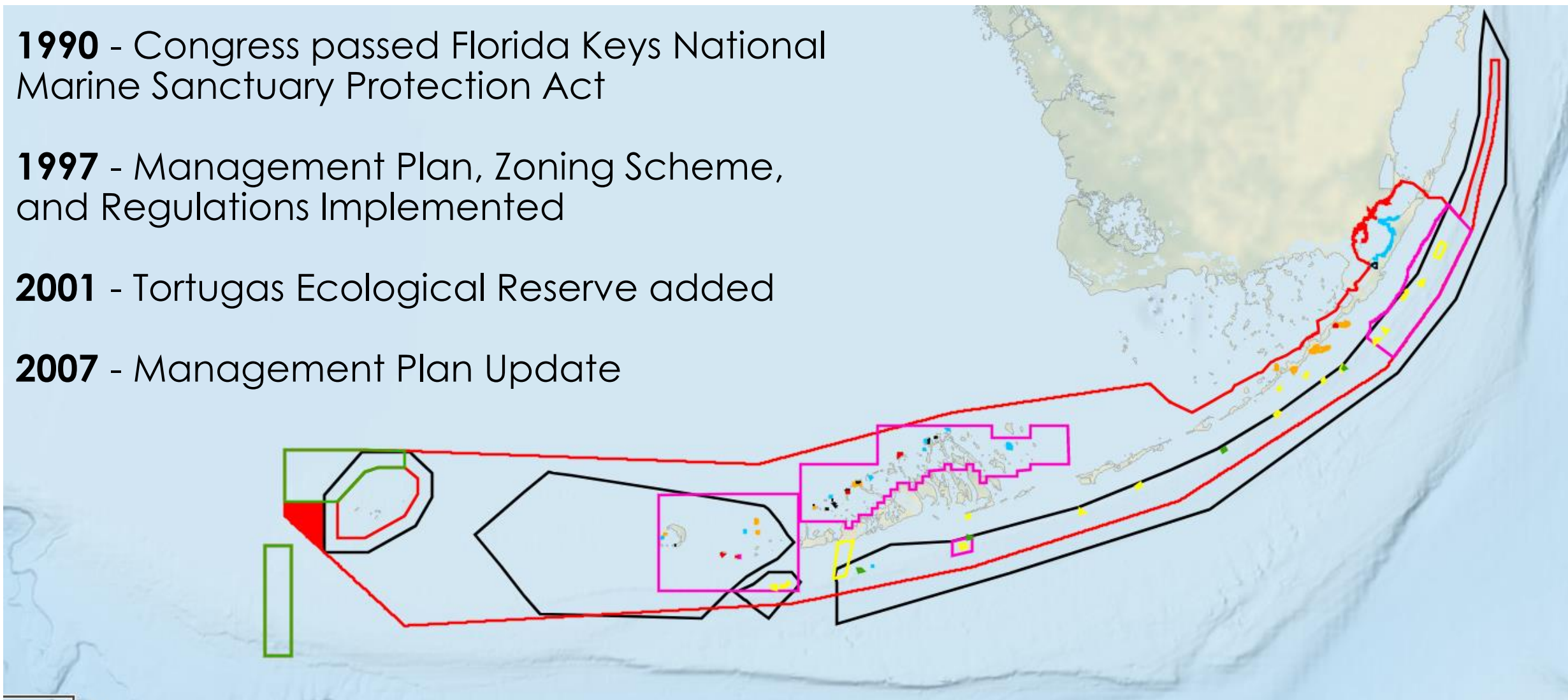
# Florida Keys National Marine Sanctuary

**1990** - Congress passed Florida Keys National Marine Sanctuary Protection Act

**1997** - Management Plan, Zoning Scheme, and Regulations Implemented

**2001** - Tortugas Ecological Reserve added

**2007** - Management Plan Update





# Blue Economy of Florida Keys NMS

## Tourism

5.5 million visitors in 2018

## Boating

4.5 million boaters per annum

## Diving and Snorkeling

1.62 million divers and snorkelers per annum

## Commercial Fishing

79% of the catch from the sanctuary is processed in Monroe County

## Recreational Fishing

2.4 million people fish in FKNMS each year



# Economic Impact of Residents and Visitors



A Healthy Florida Keys Ecosystem Provides:

**\$4.7 Billion**

Monroe County  
economy

**5.5 million**

Visitors

**60%**

of Monroe County  
economy

# Natural Resources in the Florida Keys

The Future of the Florida Keys Marine Environment is at Risk





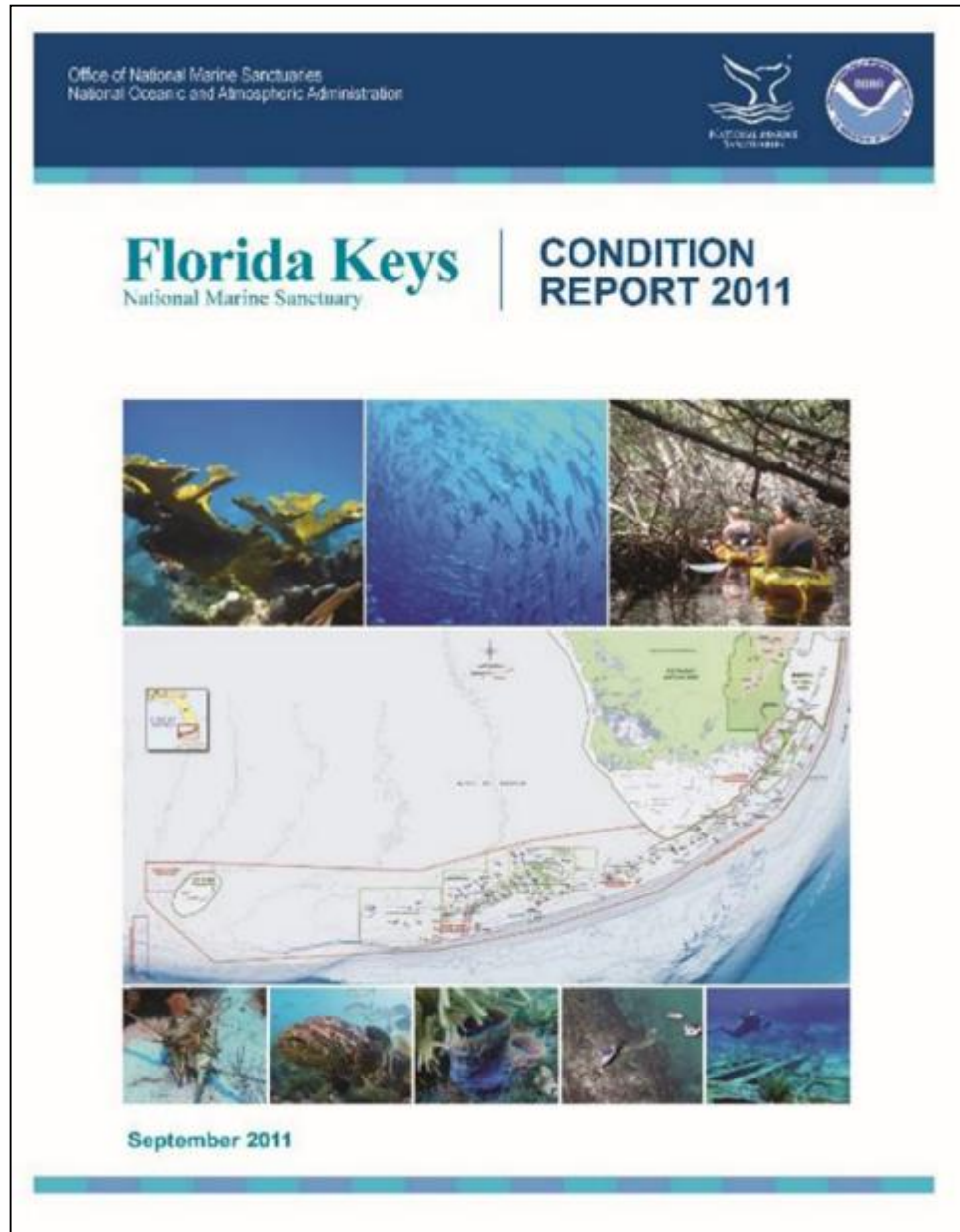
# Resource Report Card

Brought attention to natural resource declines

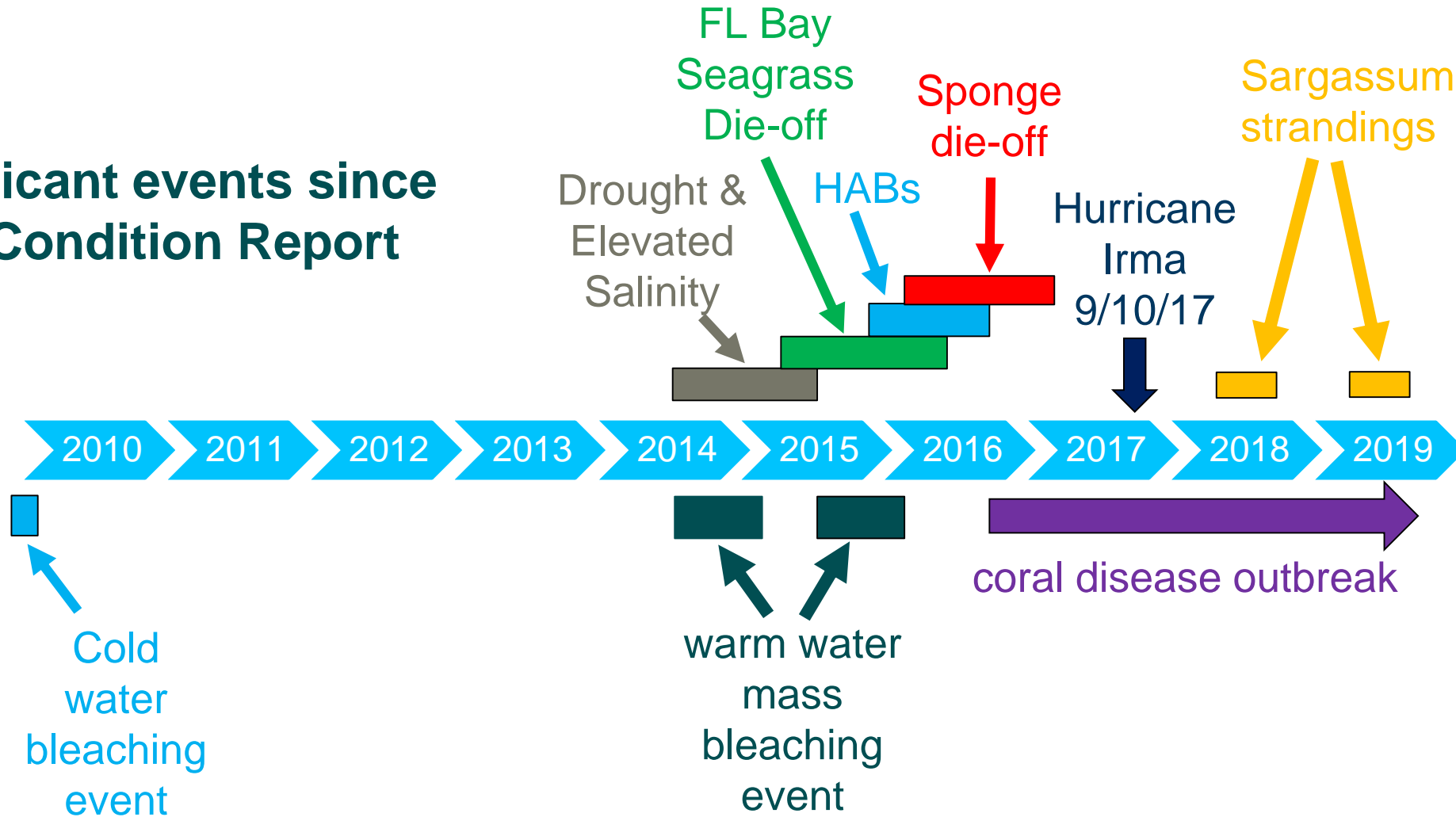
Good	Good/Fair	Fair	Fair/Poor	Poor	Undet.
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## Trends:

- |  |                              |
|--|------------------------------|
| ▲ Conditions appear to be improving.       | ? Undetermined trend.        |
| — Conditions do not appear to be changing. | N/A Question not applicable. |
| ▼ Conditions appear to be declining.       |                              |



## Significant events since 2011 Condition Report



# Other issues

Population growth

Increased use of resources

Invasive Species (e.g., lionfish)

Fishing pressure

Coastal Development

Marine Debris

Climate change/Ocean acidification





# Why Create a Blueprint?



## Healthy Florida Keys

A healthy Florida Keys marine ecosystem is the foundation for a strong economy.

## Natural Resources

Numerous stressors are putting the future of the Florida Keys marine environment at risk.

## Planning for the Future

We need a plan that addresses the threats to our marine environment and helps us maintain the natural resources that are key to our economy.

# Community-led Effort

## Sanctuary Advisory Council



50 Council Members +  
35 Community Members



70 Public Meetings +  
> 1,500 Public Comments



200 Recommendations  
to Superintendent



# Sanctuary Advisory Council Goals

Improve biological diversity and restore and enhance natural systems across all regions of the Keys



Facilitate public and private resource use compatible with resource protection

- Reduce stresses from human activities by establishing areas that restrict access to sensitive wildlife and habitats
- Protect large and contiguous habitats to replenish and preserve habitats and full life cycle needs of species
- Improve/maintain the condition of habitats
- Increase abundance and condition of selected key species
- Minimize conflicts among uses
- Prevent heavy concentrations of uses that degrade sanctuary resources
- Provide undisturbed sites for research and monitoring
- Achieve vibrant sustainable ecosystem and economy



# Sanctuary Advisory Council Working Groups

## Shallow Water Wildlife and Habitat Protection

***9 advisory council and 10 community members***

- Evaluate existing Wildlife Management Areas and recommend new areas to further protect seagrass and critical shallow water habitats.

## Coral Reef Ecosystem Restoration

***11 advisory council and 4 community members***

- Identify specific areas for active coral reef ecosystem restoration.

## Ecosystem Protection: Ecological Reserves, Sanctuary Preservation Areas, and Wildlife Management

***7 advisory council and 9 community members***

- Recommend new or modified ecological reserves to ensure protection of a diversity of resources:
  - Spawning aggregations
  - Full suite of marine flora and fauna (i.e., seabird, marine mammal, turtles, seagrass, soft corals, hard corals)

# Agency Coordination

## Florida State Agencies

- DEP
- FWC Commissioners
- SHPO
- Governor and Cabinet

## NOAA Fisheries

## Fishery Management Councils

- South Atlantic FMC
- Gulf of Mexico FMC

## Agency Partners

- DOI (USFWS, BOEM, NPS)
- Navy
- USCG



# Fishery Management Council Consultation Opportunity



# The National Marine Sanctuaries Act – Purposes and Policies

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## **NMSA Section 301(b) – Purpose and Policies**

- \* Identify, designate, and manage the sanctuary system
  - \* Build and strengthen the sanctuary system
  - \* Enhance nation-wide public awareness
  - \* Enhance understanding of ecosystem processes
  - \* Facilitate compatible human use in sanctuaries
  - \* Strengthen global protection of marine resources
-

# The National Marine Sanctuaries Act – Procedures for Designation and Implementation

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## **NMSA** **Section** **304(a)(5) –** **Fishing** **Regulations**

- \* Provide appropriate Regional FMC opportunity to prepare draft regulations for fishing
  - \* Council may draft regulations or determine regulations are not necessary
  - \* Council action must fulfill NMSA purposes and policies and goals and objectives of designation
  - \* Use national standards of Magnuson-Stevens Act as guidance
  - \* If Council declines, determination is rejected or, fails to act in timely manner, Secretary shall prepare fishing regulations
  - \* Cooperate with other fishery management authorities
-

# Proposed Action

Applicable to Gulf of Mexico Fishery Management Council jurisdiction



# Proposed Action

## Alternatives

No Action

Range of Reasonable Alternatives (3)

*Alternative 3 is agency preferred*

## Alternative Components

Management Plan activities

Boundary expansion

Sanctuary-wide regulations

Marine zones & zone specific regulations



# Management Plan



# Management Approach

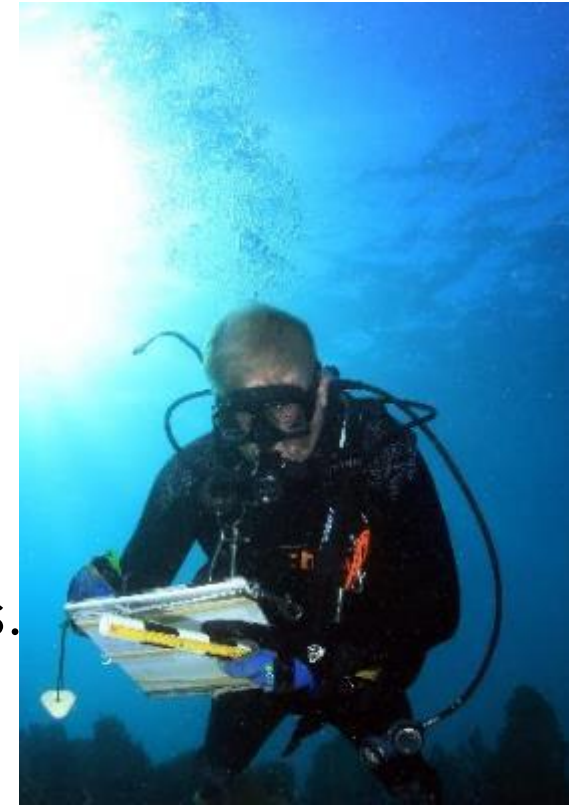
**GOAL 1:** Improve our Understanding of Sanctuary Resources, Ecosystem Services, and their Value to the Florida Keys Economy.

**GOAL 2:** Maintain or Improve the Condition of Sanctuary Resources and, where possible, Restore Ecosystem Structure and Function.

**GOAL 3:** Maintain or Increase Efforts to Reduce Threats to Sanctuary Resources and Manage Human Uses and Associated Impacts.

**GOAL 4:** Increase Awareness and Support for FKNMS and its Resources.

**GOAL 5:** Advance and Support Collaborative and Coordinated Management.



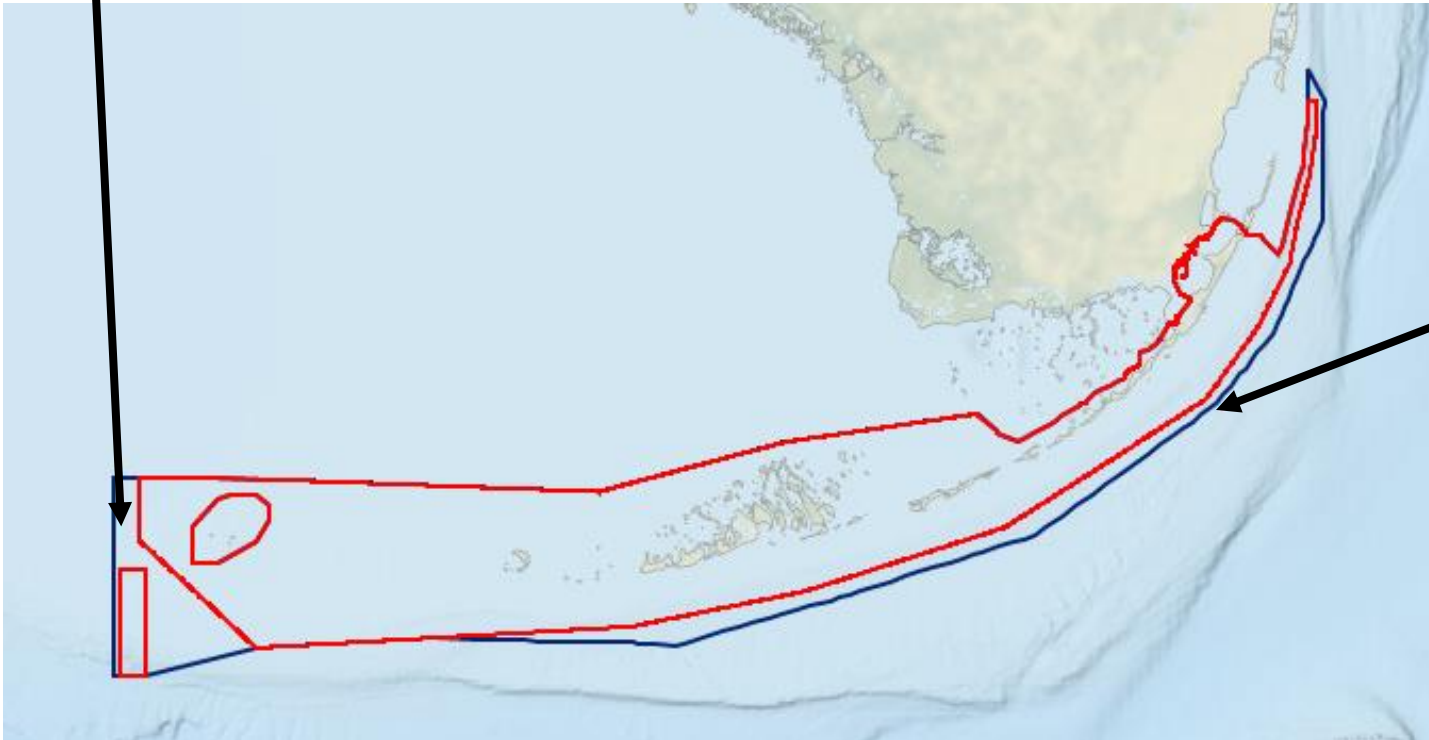


# Sanctuary Boundary



# Sanctuary Boundary Expansion: Alternatives 2 & 3

## Connectivity- Tortugas

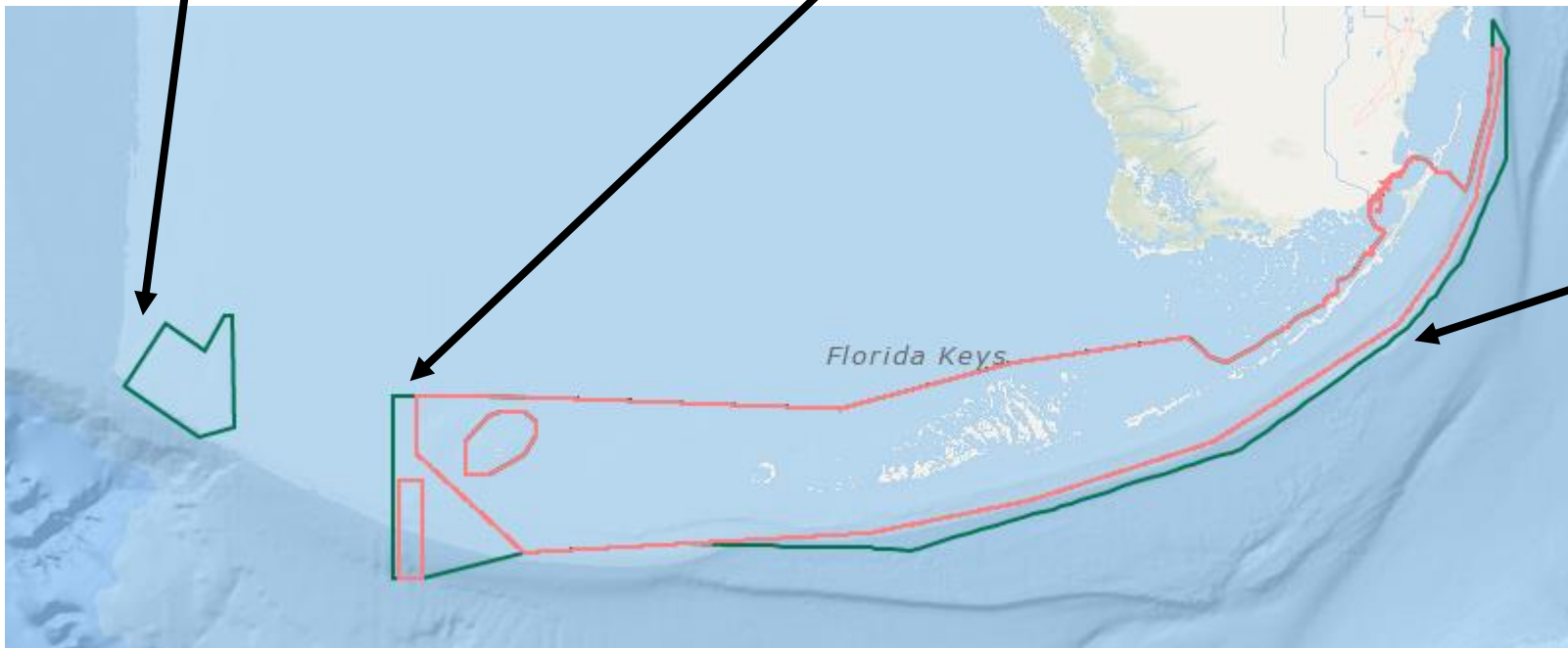


**Consistent regulation-** Expand boundary to include areas already closed to large vessel traffic

# Sanctuary Boundary Expansion: Alternative 4

**Significant Ecosystems-**  
Pulley Ridge

**Connectivity-** Tortugas



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



# Sanctuary-wide Regulations

# Sanctuary-wide Regulations

Status quo and proposed clarifications underlined

**Traditional** fishing means those commercial or recreational fishing activities that were customarily conducted within the sanctuary prior to its designation as identified in the environmental impact statement and management plan (EIS/MP) for this sanctuary, as managed by the appropriate federal (National Marine Fisheries Service in coordination with South Atlantic Fishery Management Council, Gulf of Mexico Fishery Management Council) and state (Florida Fish and Wildlife Conservation Commission) agencies.

Traditional fishing does not include use of novel or new gear types to catch species that were fished by other means as identified in the EIS/MP; does not include use of gear types (modified or not) identified in the EIS/MP to catch species those gear types were not originally intended to catch; or does not include use of gear or harvest of species outside of the seasons/time of year identified in the EIS/MP.

# Sanctuary-wide Regulations

Status Quo – no change throughout alternatives

(4) *Discharge or deposit of materials or other matter.* (i) Discharging or depositing, from within the boundary of the Sanctuary, any material or other matter, except:

(A) Fish, fish parts, chumming materials, or bait used or produced incidental to and while conducting a traditional fishing activity in the Sanctuary;



# Marine Zone Boundaries & Regulations

# Marine Zones

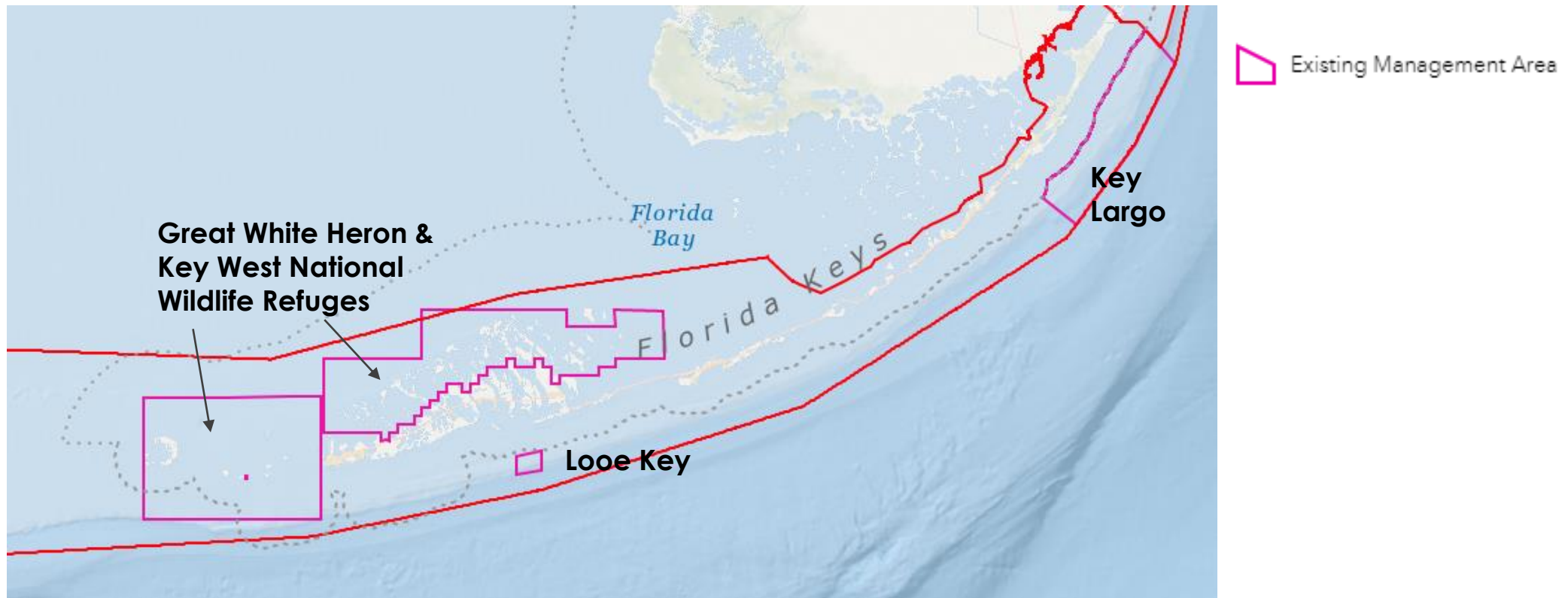
- Individual zone types provide different levels of protection
- Blueprint proposes new zones to address persistent threats to resource health, protect a range of habitat types, and facilitate restoration





# Existing Management Areas

Areas that were already established when FKNMS was designated in 1990  
Proposed name update from “Existing Management Areas”

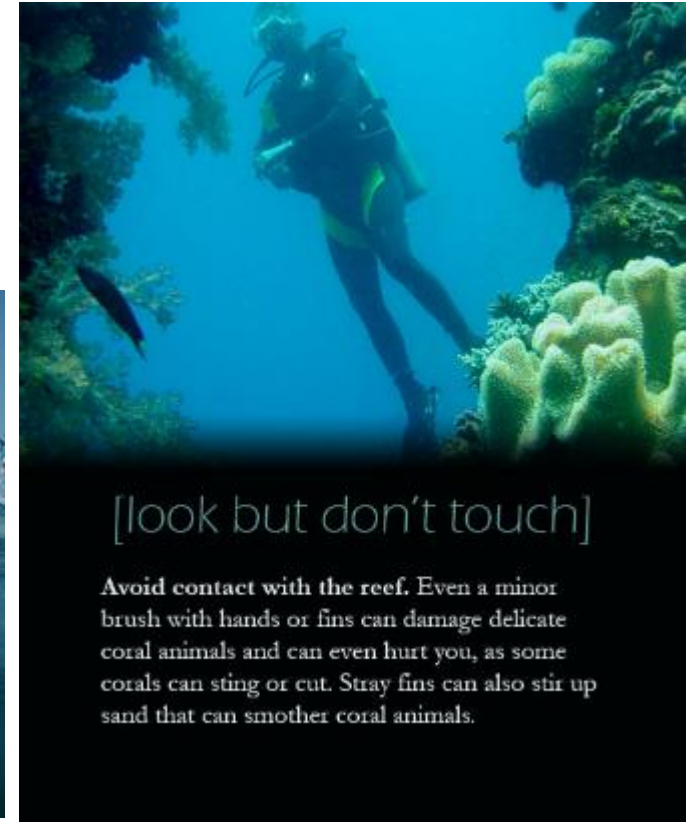




# Sanctuary Preservation Area

Manage activities to separate conflicting use and protect habitats

Regulations: prohibit discharge, fishing, touching or anchoring on coral



[look but don't touch]

Avoid contact with the reef. Even a minor brush with hands or fins can damage delicate coral animals and can even hurt you, as some corals can sting or cut. Stray fins can also stir up sand that can smother coral animals.

# Conservation Area

## Status Quo: Ecological Reserves and Special Use Areas

Most protective zone type - protect range of habitats, facilitate research

Regulations: transit only (without a valid sanctuary permit)



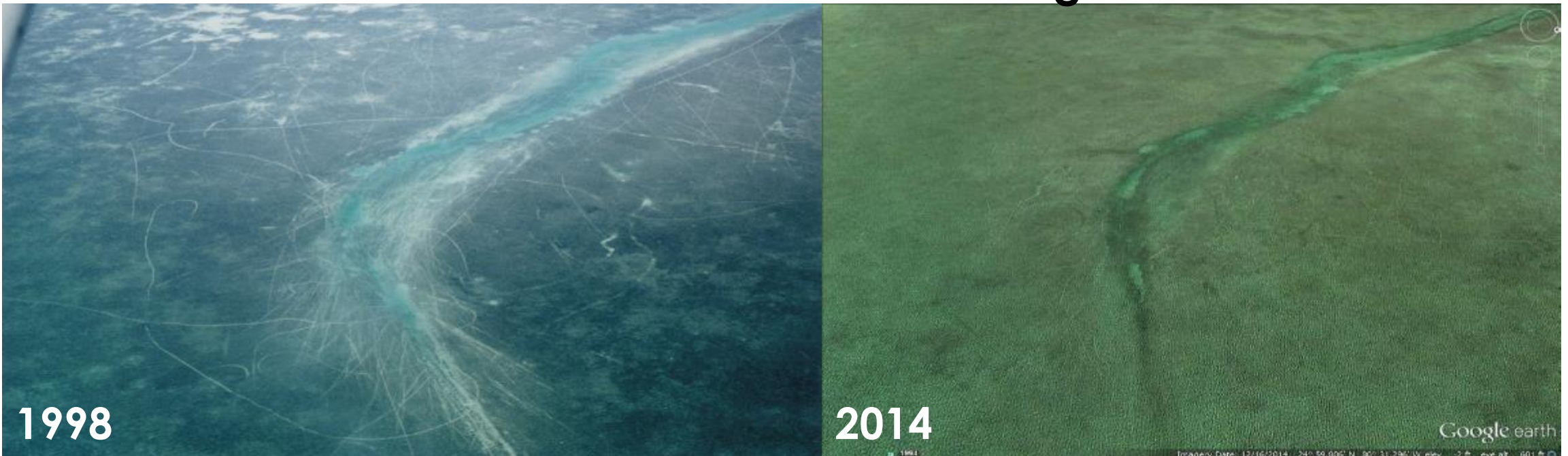


# Wildlife Management Area

Restrict vessel operations to protect seagrass and hardbottom habitat

Regulation Options: no anchor, idle speed/no wake, no motor, no entry

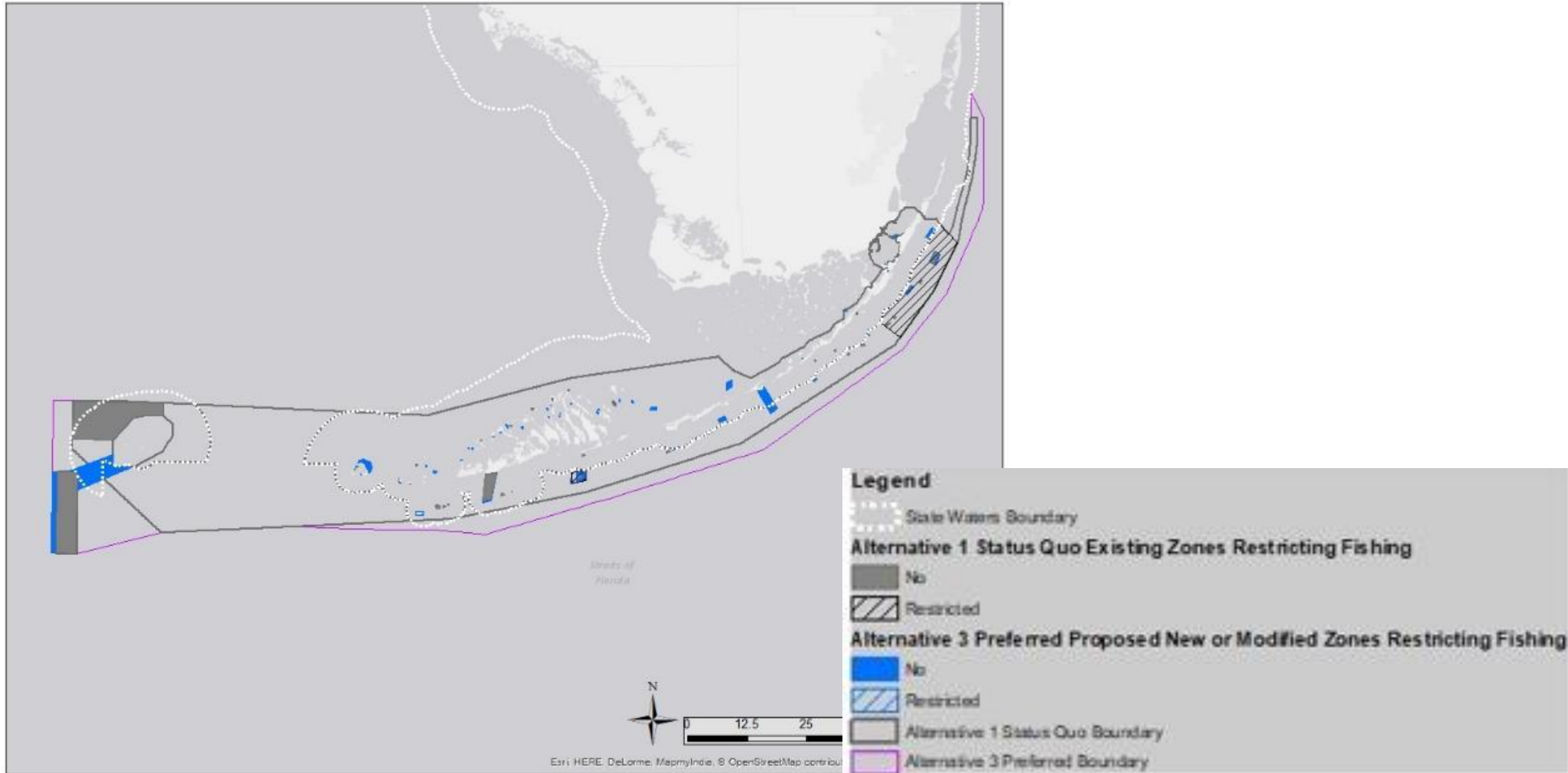
Tavernier Key No Motor zone  
**before & after zoning**



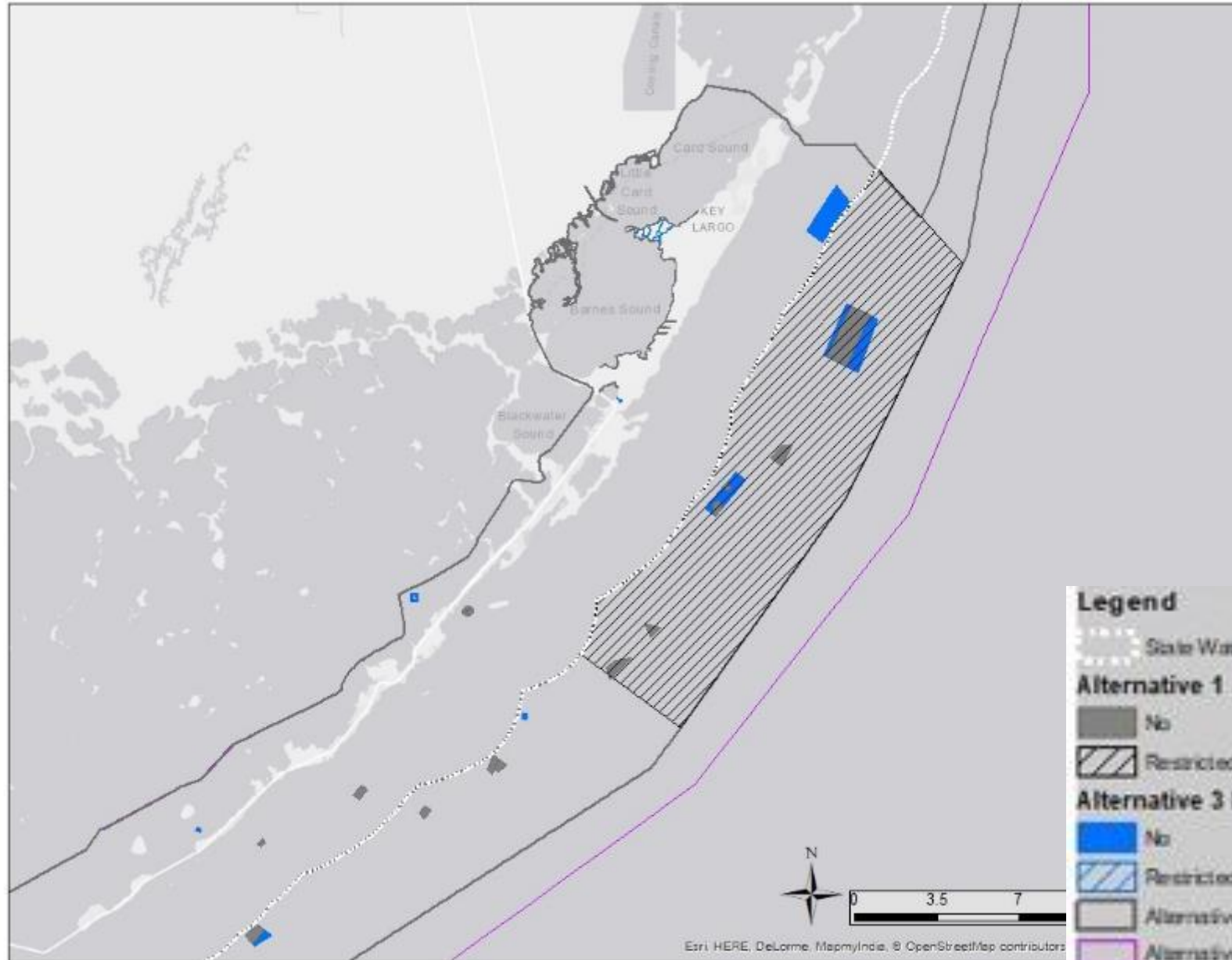
Photos: Curtis Kruer; Florida Keys Shallow Water Boating Impact Analysis and Trends Assessment - Mapping Summary Report, March 2017



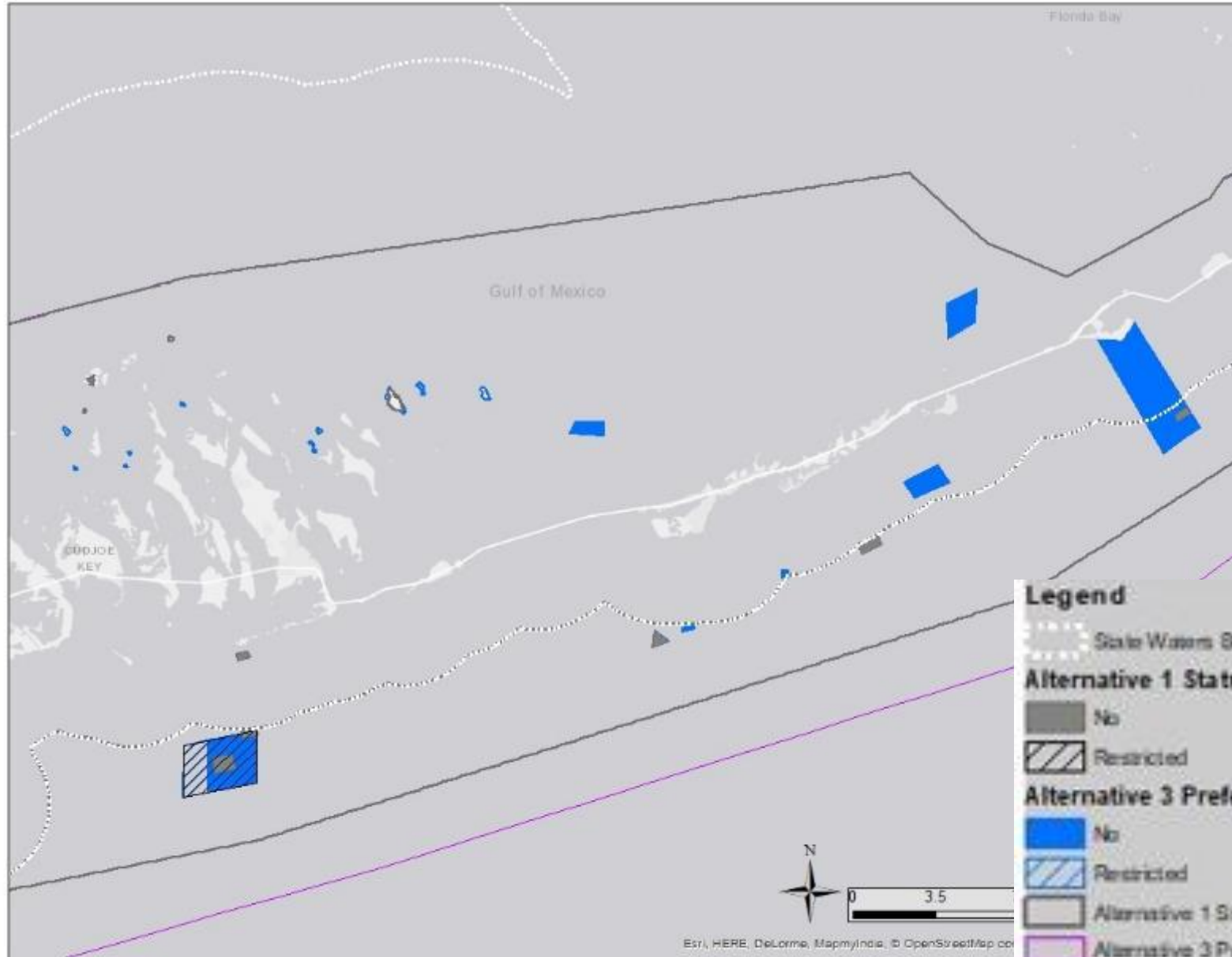
# Marine Zones: Status Quo & Preferred



# Marine Zones: Status Quo & Preferred

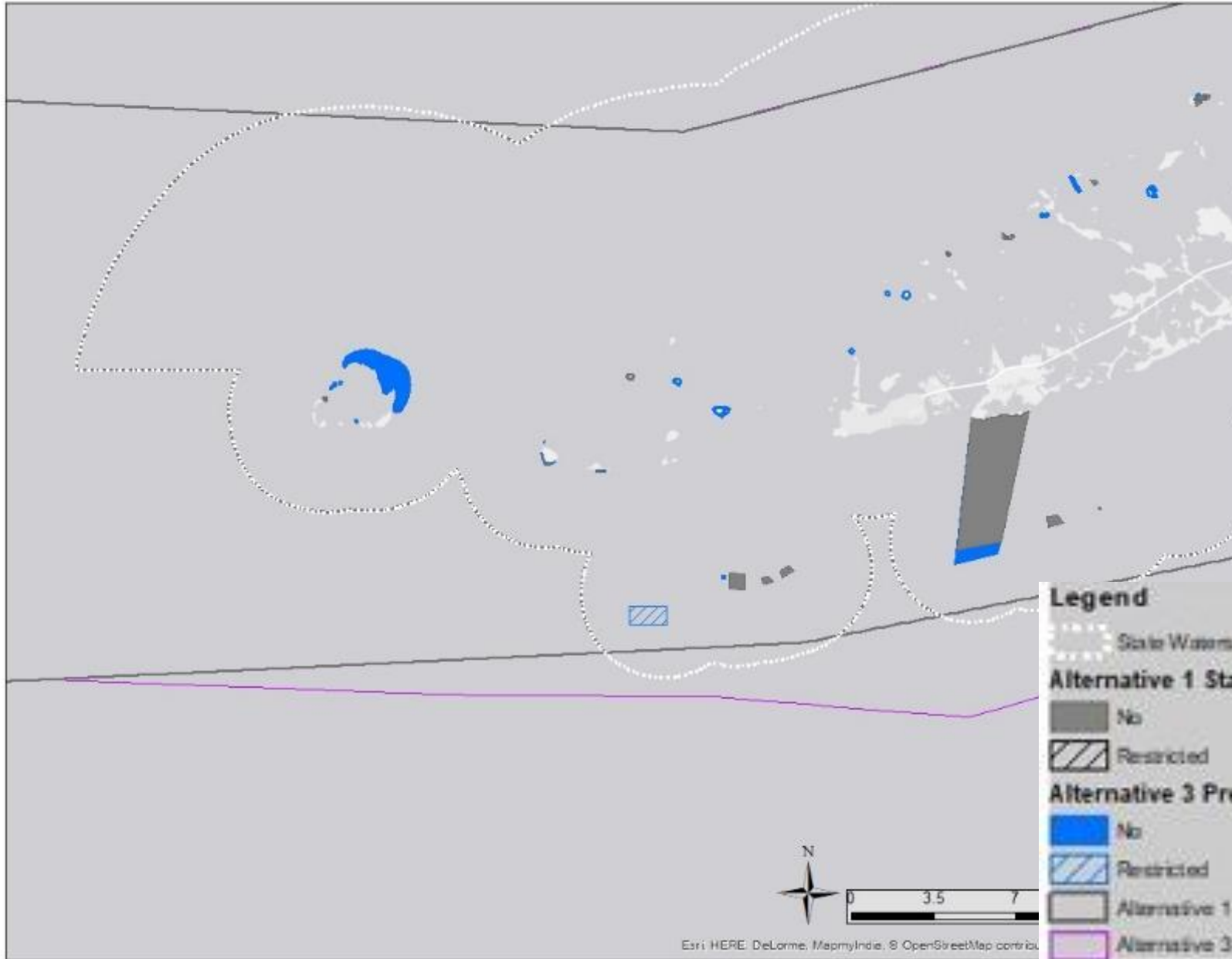


# Marine Zones: Status Quo & Preferred

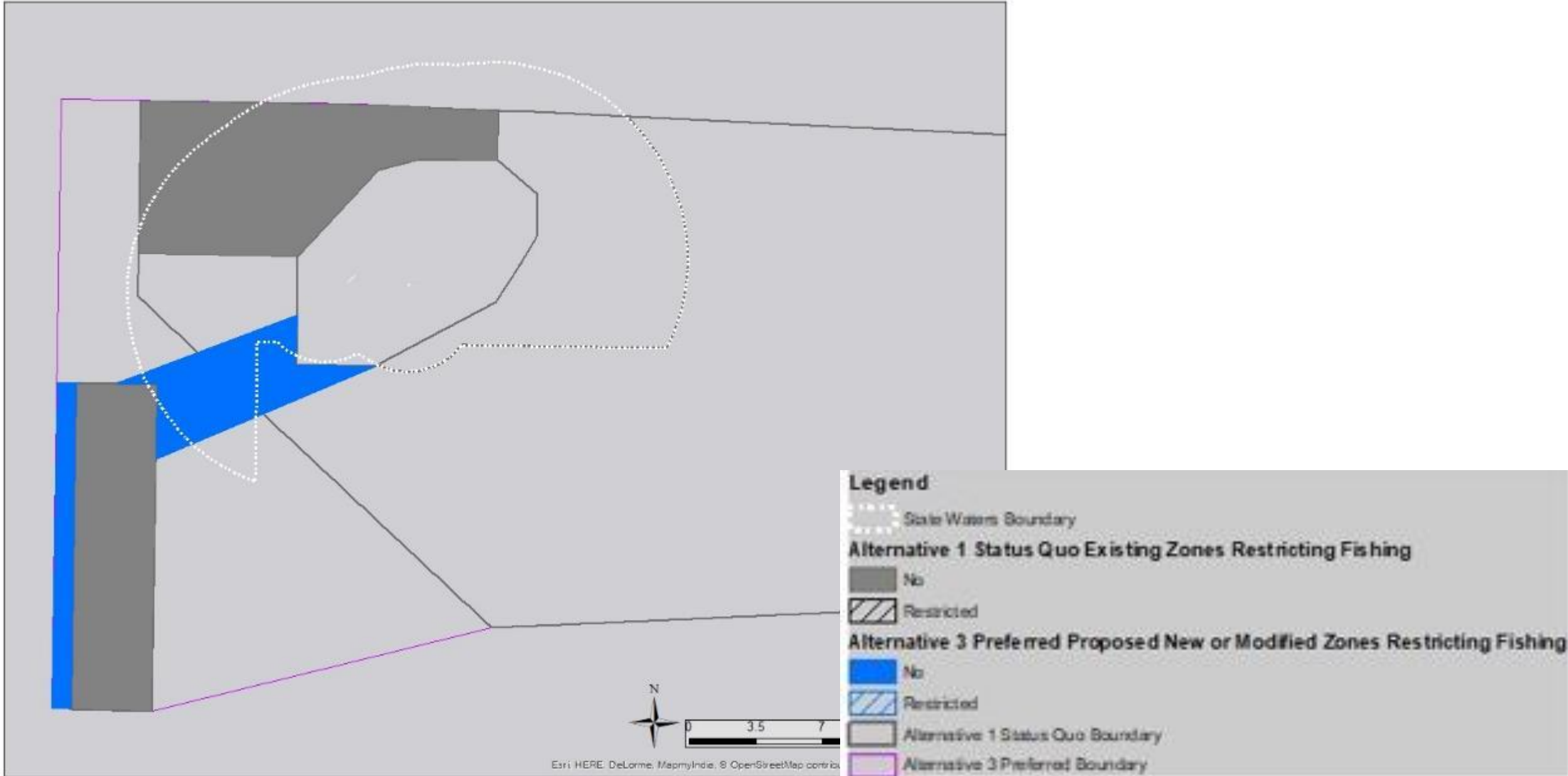




# Marine Zones: Status Quo & Preferred



# Marine Zones: Status Quo & Preferred



# Marine Zones: Sanctuary Preservation Area

General approach across alternatives

## Alternative 1 - Status Quo

### Existing SPA regulations\* prohibit:

- Discharge, touching coral, certain anchoring restrictions;
- Fishing, possessing marine life except:
  - Baitfishing allowed by permit in all SPAs
  - Catch and release trolling allowed in some SPAs: Conch, Alligator, Sombrero, and Sand Key SPAs

## Alternatives 2, 3, and 4 propose to:

- Eliminate:
  - Baitfishing Permits
  - Catch and release trolling
- Add:
  - Idle Speed/No Wake
  - No Anchor

\*For full text of existing regulations see: 15 CFR 922 Subpart P



# Summary of Alternatives

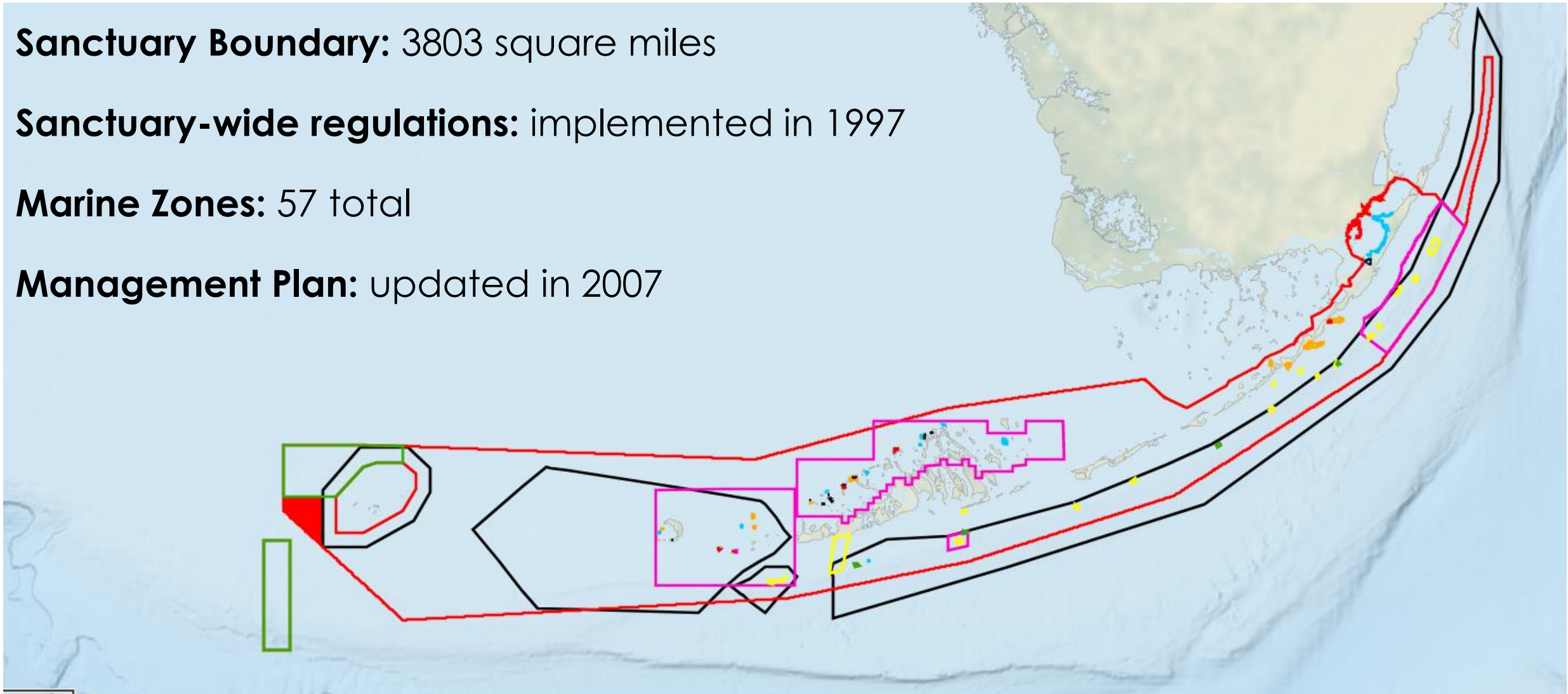
# Alternative 1: No Action

**Sanctuary Boundary:** 3803 square miles

**Sanctuary-wide regulations:** implemented in 1997

**Marine Zones:** 57 total

**Management Plan:** updated in 2007



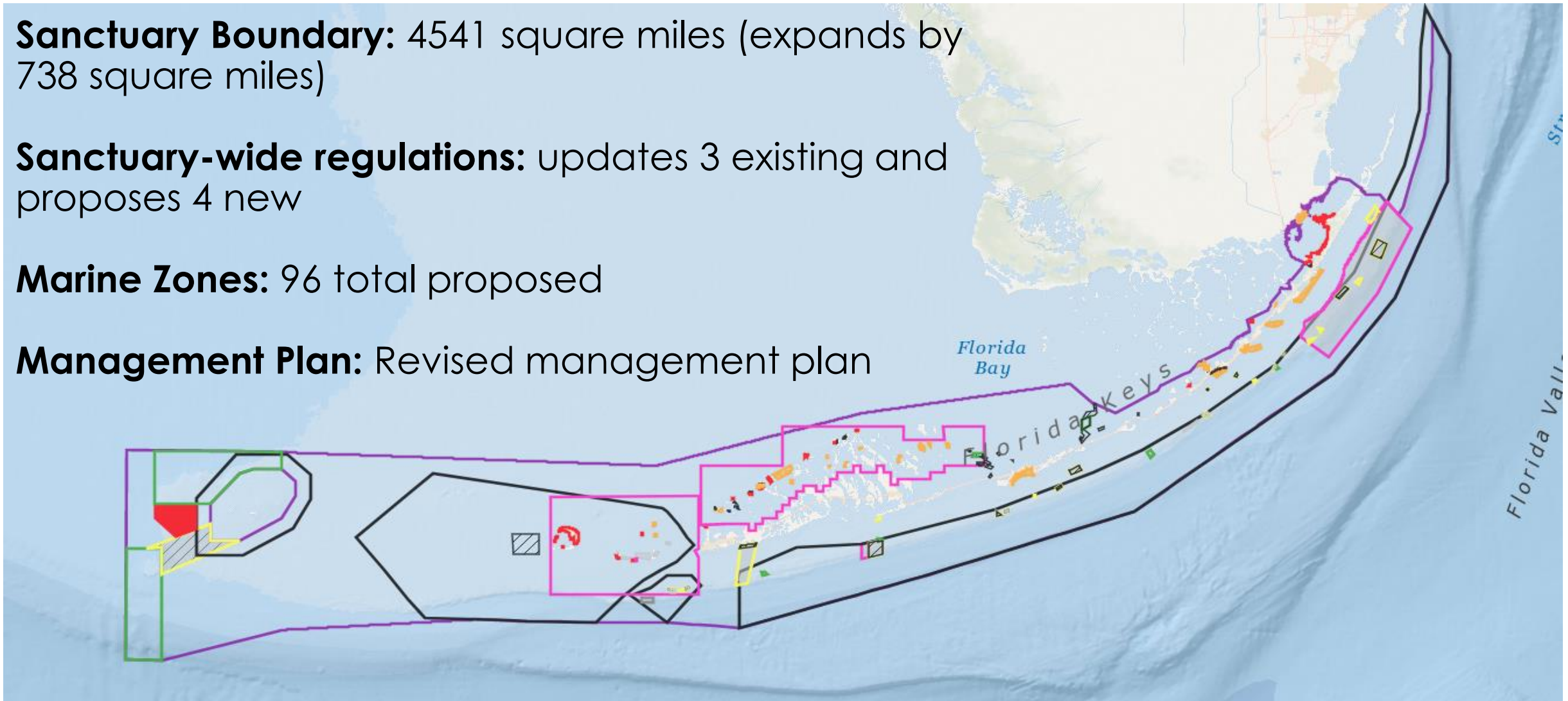
# Alternative 2: Reduce concentrated & conflicting uses

**Sanctuary Boundary:** 4541 square miles (expands by 738 square miles)

**Sanctuary-wide regulations:** updates 3 existing and proposes 4 new

**Marine Zones:** 96 total proposed

**Management Plan:** Revised management plan





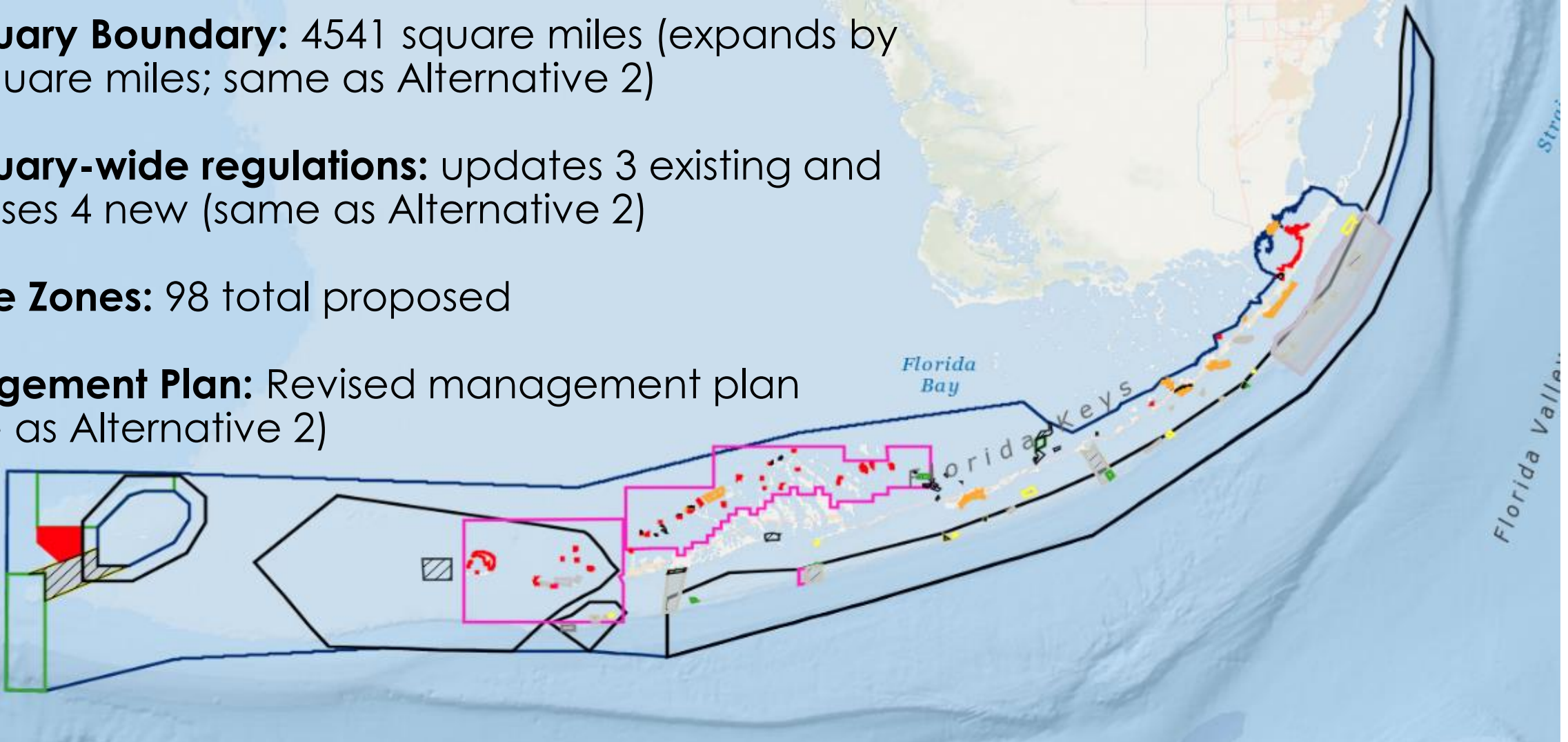
# Alternative 3: Preferred

**Sanctuary Boundary:** 4541 square miles (expands by 738 square miles; same as Alternative 2)

**Sanctuary-wide regulations:** updates 3 existing and proposes 4 new (same as Alternative 2)

**Marine Zones:** 98 total proposed

**Management Plan:** Revised management plan (same as Alternative 2)



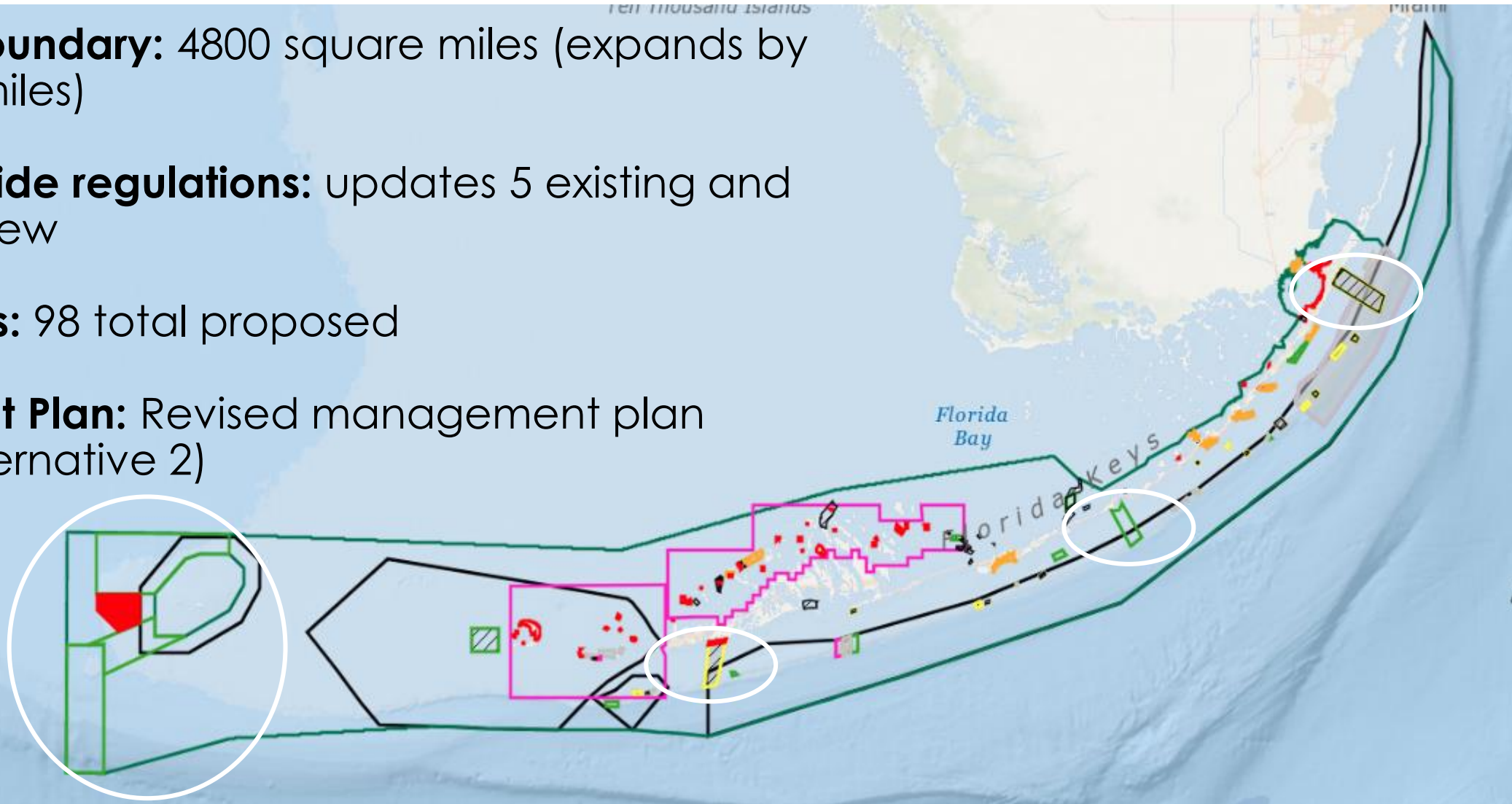
# Alternative 4: Protect large contiguous habitats

**Sanctuary Boundary:** 4800 square miles (expands by 997 square miles)

**Sanctuary-wide regulations:** updates 5 existing and proposes 4 new

**Marine Zones:** 98 total proposed

**Management Plan:** Revised management plan (same as Alternative 2)





# NOAA's Preferred Alternative:

- 1. Expand the sanctuary boundary:**
  - protect connected habitats
- 2. Update sanctuary-wide regulations:**
  - be consistent with state regulations
  - provide additional authority to address threats to sanctuary resources
- 3. Modify and create new marine zones:**
  - provide targeted habitat protections
  - protect additional habitat types
  - protect wildlife including ESA listed coral species
  - facilitate research and restoration
  - manage human uses and impacts
- 4. Revise the management plan:**
  - advance understanding
  - improve sanctuary resource condition
  - reduce threats and impacts
  - enhance stewardship
  - advance collaboration and partnership

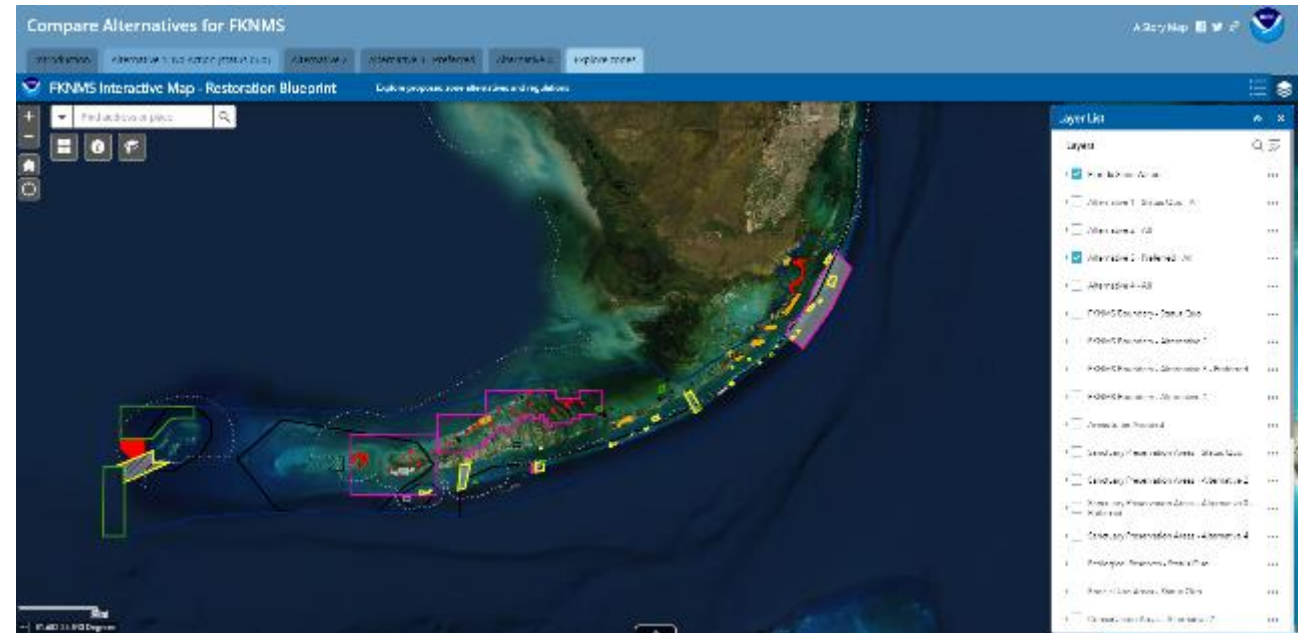




# Restoration Blueprint Information Tools

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

[Interactive Map](#) will be available to explore alternatives



# Fishery Management Council and Florida Fish and Wildlife Conservation Commission Sessions

Date	Meeting Type	Engagement opportunity	Location
September 16	GMFMC Coral SSC, Coral AP, Shrimp AP	Presentation, Q&A, Discussion	Tampa, FL
October 2	GMFMC Reef Fish AP	Presentation, Q&A, Discussion	Tampa, FL
October 2	FWC Commission Meeting	Presentation, Q&A	Cape Canaveral, FL
October 10	SAFMC Snapper Grouper AP	Presentation, Q&A, Discussion	Webinar
October 21	GMFMC Meeting	Presentation, Q&A	Galveston, TX
October 22	SAFMC Ecosystem Habitat Protection AP	Presentation, Q&A, Discussion	St. Petersburg, FL
October 29	SAFMC Shrimp, Coral, Dolphin/Wahoo, and Mackerel/Cobia APs	Presentation, Q&A, Discussion	Webinar
December 2-6	SAFMC Meeting	Presentation, Q&A	Wilmington, NC
December 11-12	FWC Commission Meeting	TBD, Public Comment likely	TBD
January 27	GMFMC Meeting	Discussion/recommendation	New Orleans, LA

# Advisory Council and Public Information Sessions

Date	Meeting Type	Public engagement opportunity	Location
September 23	Public Information Session	Written Q&A; Written Comment	Key West
September 30	Public Information Session	Written Q&A; Written Comment	Marathon
October 7	Public Information Session	Written Q&A; Written Comment	Tavernier
October 15	Sanctuary Advisory Council meeting	Written and Oral Public Comment	Key West
October 28	Public Information & Comment Opportunity	Written Q&A; Oral Public Comment	Miami
November 4	Public Information & Comment Opportunity	Written Q&A; Oral Public Comment	Ft. Myers
November 6	Public Comment Opportunity	Written and Oral Public Comment	Marathon (TBD)
December 10	Sanctuary Advisory Council meeting	Written and Oral Public Comment	Islamorada

**Public Comment Period:**  
**Submit public comments:**

August 20, 2019 through January 31, 2020  
[www.regulations.gov](http://www.regulations.gov)





**THANK YOU**

Insert Image



# Extra Background Slides

# Sanctuary-wide Regulations:

Alternatives 2, 3 & 4:

- Limit discharge from cruise ships in sanctuary
- Increase # days allowed for emergency regulation
- Align NOAA permitting regulations with those of the Florida Department of State Division of Historical Resources (DHR)
- Ability to address impact from derelict or deserted vessels
- Prohibit fish feeding
- Mooring buoy restrictions



**Only included in Alternative 4:**





- **Require FKNMS authorization for live rock aquaculture**
- **Limit boat speed within 100 yards of all shorelines**

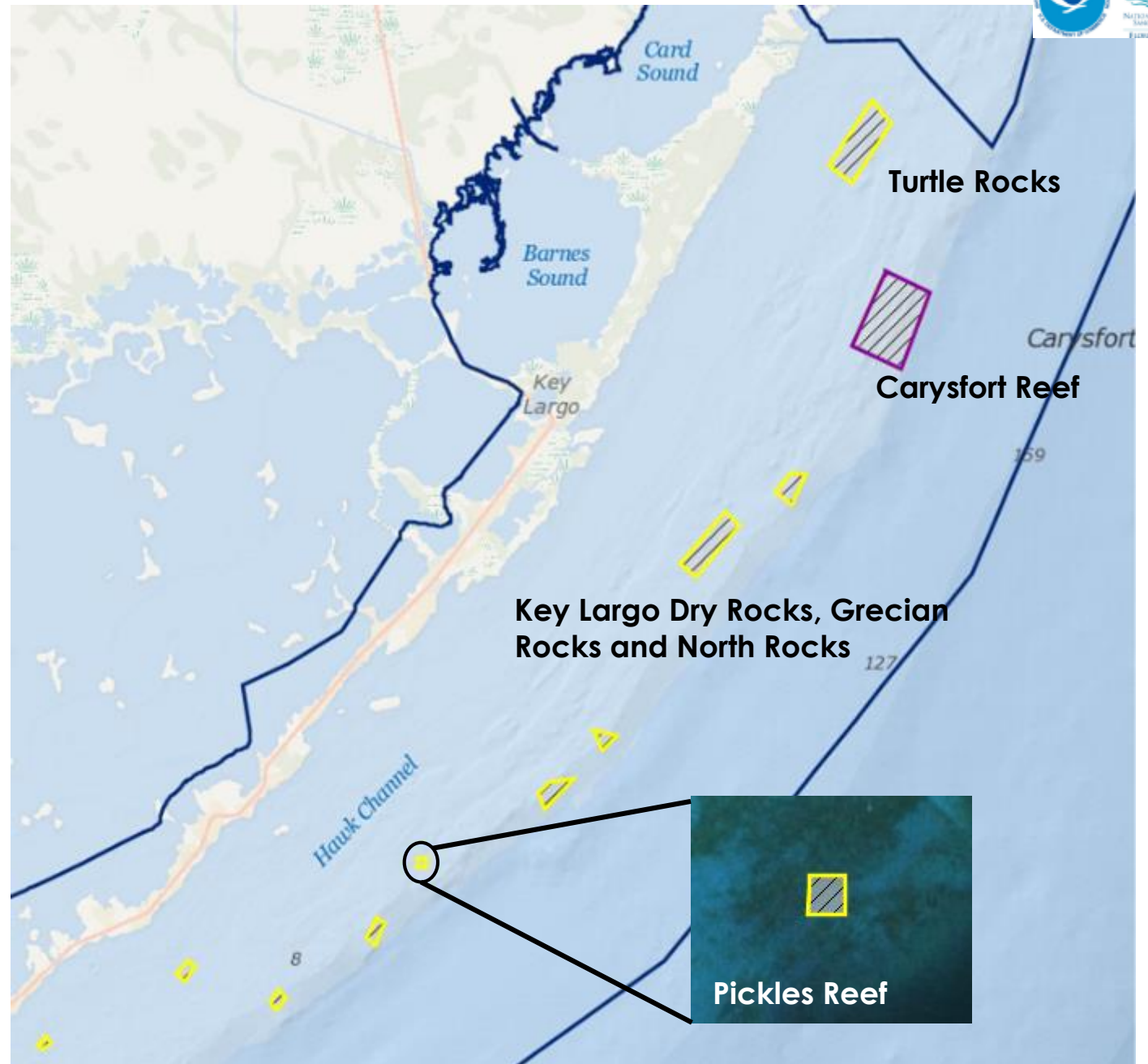


# Marine Zones:

## Sanctuary Preservation Area

Preferred alternative:  
Upper Keys





-  No Anchor
-  Idle Speed
-  Sanctuary Preservation Area
-  Limited Entry

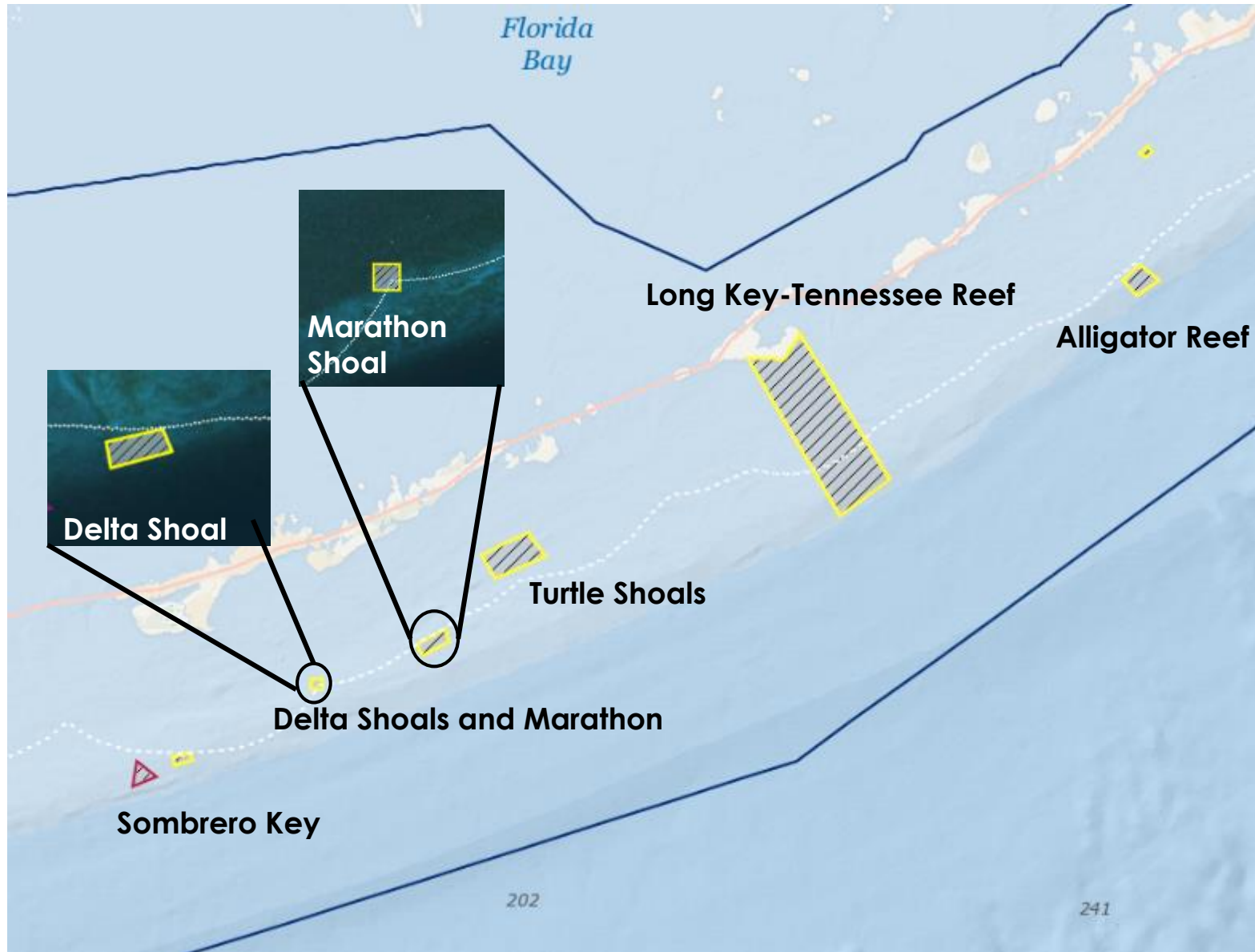


# Marine Zones:

## Sanctuary Preservation Area

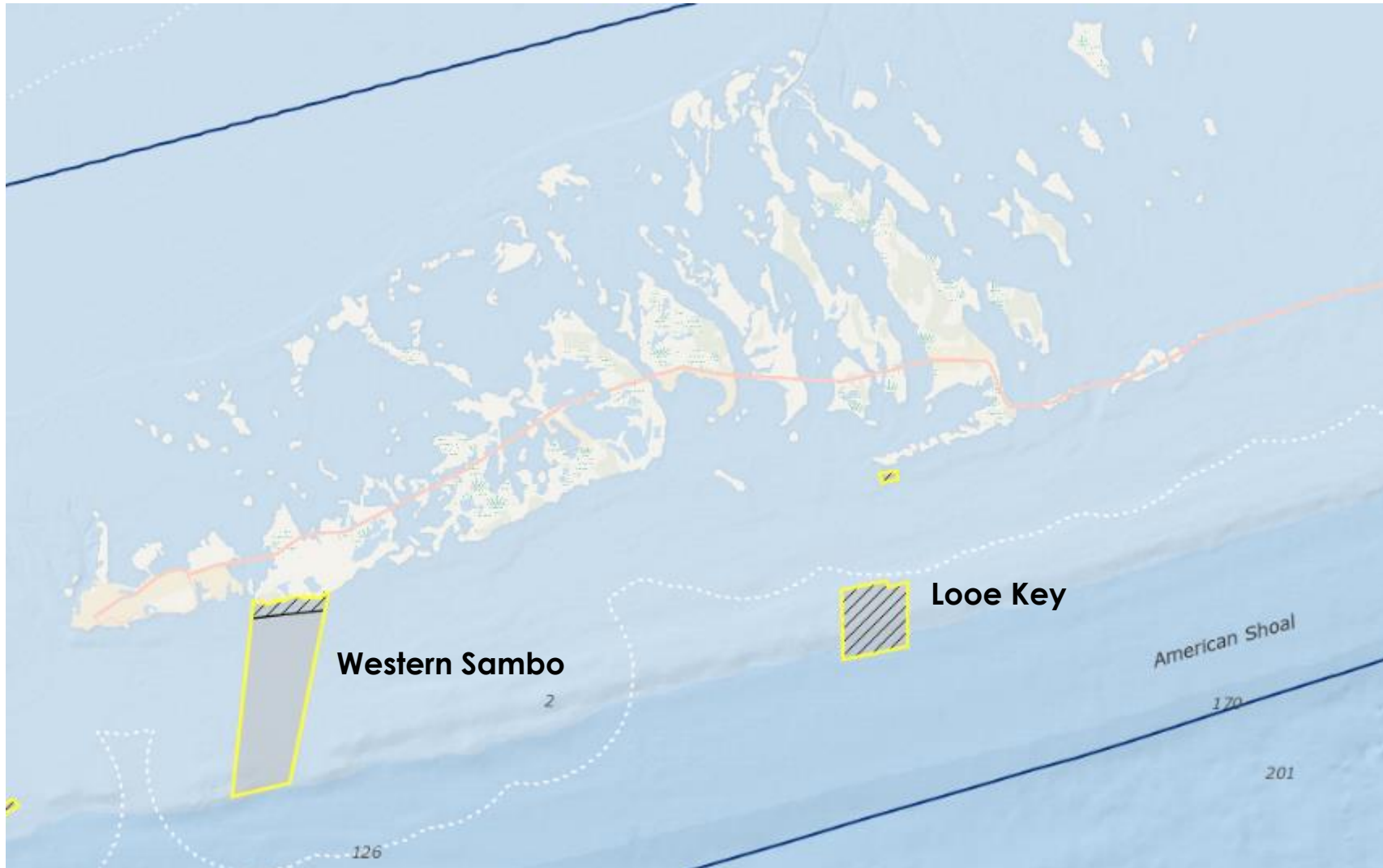
Preferred alternative:  
Middle Keys




-  No Anchor
-  Idle Speed
-  Sanctuary Preservation Area
-  Limited Entry



# Marine Zones: Sanctuary Preservation Area

Preferred alternative: Lower Keys







-  No Anchor
-  Idle Speed
-  Sanctuary Preservation Area

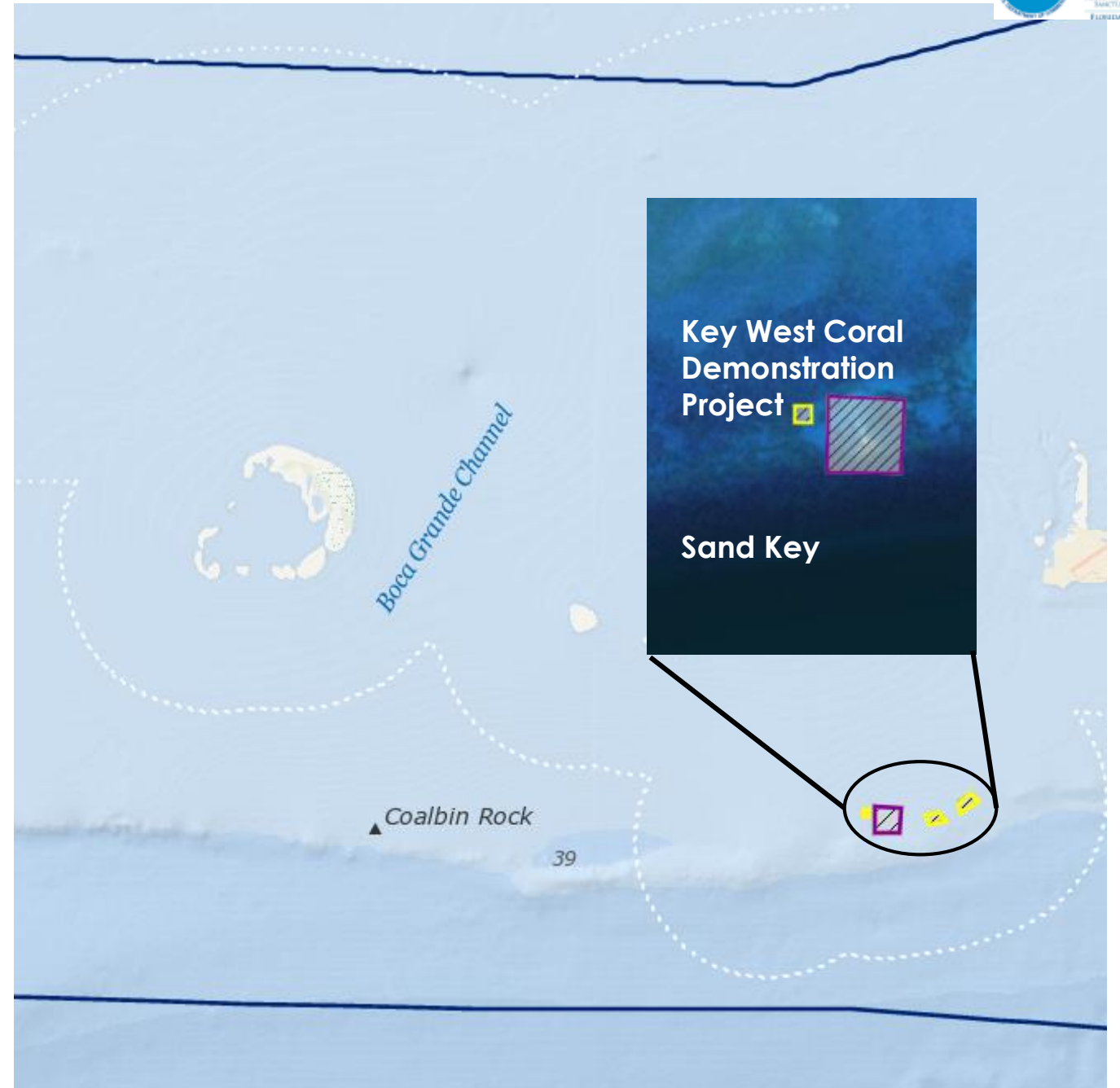


# Marine Zones:

## Sanctuary Preservation Area

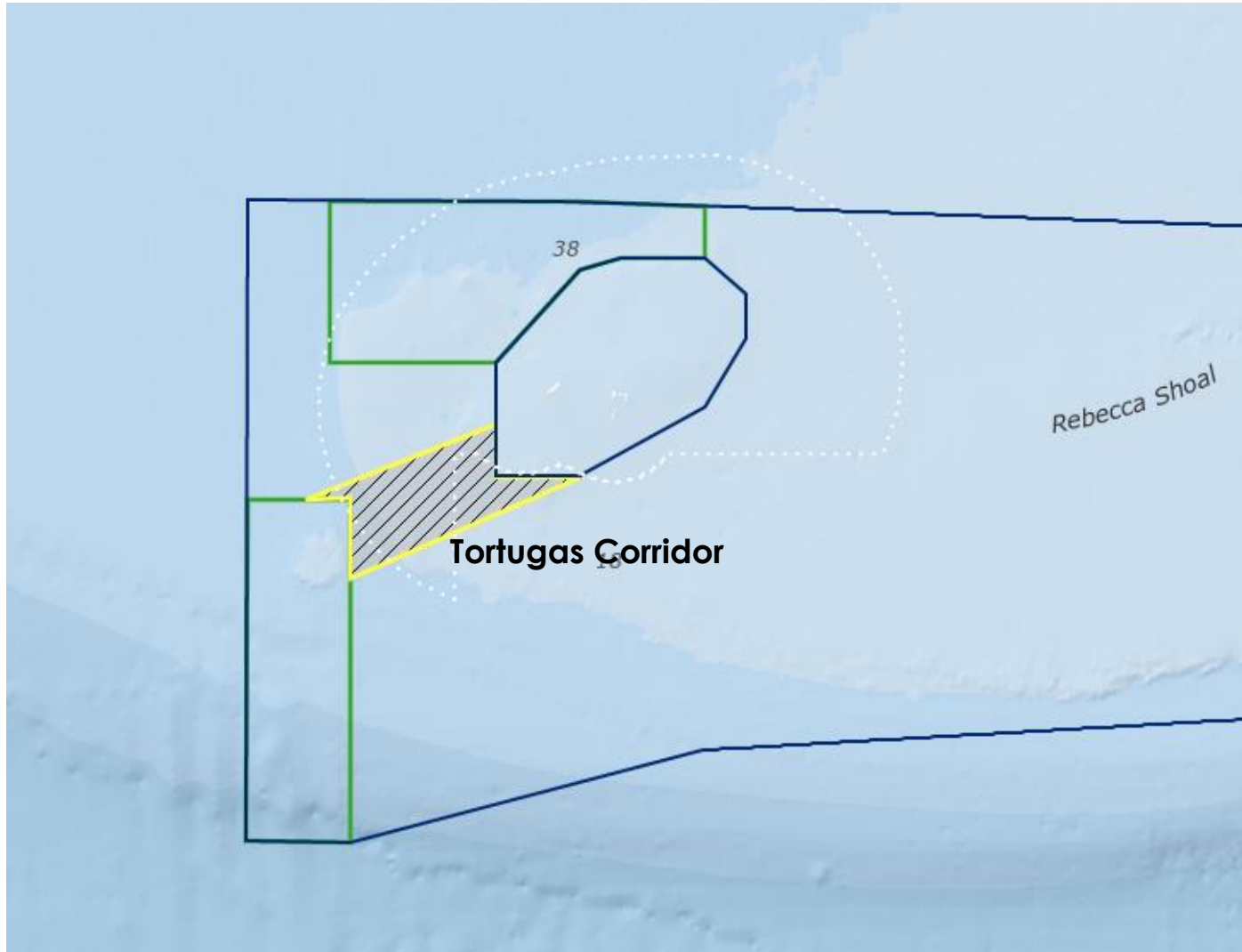
Preferred alternative:  
Marquesas





-  No Anchor
-  Idle Speed
-  Sanctuary Preservation Area
-  Limited Entry



# Marine Zones: Sanctuary Preservation Area

Preferred alternative: Tortugas



-  No Anchor
-  Idle Speed
-  Sanctuary Preservation Area
-  Transit Only

# Marine Zones: Sanctuary Preservation Area (summary of alternatives)

- Separate conflicting uses
- Protect coral reef habitat through placement of mooring buoys

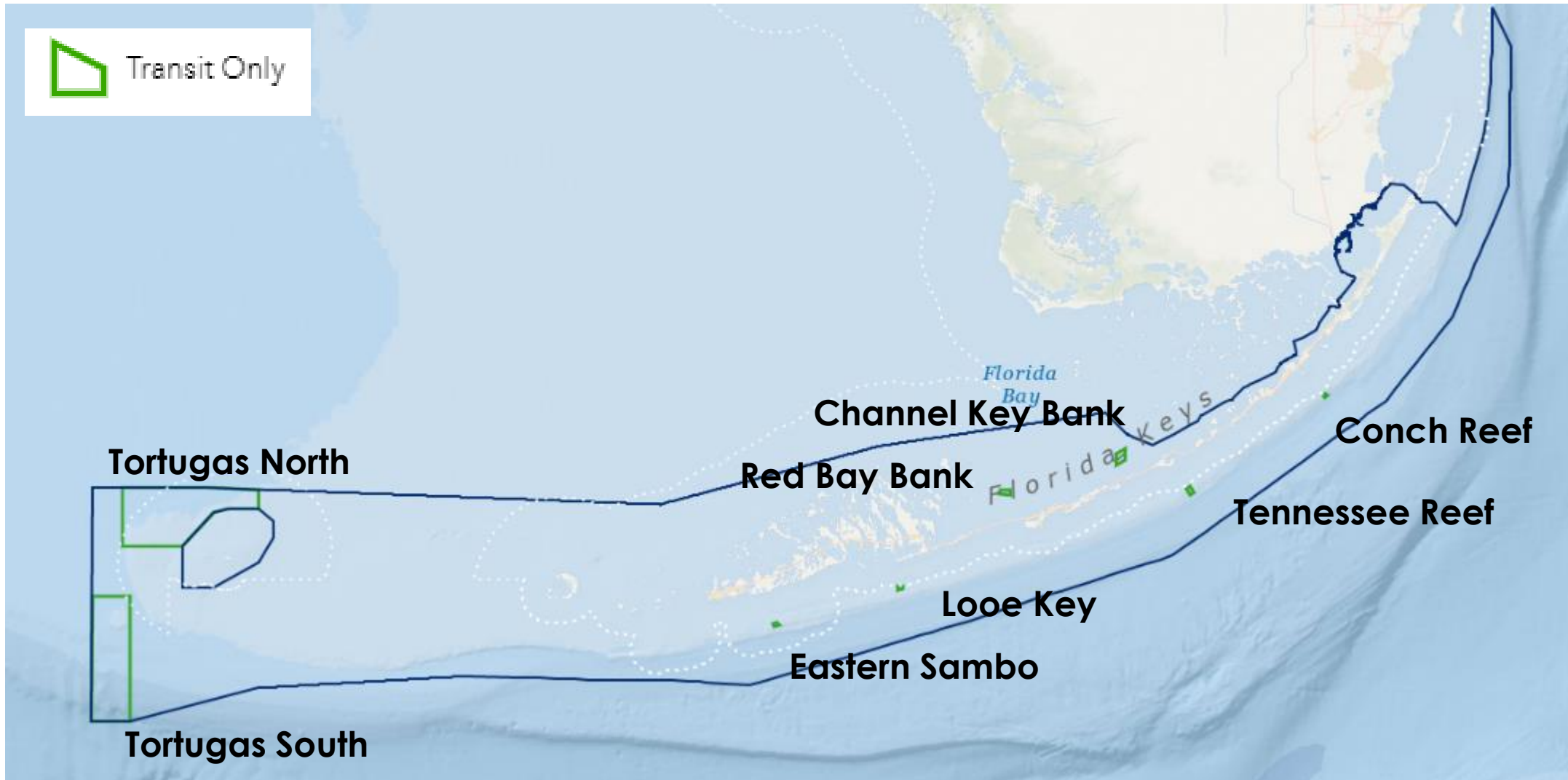
Sanctuary Preservation Areas				
	Alternative 1 (status quo)	Alternative 2	Alternative 3 (preferred)	Alternative 4
Total zones <sup>1</sup>	19	25	26	22
Total area (sq miles) <sup>1</sup>	18	68.43	78	50.33
Regulations applied	*existing SPA regulations *baitfishing permits *catch and release trolling allowed in 4 SPAs	*existing SPA regulations *eliminate baitfish permits *eliminate catch and release trolling *idle speed/no wake *no anchor	*existing SPA regulations *eliminate baitfish permits *eliminate catch and release trolling *idle speed/no wake *no anchor *3 limited entry SPAs	*existing SPA regulations *eliminate baitfish permits *eliminate catch and release trolling *idle speed/no wake *no anchor *2 limited entry SPAs

<sup>1</sup> Includes Western Sambo Ecological Reserve as it is regulated like a Sanctuary Preservation Area



# Marine Zones: Conservation Area

Preferred alternative



# Marine Zones: Conservation Area (summary of alternatives)

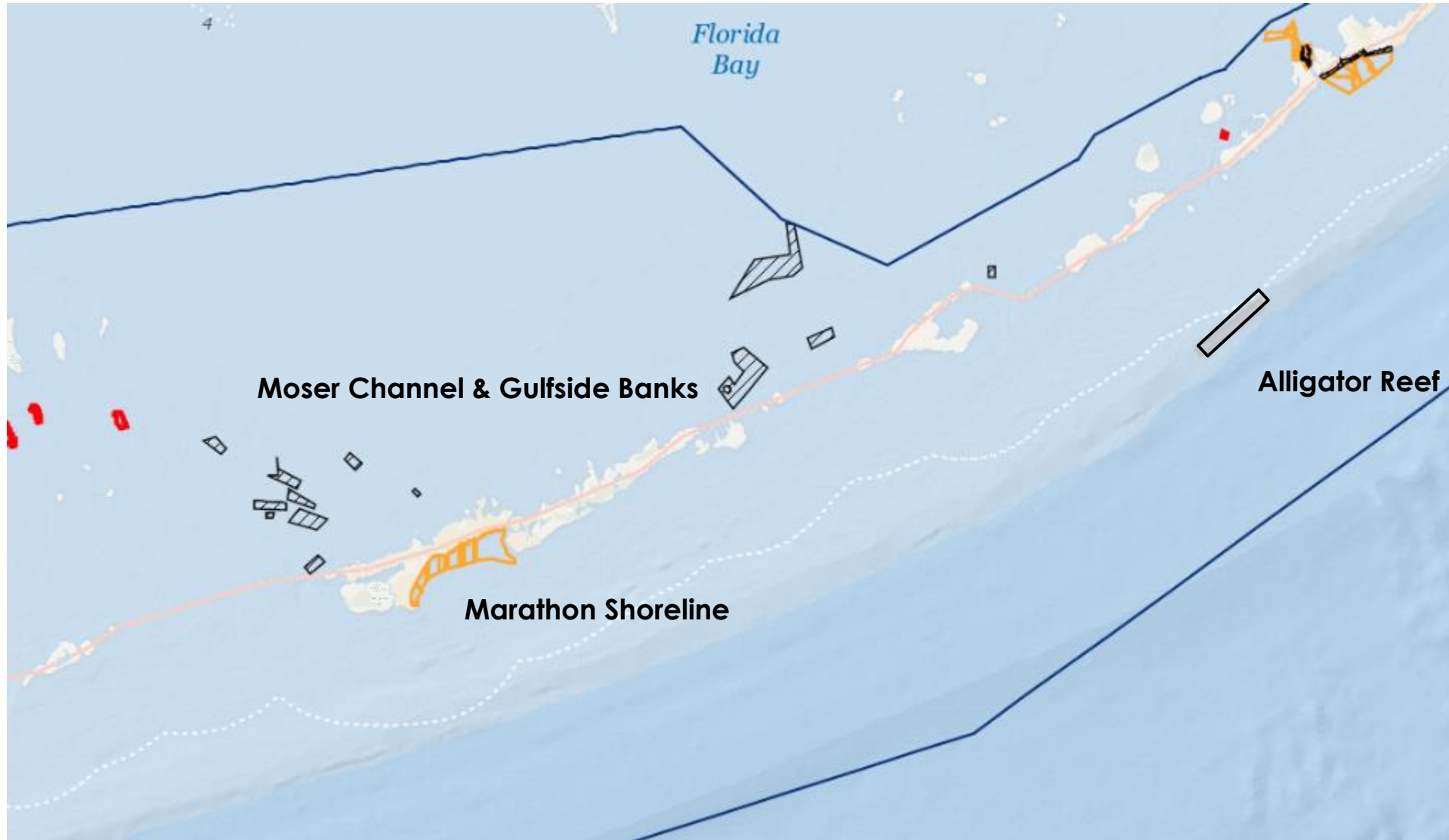
- Replace existing Ecological Reserve and Special Use Area zone types
- Most protective zone type
- Protect large contiguous habitat areas
- Facilitate research, restoration, and monitoring

Conservation Areas				
	Alternative 1 (status quo)	Alternative 2	Alternative 3 (preferred)	Alternative 4
Total zones	6 <sup>1</sup>	8	8	13
Total area (sq miles)	182.23	203.21	203.21	270.01
Regulations applied	transit only without applicable permit	transit only without applicable permit	transit only without applicable permit	transit only without applicable permit

<sup>1</sup> Alternative 1 includes two Ecological Reserves and four Special Use Areas.

# Marine Zones: Wildlife Management Area

Preferred alternative: Middle Keys



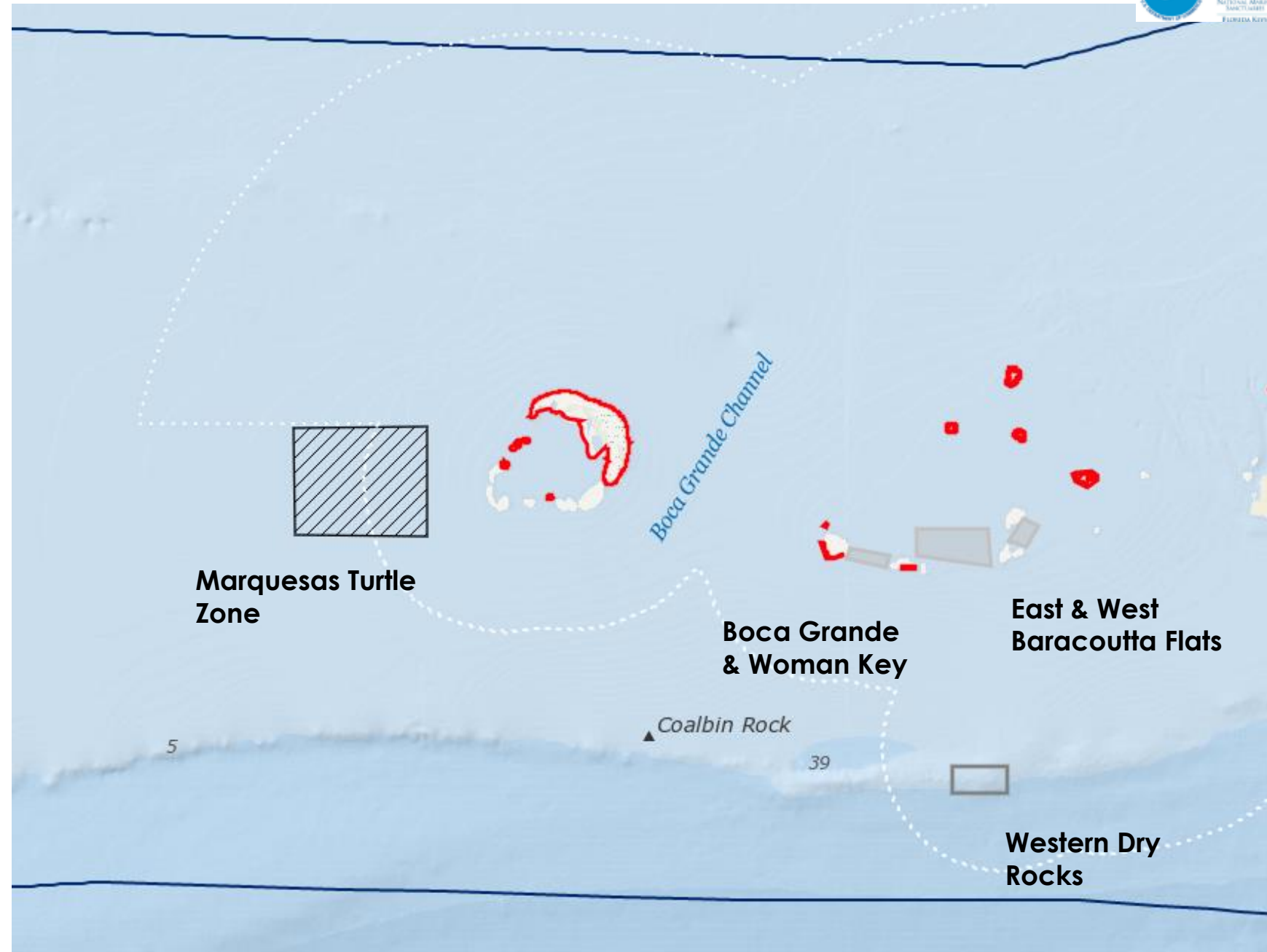
-  No Entry
-  No Anchor
-  Idle Speed
-  Trolling Only
-  No Motor



# Marine Zones: Wildlife Management Area

Preferred alternative:  
Marquesas

-  No Entry
-  No Anchor
-  Idle Speed
-  Trolling Only
-  No Motor



# Marine Zones: Wildlife Management Area (summary of alternatives)

- Minimize disturbance to sensitive or endangered wildlife
- Restrictions vary- no anchor, idle speed/no wake, no motor, no entry
- WMAs are small and targeted, and comprise the majority of existing and proposed new zones

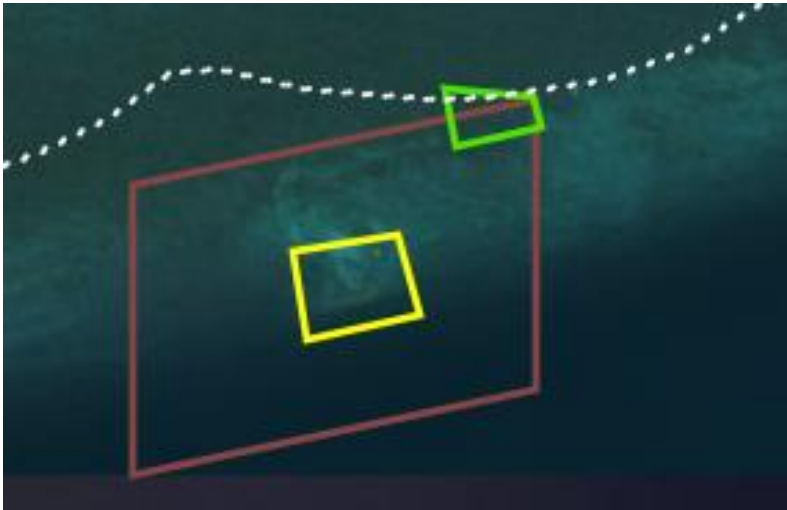
Wildlife Management Areas				
	Alternative 1 (status quo)	Alternative 2	Alternative 3 (preferred)	Alternative 4
<b>Total zones<sup>1</sup></b>	28	59	60	59 <sup>2</sup>
<b>Total area (sq miles)<sup>1</sup></b>	37.55	67.68	69.62	322.73 <sup>2</sup>
<b>Regulations applied</b>	*idle speed/no wake *no motor *no anchor *no access buffer zone *closed	*idle speed/no wake *no motor *no anchor *trolling only *no entry	*idle speed/no wake *no motor *no anchor *trolling only *no entry	*idle speed/no wake *no motor *no anchor *no entry

<sup>1</sup> Includes Tortugas No Anchor zone

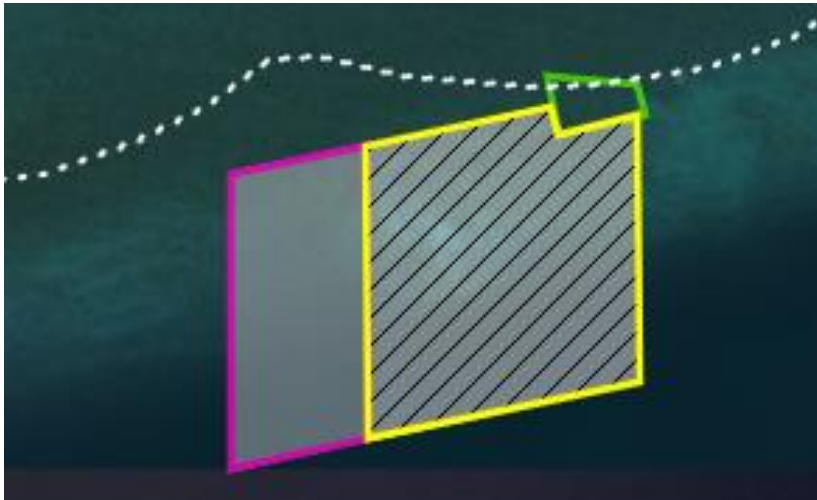
<sup>2</sup> Includes Pulley Ridge No Anchor zone

# Marine Zones: Management Areas

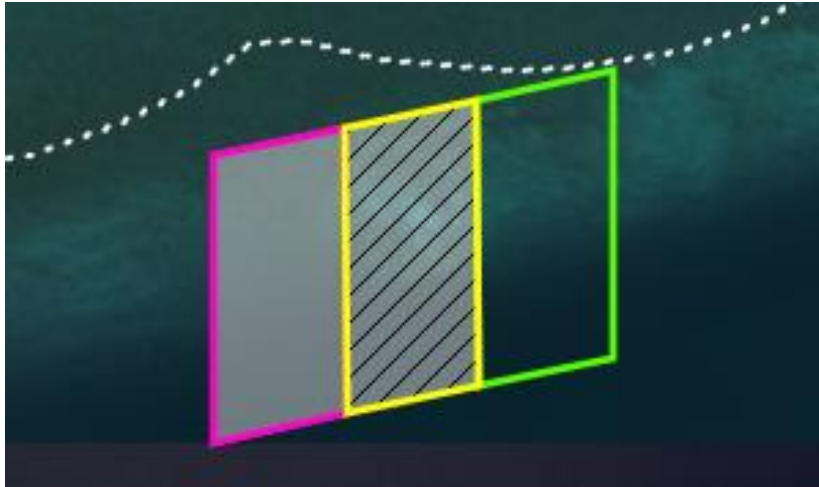
Proposed spatial and regulation changes at Looe Key






Alternative 1






Alternatives 2 & 3



Alternative 4

-  Sanctuary Preservation Area
-  Idle Speed
-  No Anchor

-  Management Area
-  Transit Only
-  Existing Management Area



# Marine Zones: Management Areas

- proposed anchoring prohibition in Key Largo



## Alternative 1

Existing Management Area regulations



## Alternative 2

Existing Management Area regulations  
No Anchor

# Marine Zones: Management Areas (summary of alternatives)

Management areas (including national wildlife refuges) <sup>1</sup>				
	Alternative 1 (status quo)	Alternative 2	Alternative 3 (preferred)	Alternative 4
<b>Total zones</b>	4	4	4	4
<b>Total area: Looe Key and Key Largo sq miles</b>	139.45	134.75	134.75	134.75
<b>Regulations applied to Key Largo and Looe Key</b>	Prohibited activities: *Removing, taking, spearing, or otherwise damaging any coral, marine invertebrate, plant, soil, rock, or other material; taking tropical fish *Use of wire fish traps and similar gear *Spearfishing	*Existing regulations applied and *No Anchoring	*Existing regulations applied and *No Anchoring	*Existing regulations applied and *No Anchoring
<b>Total area: Key West and Great White Heron NWR</b>	656.06	656.06	656.06	656.06
<b>Regulations applied to NWR portions<sup>1</sup></b>	Prohibited activities: Operating a personal watercraft (PWC), airboat, or water skiing	Small area of relief for PWC operation around the "G13" marker	Small area of relief for PWC operation around the "G13" marker	Small area of relief for PWC operation around the "G13" marker