



## **Florida Keys National Marine Sanctuary Advisory Council Marine Zoning and Regulatory Review**

### **Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection**

#### **Working Group Recommendations**

**For Florida Keys National Marine Sanctuary Advisory Council  
Consideration: August 19, 2014**

**Florida Keys National Marine Sanctuary  
Marine Zoning and Regulatory Review**

**Florida Keys National Wildlife Refuges Complex  
Backcountry Management Plan Update**



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## Introduction & Background

The Sanctuary Advisory Council (Council), working with public and community experts, is leading the process to help guide and develop recommendations for changes to the FKNMS regulations and marine zoning plan. Based on the direction from the FKNMS management plan (2007), the Council's guidance in adopted goals and objectives (see below), and public comments, nine specific priority issues were identified to be addressed by the Council as part of this process:

1. Shallow Water Wildlife and Habitat Protection
2. Coral Reef Ecosystem Restoration
3. Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection
4. Permit Procedures and Adaptive Management
5. Artificial Reefs
6. Study Areas and Boundary Modifications
7. Personal Watercraft Tours/ Fishing Conflicts
8. Water Quality
9. Fishery Management Coordination

The Council created working groups to focus on addressing three of the identified priorities: Coral Reef Ecosystem Restoration, Shallow Water Wildlife and Habitat Protection, and Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection. Working groups allow the Council to gather information from community experts, user groups, and scientists. The Council's three working groups have completed several months of meetings since their work began in January 2013. Working group draft recommendations were developed using relevant scientific and resource information, as well as input from the public, during meetings that were held throughout the Florida Keys.

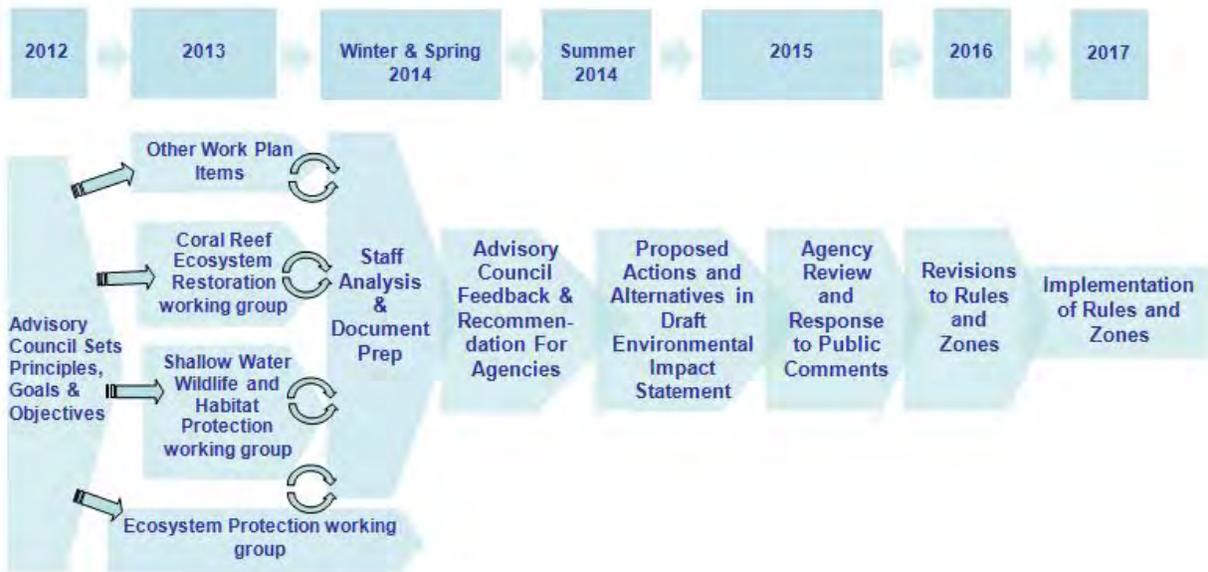
This document reflects draft recommendations from the Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection working group (Ecosystem Protection) and is intended to help the Council identify those issue that should be included in the economic and environmental analysis. This document includes three main sections:

- 1) Summaries of the working group's draft recommendations for Council consideration.
- 2) Maps and site descriptions for each of the areas identified for potential modification or for new areas to be considered for ecosystem protection.
- 3) Appendix with the full text of Ecosystem Protection draft recommendations for Council consideration including additional background, discussion to date, issues to consider, and decision.

This document includes 25 draft recommendations for Council review. The Council will identify those draft recommendations for which further information is needed prior to making a final recommendation to the sanctuary superintendent for potential changes to FKNMS marine zones and regulations.

The review of the marine zone boundaries and regulations of FKNMS is a very involved, open, and transparent public process culminating in the implementation of any regulatory modifications, additions, or eliminations in 2017. The process will take time – not month, but

years. It will involve proactively reaching out to members of the community to gather input, weighing collected information against the best available science, and developing recommendations that will allow the sanctuary to meet the goals and objectives of this review. From there the Council will develop recommendations for NOAA and the U.S. Fish and Wildlife Service to consider, and staff will assess the environmental and economic impacts of any modifications or additions to sanctuary regulations. Finally, any changes to marine zone regulations or boundaries will be adopted and implemented.



## Goals and Objectives for Marine Zoning and Regulatory Review

Approved on December 13, 2011 by Florida Keys National Marine Sanctuary Advisory Council.

The Sanctuary Advisory Council approved the following goals and objectives for the review of FKNMS zones and regulations in December 2011. These goals and objectives were highlighted in the public scoping notice in order to better inform public comments during the initial scoping period. These goals and objectives also provide guidance for the Sanctuary Advisory Council and working groups during development of recommendations for regulations, modifications to the zoning plan and other resource protection strategies.

- A. To improve the diversity of natural biological communities in the Florida Keys to protect, and, where appropriate restore and enhance natural habitats, populations and ecological processes overall and in each of these sub regions Tortugas, Marquesas, Lower, Middle, and Upper Keys.
  1. Reduce stresses from human activities by establishing areas that restrict access to sensitive wildlife populations and habitats.
  2. Protect large, contiguous, diverse and interconnected habitats that provide natural spawning, nursery, and permanent residence areas for the replenishment and genetic protection of marine life and protect and preserve all habitats and species.
  3. Improve/maintain the condition of the biologically structured habitats including
    - a. Coral Reef
      - i. Inshore Patch Reef
      - ii. Mid-Channel Patch Reef
      - iii. Offshore Patch Reef
      - iv. Reef Margin/Fore Reef
      - v. Deep Reef
    - b. Seagrass Bed
    - c. Hardbottom
    - d. Coastal Mangrove
  4. Increase abundance and condition of selected key species including corals, queen conch, long spined sea urchin, apex predatory fish, birds and sea turtles.
- B. To facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities.
  1. Minimize conflicts among uses compatible with the National Marine Sanctuary.
  2. Prevent heavy concentrations of uses that degrade Sanctuary resources.
  3. Provide undisturbed monitoring sites for research and control sites to help determine the effects of human activities.
  4. Achieve a vibrant ecologically sustainable ecosystem and economy.
    - a. Apply the best available science and balanced, conservation based management.

## **Principles for Marine Zoning and Regulatory Review**

Approved on December 13, 2011 by Florida Keys National Marine Sanctuary Advisory Council.

1. The Florida Keys National Marine Sanctuary regulation/zoning review should be conducted with the recognition that there are bordering and overlapping marine management regimes in place, and that these regimes must be considered when contemplating changes to the Florida Keys National Marine Sanctuary regulation/marine zoning structure.
2. All areas of the Florida Keys National Marine Sanctuary should be classified as part of a specific zone, therefore the current “unzoned” area should be classified as a recognized zone type such as “general use area” or “multiple use area”.
3. Each habitat type should be represented in a non-extractive marine zone in each of the biogeographically distinct sub regions of the Florida Keys National Marine Sanctuary to achieve replication. The subregions identified were the Tortugas, Marquesas, and Lower, Middle, and Upper Keys.
4. Information on resilient reef areas that can serve as refugia should be taken into account in zoning changes.
5. Temporal zoning should be considered as a tool for protecting spawning aggregations and nesting seasons.
6. The size of individual non-extractive zoned areas, the cumulative total area included in non-extractive zones, and their spatial relationship with one another matter greatly in achieving the resource protection purposes of the Florida Keys National Marine Sanctuary.

## **Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection**

Existing zones such as Sanctuary Preservation Areas (SPA) protect shallow, heavily used areas where conflicts occur among user groups and where concentrated visitor activity has led to resource degradation. These zones encompass discrete, biologically important areas and are designed to reduce user conflicts and sustain critical marine species and habitats. Ecological Reserves (ER) protect biodiversity by setting aside larger areas with minimal human disturbance. These encompass large, contiguous, and diverse habitats in order to protect and enhance natural spawning, nursery, and permanent-residence areas for the replenishment and genetic protection of fish and other marine life.

The Condition Report and scoping comments identified significant need to review the current marine zones and associated regulations. The purpose of the existing zoning scheme with respect to the reserves is to protect and preserve sensitive components of the ecosystem by regulating activities within the zoned areas, while facilitating activities compatible with resource protection. While certain zoning ensures that areas of high ecological importance will evolve in a natural state, with minimal human influence, additional areas may need to be considered to ensure long term protection of the natural resources, promote sustainable use of the sanctuary resources, and protects areas that represent diverse habitats as well as areas important for maintaining natural resources (i.e., fish, invertebrates) and ecosystem functions.

To conduct this review, the Sanctuary Advisory Council established an Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection working group. The Ecosystem Protection working group consists of 15 community members, five of which are Advisory Council members, representing a range of issues and constituencies.

	Name	Affiliation
1	Chris Bergh	SAC; Conservation & Environment; Working Group Chair
2	Ben Daughtry	SAC; Commercial Fishing – Marine/Tropical
3	Rob Harris	SAC; Fishing – Charter Sports Fishing
4	Suzy Roebing	SAC; Citizen at Large – Upper Keys
5	Joe Weatherby	SAC; Tourism
6	Maria Brandvold	Recreational Fisherman
7	Tad Burke	Florida Keys Fishing Guides Association
8	Mark Chiappone	NOVA Southeastern University
9	Don DeMaria	Sea Sampler
11	Manny Herrera	Florida Keys Commercial Fishermen’s Association
12	Ernie Piton	Florida Keys Commercial Fishermen’s Association
13	Dave Vanden Bosch	Captain Hooks Dive Center and Marina – Middle Keys
14	Scott Saunders	Fury Water Adventures
15	Mimi Stafford	Reef Relief

**Ecosystem Protection Working Group Objectives:**

Approved on December 11, 2012 by Florida Keys National Marine Sanctuary Advisory Council.

1. Review and evaluate existing reserves designated for protection of coral reef ecosystems.
2. Review current exceptions to regulations in Sanctuary Preservation Areas and Ecological Reserves.
3. Review and evaluate Sanctuary Preservation Areas reduction of conflicting uses.
4. Recommend new or modified ecological reserves to ensure protection of a diversity of resources:
  - a. Spawning aggregations
  - b. Full suite of marine flora and fauna (i.e., seabird, marine mammal, turtles, seagrass, soft corals, hard corals)
5. Consider temporal zoning to address seasonal impacts associated with intense uses or seasonal ecological activities (i.e., nesting, breeding, spawning).
6. Ensure the FKNMS zoning scheme promotes sustainable use of the sanctuary resources and protects areas that represent diverse habitats as well as areas important

Phase I Meetings: The working group met over a series of eight meetings from late March to September, 2013:

- March 14: Clarified Role and Authority of Working Group.
- April 4: Identified primary habitats, resources, and data layers, as well as study areas and geographic regions to be considered.
- May 2: Identified criteria and factors to consider for Ecosystem Protection.
- May 23: Identified a range of ecosystem protection components to consider when making recommendations regarding fish spawning aggregations.
- June 13: Identified select biological information in SPAs and ERs as it relates to the Council and working group objectives, Discussed boundary modifications and justifications for existing SPAs and ERs.
- July 11: Assessed and discussed draft maps showing proposed modifications to existing zones and potential new zones to meet ecosystem protection goals.
- July 29: Heard public comment and vote taken to host additional regional meetings to facilitate greater community engagement and to solicit site-specific input. Voted that water quality, education, and enforcement should be addressed through this review process.

The working group hosted a series of regional public meetings to facilitate information exchange and solicit region and site-specific input from the community. These meetings were planned throughout the Florida Keys to allow greater community participation and to better facilitate region and site-specific input.

- September 23: Solicit input about the Middle Keys region.
- September 24: Solicit input about the Upper Keys region.
- September 25: Solicit input about the Lower Keys region.
- September 26: Solicit input about the Marquesas and Dry Tortugas regions.

Following these regional public meetings, the working group reconvened:

- September 30: Discussed input received through regional public sessions and made a decision to continue to meet and develop recommendations for Council review.

Phase II Meetings: The working group reconvened and met for a series of six regional two-day meetings from March to early July 2014:

- March 6 & 7: Reconvene, review the working group charge, review the scientific and use data available and begin to work with the data. Discuss and make ecosystem protection recommendations for the Dry Tortugas region.
- March 25 & 26: Discuss and make ecosystem protection recommendations for the Upper Keys region
- April 17 & 18: Discuss and make ecosystem protection recommendations for the Middle Keys region
- May 13 & 14: Discuss and make ecosystem protection recommendations for the Lower Keys region
- June 10 & 11: Discuss and make ecosystem protection recommendations for the Marquesas region
- July 8 & 9: Review preliminary recommendations for all regions, final discussion, and develop suite of ecosystem protection recommendations for consideration by the Council.

#### **For More Information**

Full working group meeting notes, presentations and products and draft recommendations can be found on the sanctuary website: <http://floridakeys.noaa.gov/review/reserves.html>.

### **Summary of Working Group Recommendations for Sanctuary Advisory Council Consideration**

\*\*For Ecosystem Protection zone recommendations see FKNMS Maps for more information. To see the complete Ecosystem Protection Working Group outcomes and recommendations, see Appendix I and II.

Recommendation EP 1-19: Evaluate the economic and environmental benefit/impact of eleven existing sanctuary marine zones\* including one Fishery Management Plan Area Closed to Lobster Trap Gear, the general Sanctuary and Area to be Avoided boundaries with recommended modifications and seven new zones proposed for ecosystem protection.

\*Sanctuary Preservation Areas (SPAs), Special Use Areas (SUAs), Ecological Reserves (ERs), and Existing Management Areas (EMAs)

<b>ID</b>	<b>Name</b>	<b>Zone Modification</b>	<b>Region</b>	<b>Map Page #</b>
EP-1	Carysfort Reef	Existing SPA, modifications	Upper	12-15
EP-2	Turtle Rocks	Potential new zone	Upper	12, 13, 16, 17
EP-3	Basin Hill Shoals	Potential new zone	Upper	12-15, 18, 19
EP-4	Conch Reef	Existing SPA, modifications	Upper	12, 13, 20, 21
EP-5	Davis Reef	Existing SPA, modifications	Upper	12, 13, 20-23
EP-6	Alligator Reef	Existing SPA, modifications	Middle	12, 13, 24-29
EP-7	FMP Area Closed to	Existing FMP Area,	Middle	12, 13, 24-29

	Lobster Trap Gear (near Alligator Reef)	modifications		
EP-8	Tennessee Reef	Existing SUA, modifications	Middle	24, 25, 30, 31
EP-9	Turtle Shoals	Potential new zone	Middle	24, 25, 32, 33
EP-10	Sombrero Key	Existing SPA, modifications	Middle	24, 25, 34, 35
EP-11	Looe Key	Existing SPA, SUA, and EMA, modifications	Lower	36-39
EP-12	Wonderland	Potential new zone	Lower	36, 37, 40, 41
EP-13	West Washerwoman (west)	Potential new zone	Lower	36, 37, 42, 43
EP-14	West Washerwoman (east)	Potential new zone	Lower	36, 37, 42-47
EP-15	Western Sambo	Existing ER, modifications	Lower	36, 37, 44-47
EP-16	Western Dry Rocks	Potential new zone	Marquesas	36, 37, 48-51
EP-17	Tortugas South	Existing ER, modifications	Dry Tortugas	52-59
EP-18	Sanctuary Boundary	Existing Sanctuary, modifications	Dry Tortugas	52-59
EP-19	Area to be Avoided (ATBA)	Existing ATBA, modifications	Dry Tortugas	52-59

Recommendation EP 20-25: Evaluate the following concepts and the potential economic and environmental benefit/impact if implemented.

EP-20	Prohibit anchoring in Sanctuary Preservation Areas.
EP-21	Prohibit anchoring in FMP Areas Closed to Lobster Trap Gear.
EP-21	Mark, where feasible, FMP Areas Closed to Lobster Trap Gear.
EP-22	Establish a permit system to implement a limited use/limited entry program.
EP-23	Evaluate the use of artificial reefs in FKNMS.
EP-24	Promote coral restoration in reef areas shown to be resilient.
EP-25	Prohibit coral restoration in zones that are set aside as ecological reserve type zones.

The Ecosystem Protection Working Group identified several other non-regulatory issues for Advisory Council consideration.

- Identified enforcement, water quality, and education as priority issues to address (see Appendix I for working group decision item).
- Promote the use of technology as a means to address management needs and education.
- Noted concerns about lobster mini-season and ecosystem protection goals.
- Support creation of a Florida Keys specific Fishery Management Council or Sub-Committee of the South Atlantic and Gulf of Mexico Fishery Management Councils and noted that the area of focus should include the “study area” as identified by the Advisory Council for this regulatory review.
- Promote greater coordination between FKNMS and Biscayne Bay National Park.
- Noted issues to consider related to the turtle protection areas recommended by the Shallow Water Wildlife and Habitat working group.

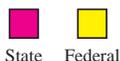
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## Data Descriptions and Information for Index Maps

### High Stony Coral Species Richness

This dataset represents field survey information for the species richness of hard corals at a given site. Species richness is an estimate of the average number of species observed by a scientific diver within the study site selected. The points shown are the top 25% of this particular data set.

Dates data was collected: 1996 to present.



State Federal

### State Threatened & Federal Endangered Species Act Listed Coral Species

This dataset represents areas where specific rare species of corals were observed. State listed species includes pillar coral; Federal ESA listed species include elkhorn and staghorn coral.

Data was collected: 1996 to the present.



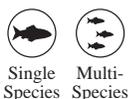
### Florida Reef Resiliency Program Resilient Reefs

This data has been analyzed to help determine resilient reefs which are defined as: reef areas with high coral colony density, where bleaching has been relatively low and where coral disease prevalence has been low. This data was collected over nine sampling periods between August 2005 and September 2010. In total, 1176 sites were recorded.

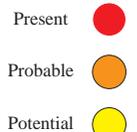


### High Fish Species Richness

This dataset shows the number of species of the fish community per sampling site along the Florida Keys. A total of 365 species are included. Species richness is an estimate of the average number of species observed by a scientific diver within a 40,000 square meter area that was randomly chosen for a fish survey. The points shown are the top 25% of this particular data set. Dates data was collected: 1980 to 2010



Single Species Multi-Species

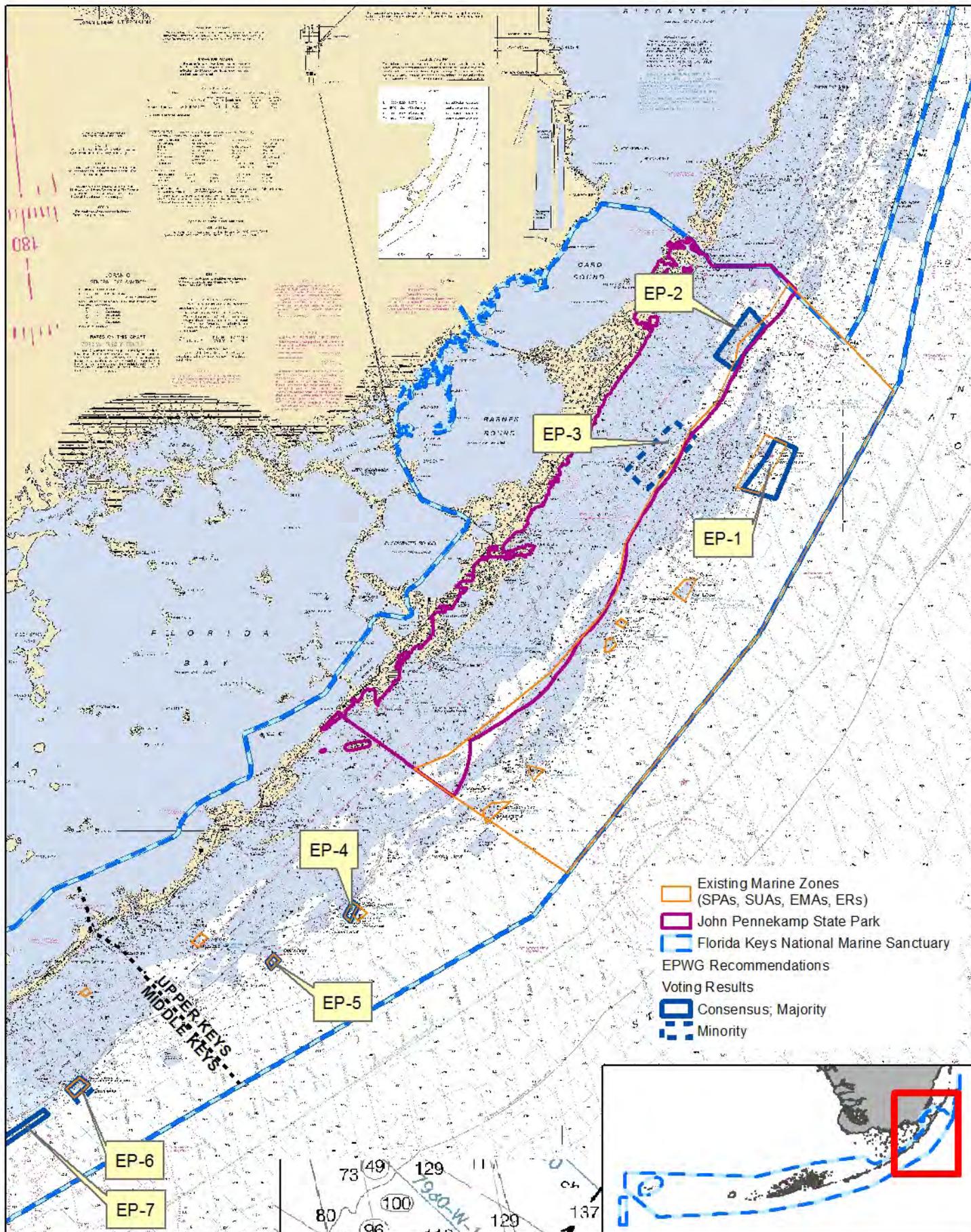


Present  
Probable  
Potential

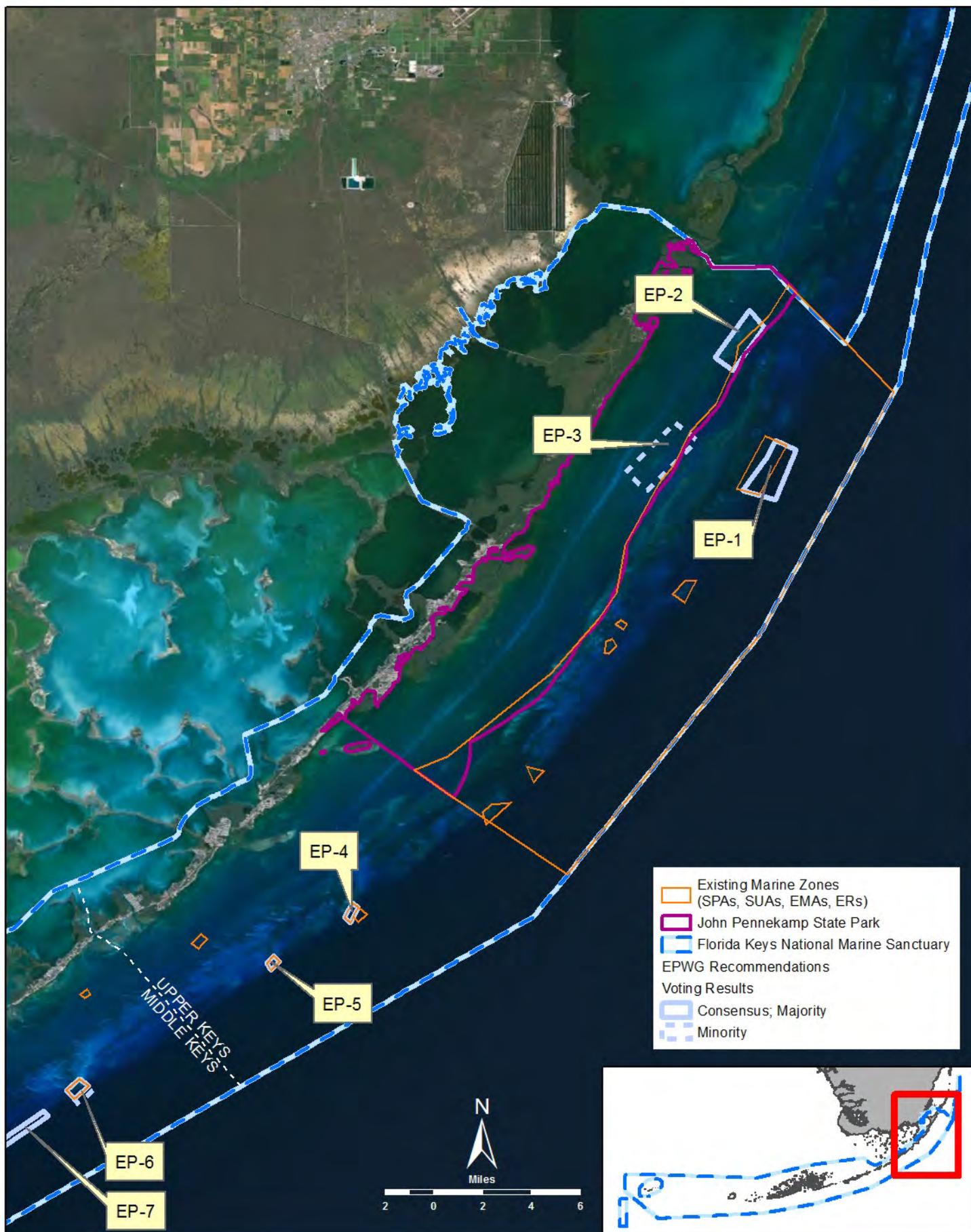
### Fish Aggregations

This dataset is a compilation of locations where reef fish aggregations occur ('present', aggregations observed, see methods below), are likely to occur ('probable', considerable evidence of aggregations but more documentation needed), or may occur ('potential', some evidence of aggregations but more documentation needed). Evidence of aggregations was generated from scientist-led surveys and from communications with commercial, charter and recreational fishers. Scientific surveys included the use of fisheries sonar (to locate aggregations of fish), scuba divers (to identify aggregations to species level and provide abundance estimates and behavioral observations), aerial surveys (to perform counts of fishing vessels and to identify hot-spots of fishing activity identify), or, in most cases, combinations of these methods. Single or multi-species aggregations are noted. Dates data was collected: 2009 to 2012

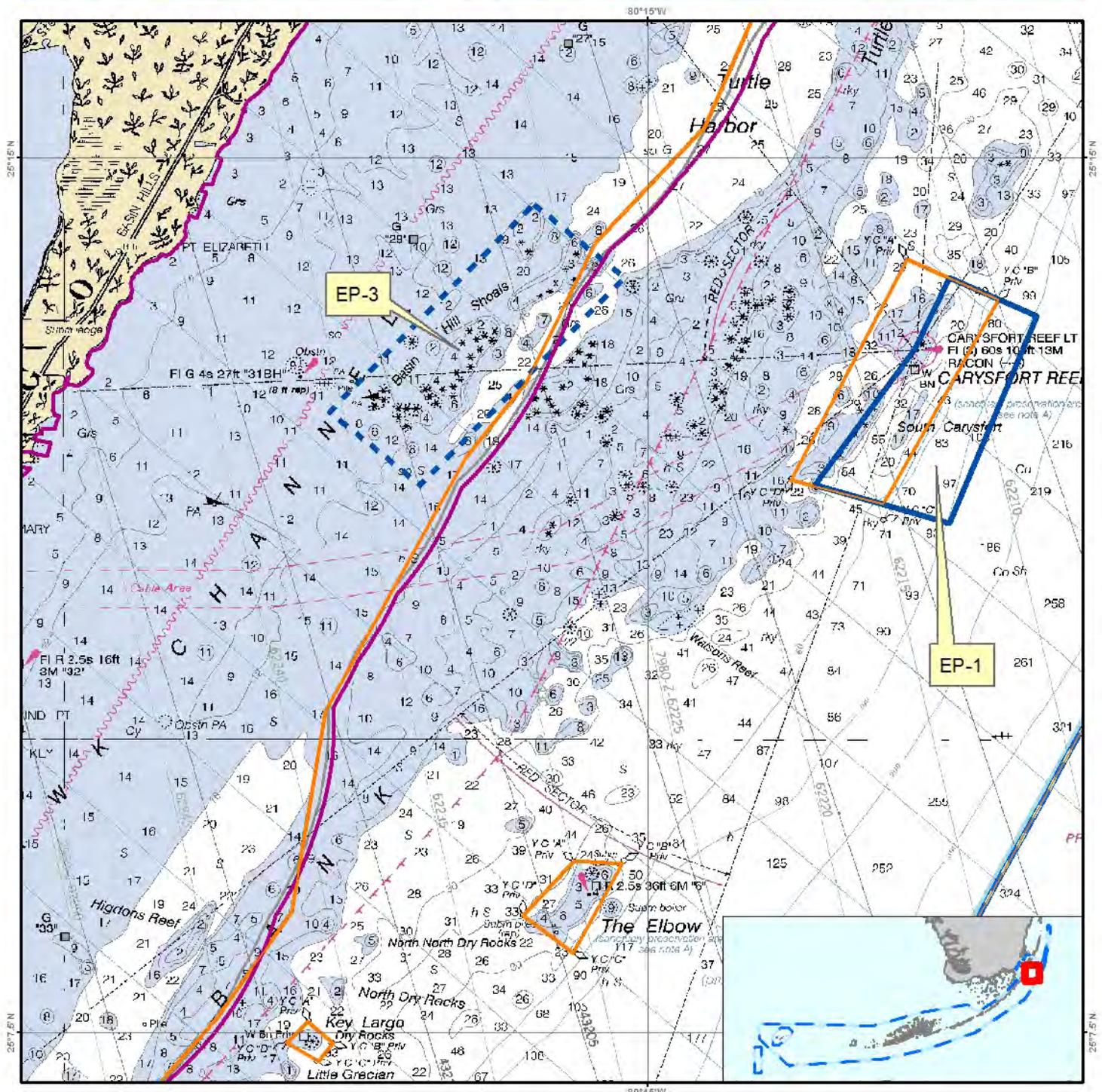
# Upper Keys Region Map



# Upper Keys Region Map



# Carysfort Reef



### EP Recommendation - 1, Carysfort Reef

#### Modify Zone

1. Allow certain level of bait-fishing (limit number of permits allowed in zone). *Consensus*
2. No anchor zone, limit number of mooring balls. *Consensus*
3. Make zone an ecological reserve/research only area, close to all user groups (allow use at existing mooring balls). *6 in favor, 12 present*

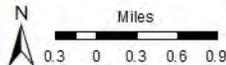
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### EPWG Recommendations

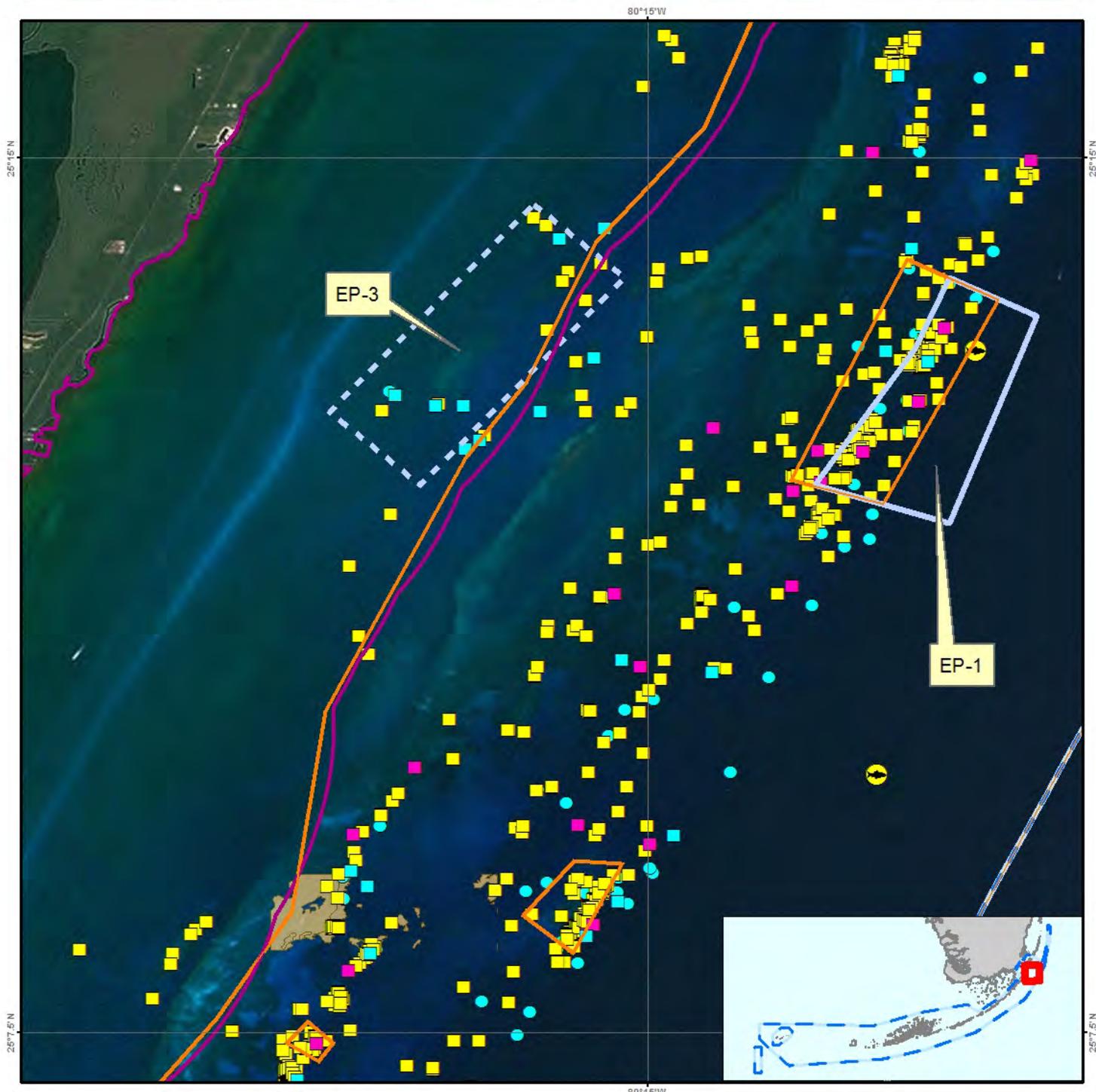
#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary
- John Pennekamp State Park

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Carysfort Reef



## EP Recommendation - 1, Carysfort Reef

### Modify Zone

1. Allow certain level of bait-fishing (limit number of permits allowed in zone). *Consensus*
2. No anchor zone, limit number of mooring balls. *Consensus*
3. Make zone an ecological reserve/research only area; close to all user groups (allow use at existing mooring balls). *6 in favor, 12 present*

NOTE: While shown here, detailed information about EP-3 can be found on a following page.

### EPWG Recommendations

#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary
- John Pennekamp State Park

Florida Reef Resiliency Program Resilient Reefs

State Threatened Coral Species, Pillar Coral

Federal ESA Coral Species, Elkhorn and Staghorn Coral

High Stony Coral Species Richness

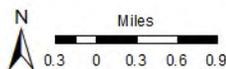
High Fish Species Richness

#### Fish Aggregations

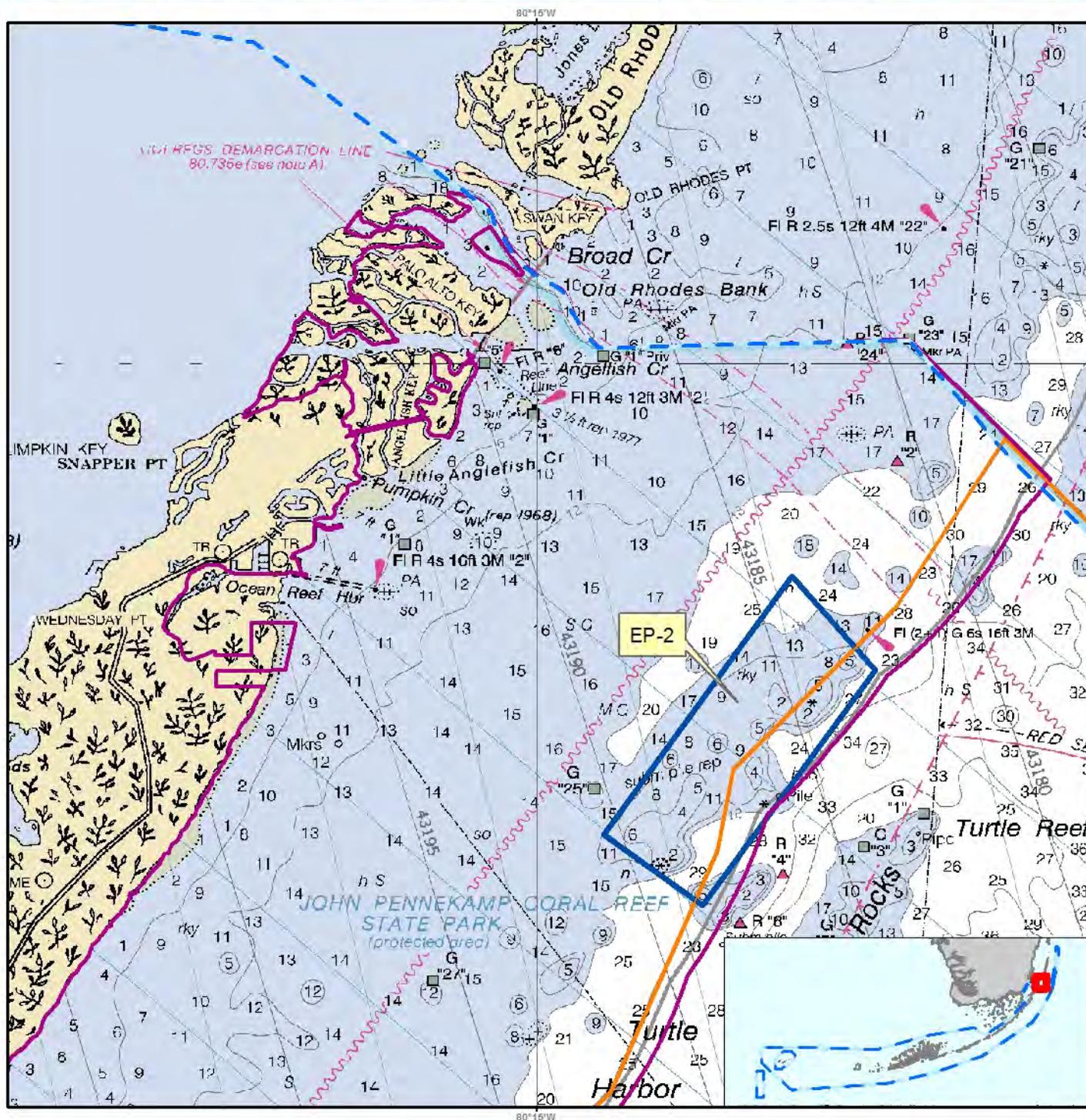
Single Species

Potential

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# Turtle Rocks



### EP Recommendation - 2, Turtle Rocks

New Zone

1. No take, close to all uses. 10 in favor, 13 present

### EPWG Recommendations

Voting Results

Consensus; Majority

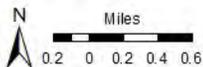
Minority

Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

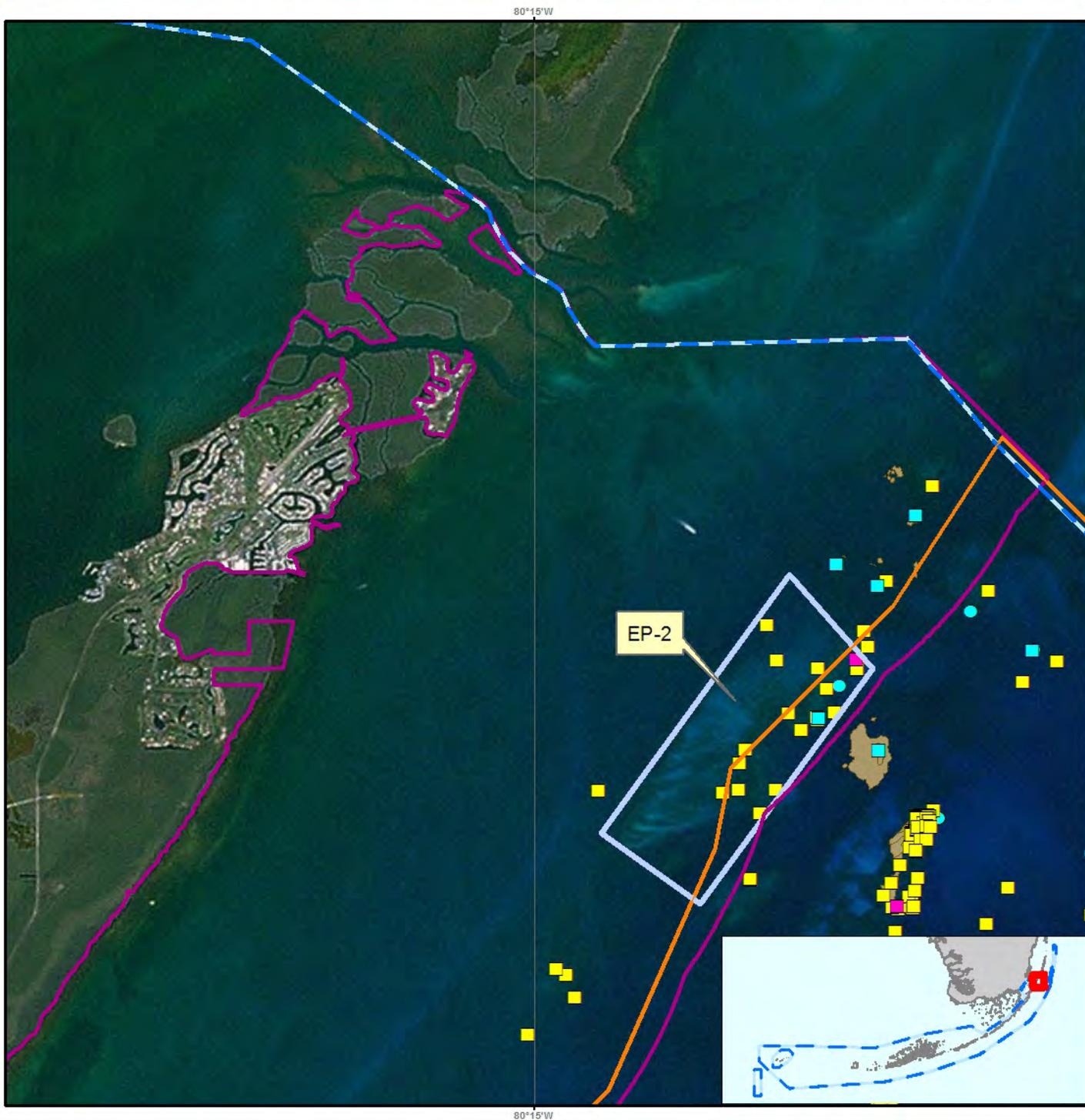
FKNMS Boundary

John Pennekamp State Park

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# Turtle Rocks



### EP Recommendation - 2, Turtle Rocks

#### New Zone

1. No take, close to all uses. 10 in favor, 13 present

#### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority

Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

FKNMS Boundary

John Pennekamp State Park

Florida Reef Resiliency Program Resilient Reefs

State Threatened Coral Species, Pillar Coral

Federal ESA Coral Species, Elkhorn and Staghorn Coral

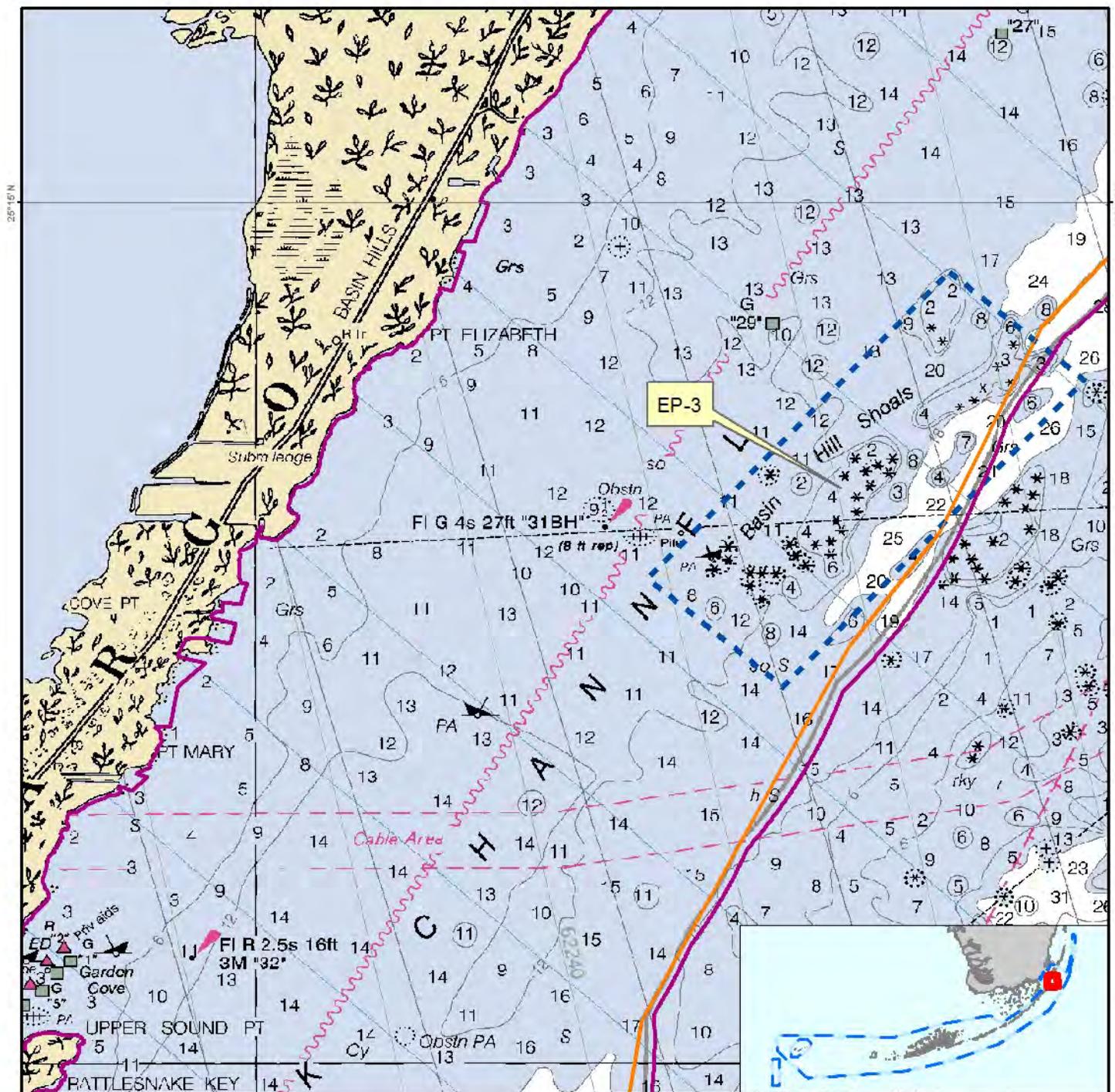
High Stony Coral Species Richness

High Fish Species Richness

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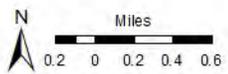
# Basin Hill Shoals



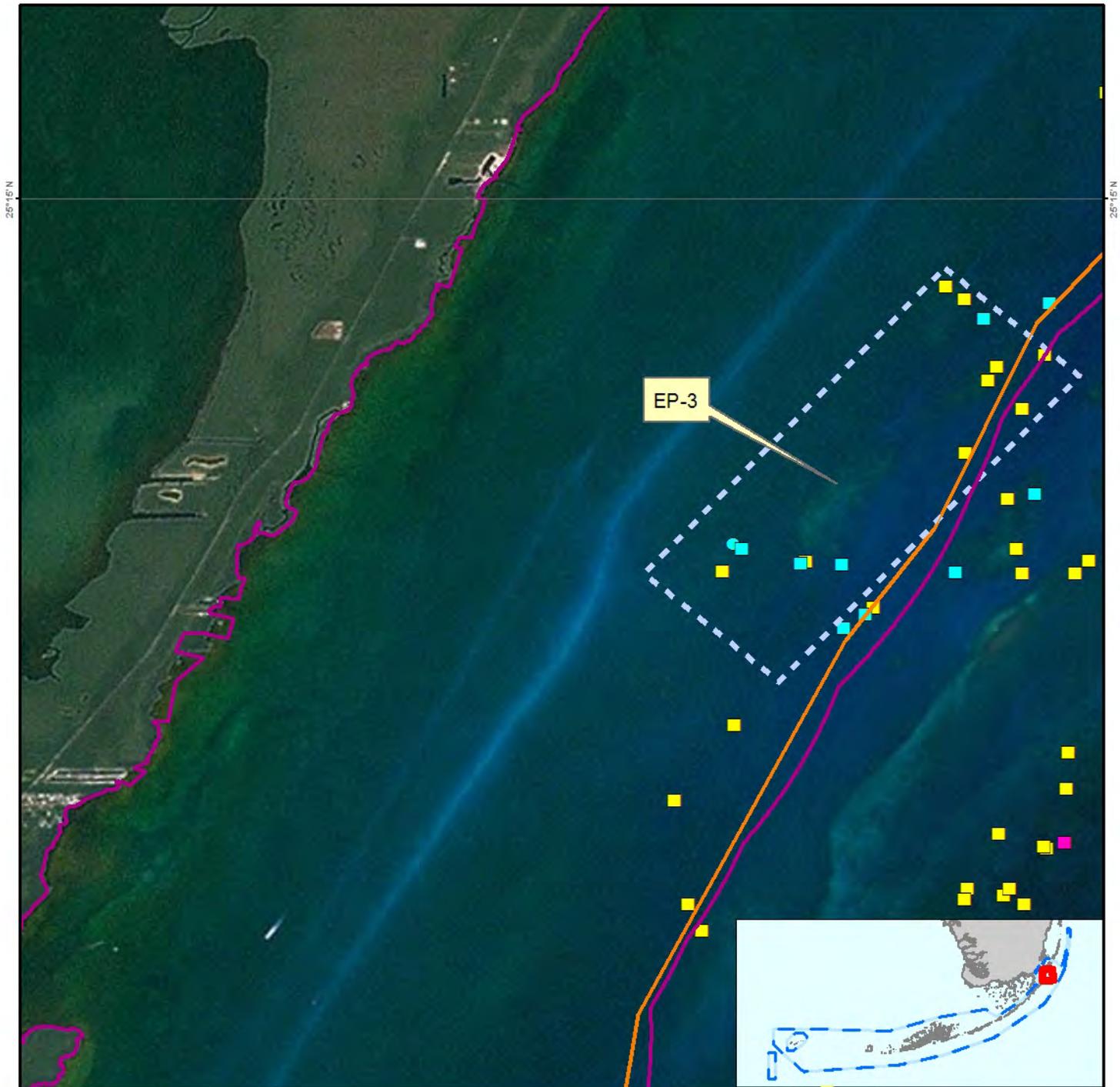
**EP Recommendation - 3, Basin Hill Shoals**  
 New Zone  
 1. No take, close to all uses. 6 in favor, 13 present

- EPWG Recommendations**
- Consensus; Majority
  - Minority
  - Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
  - John Pennekamp State Park

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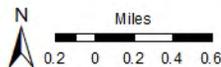
# Basin Hill Shoals



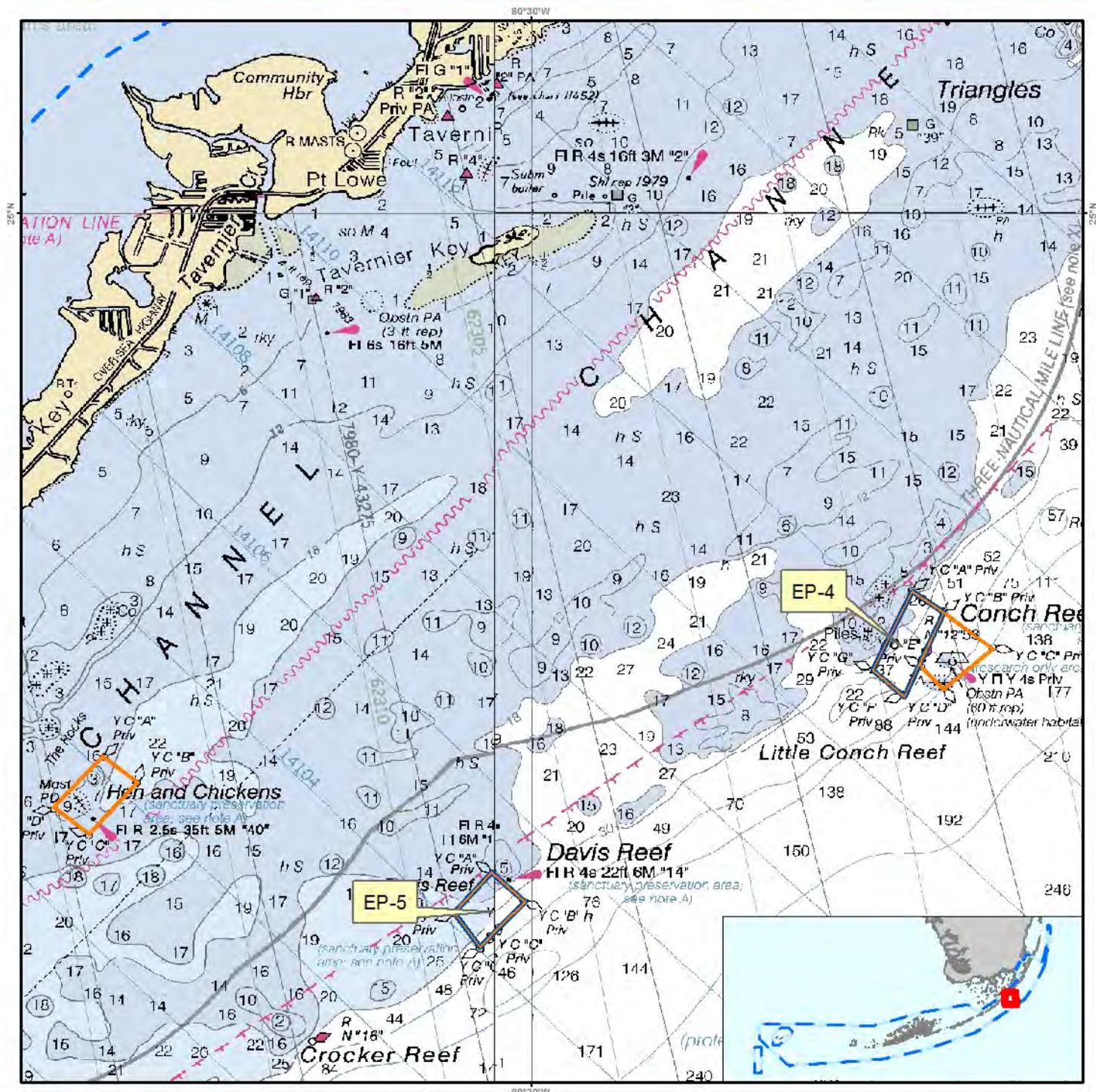
**EP Recommendation - 3, Basin Hill Shoals**  
*New Zone*  
 1. No take, close to all uses. 6 in favor, 13 present

- EPWG Recommendations Voting Results**
- Consensus; Majority
  - Minority
  - Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
  - John Pennekamp State Park
  - State Threatened Coral Species, Pillar Coral
  - Federal ESA Coral Species, Elkhorn and Staghorn Coral
  - High Stony Coral Species Richness
  - High Fish Species Richness

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# Conch Reef



### EP Recommendation - 4, Conch Reef

#### Modify Zone

1. Eliminate exception to allow catch and release by trolling. *Consensus*

NOTE: While shown here, detailed information about EP-5 can be found on a following page.

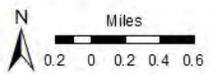
### EPWG Recommendations

#### Voting Results

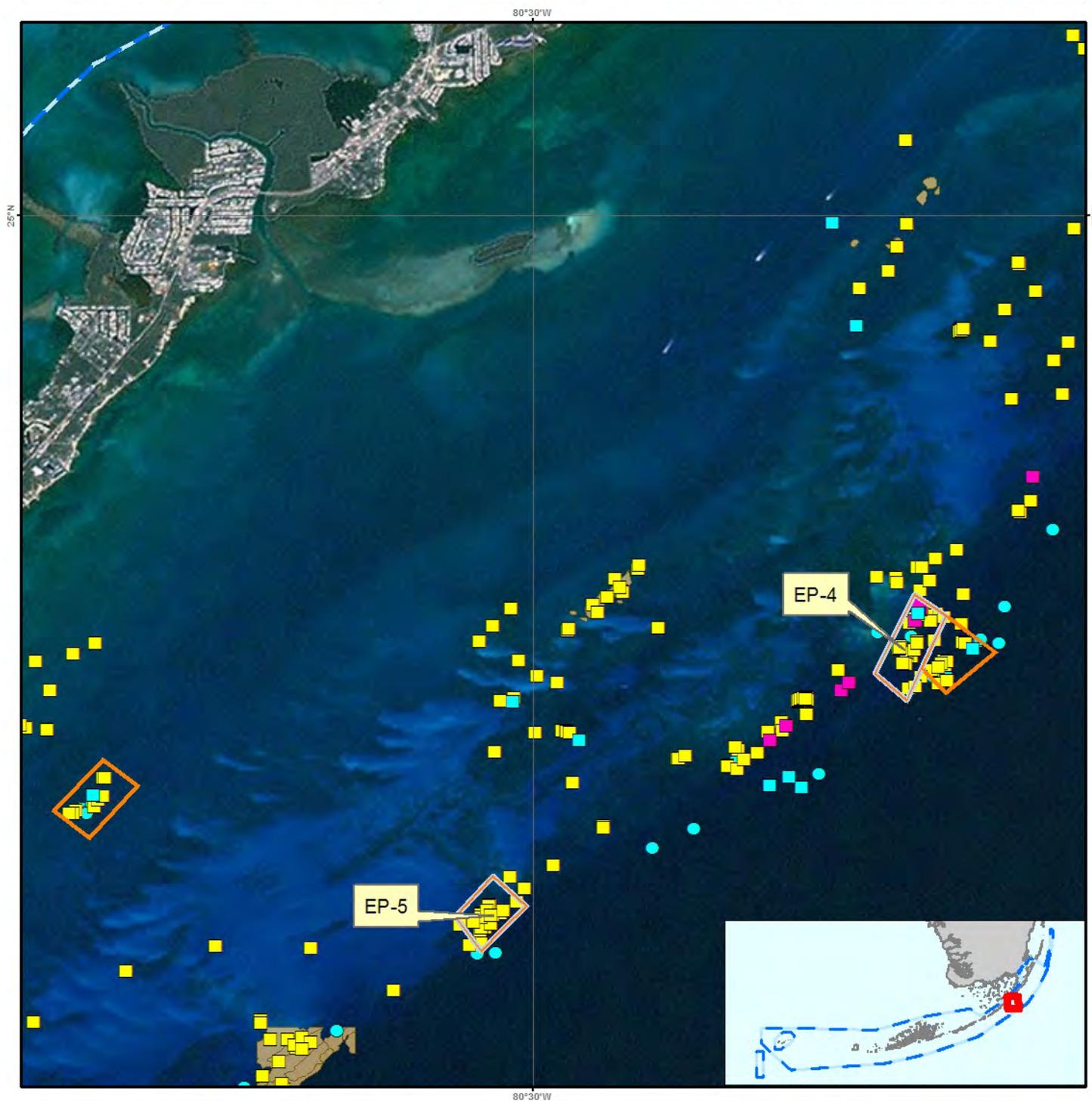
-  Consensus; Majority
-  Minority

-  Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
-  FKNMS Boundary

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Conch Reef



### EP Recommendation - 4, Conch Reef

#### Modify Zone

1. Eliminate exception to allow catch and release by trolling. *Consensus*

NOTE: While shown here, detailed information about EP-5 can be found on a following page.

#### EPWG Recommendations Voting Results

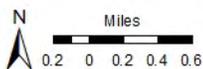
- Consensus; Majority
- Minority

- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

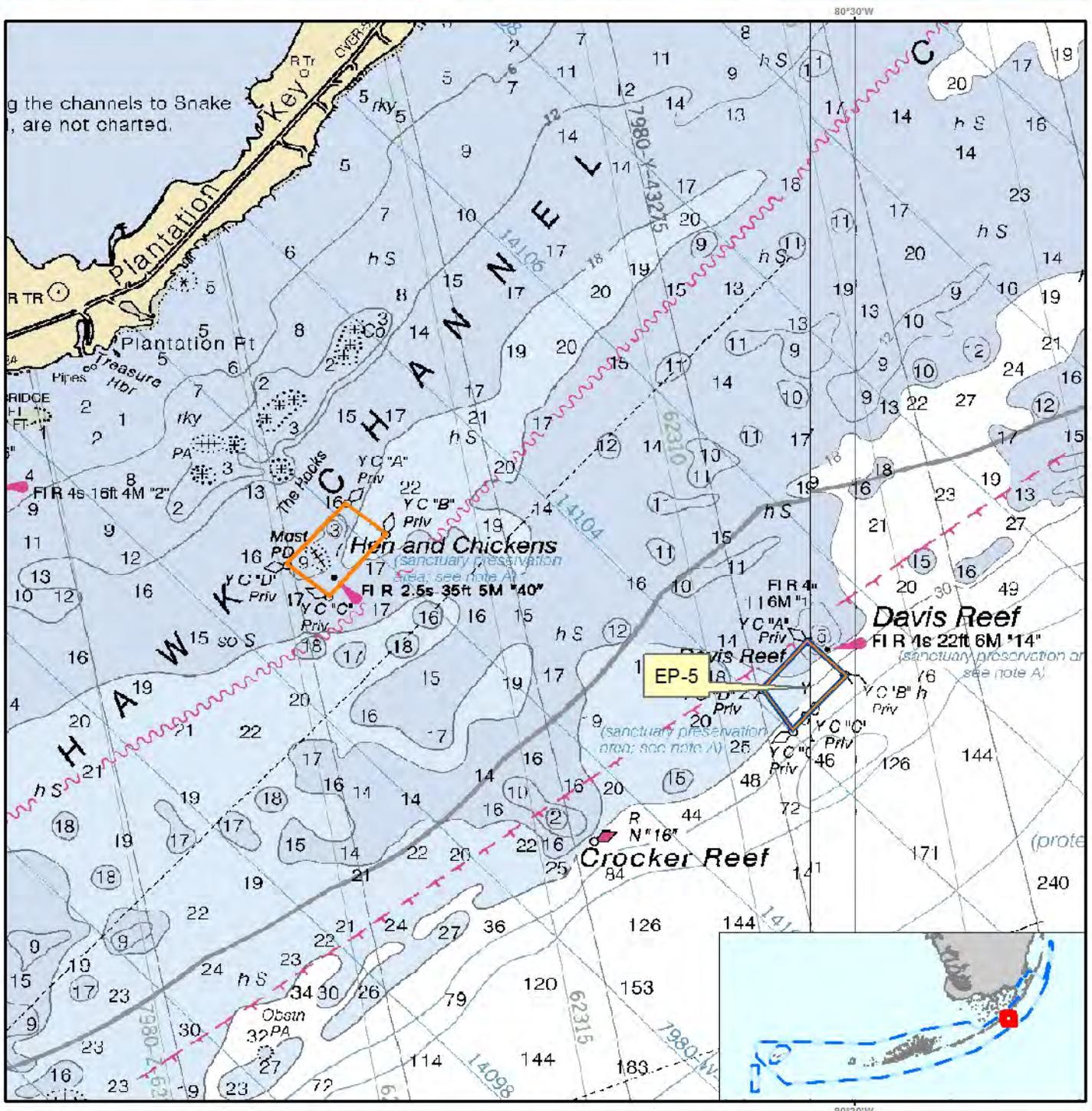
- Florida Reef Resiliency Program Resilient Reefs
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral

- High Stony Coral Species Richness
- High Fish Species Richness

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Davis Reef



### EP Recommendation - 5, Davis Reef

#### Modify Zone

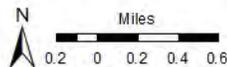
1. Do not change area of existing zone. *Consensus*
2. Eliminate exception to allow catch and release by trolling. *Consensus*

### EPWG Recommendations

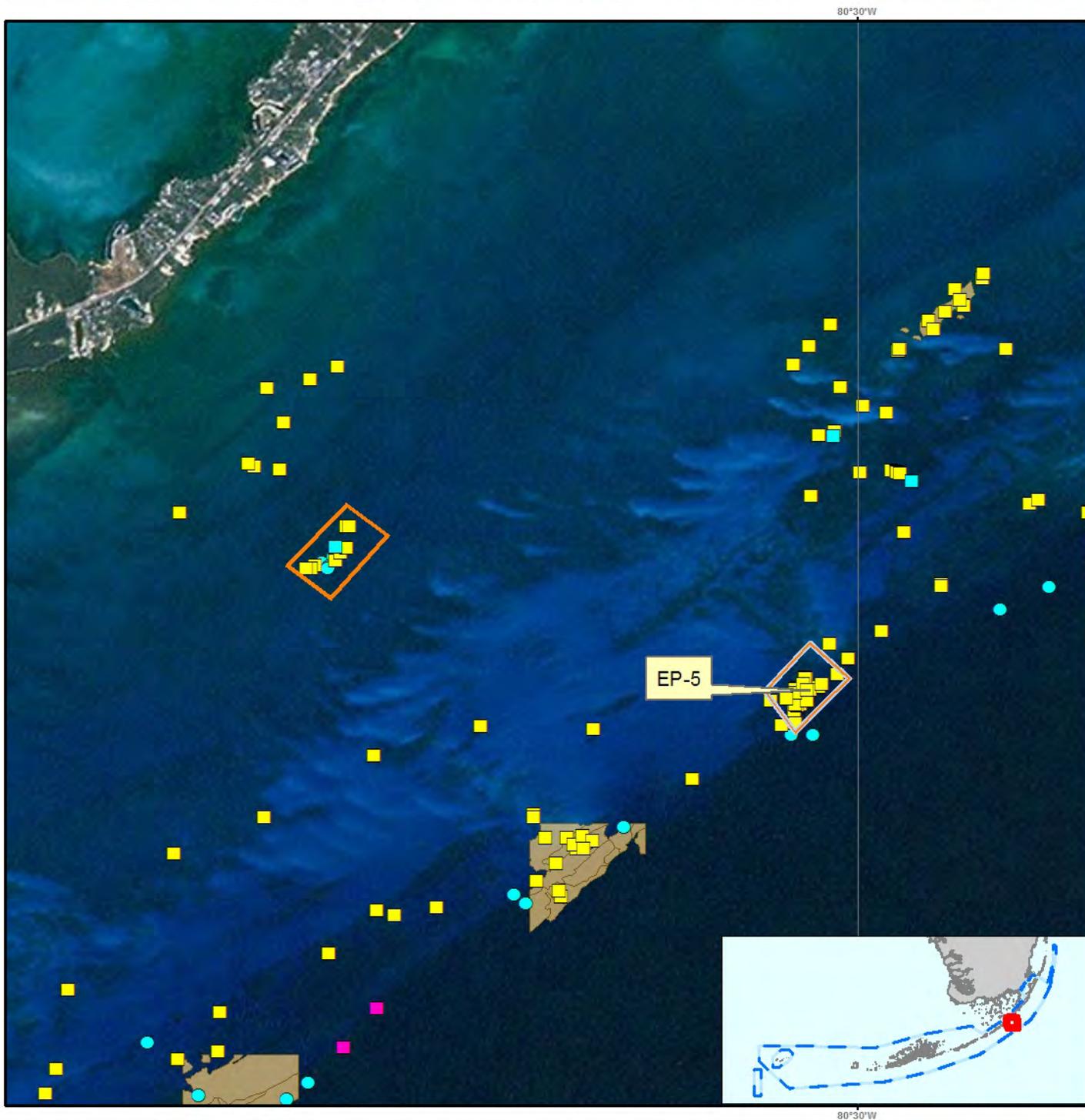
#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Davis Reef



## EP Recommendation - 5, Davis Reef

### Modify Zone

1. Do not change area of existing zone. *Consensus*
2. Eliminate exception to allow catch and release by trolling. *Consensus*

### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority

Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

Florida Reef Resiliency Program Resilient Reefs

State Threatened Coral Species, Pillar Coral

Federal ESA Coral Species, Elkhorn and Staghorn Coral

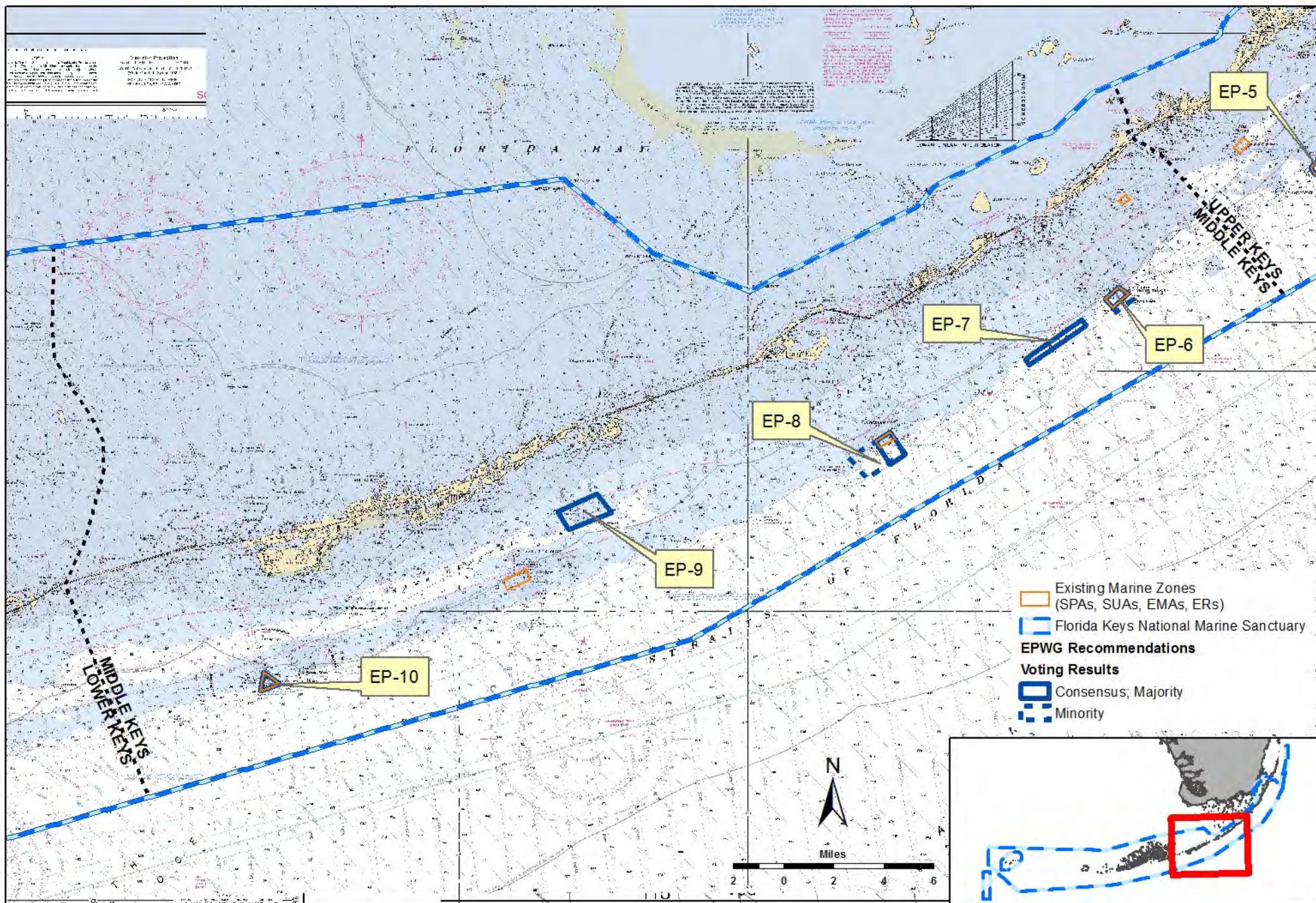
High Stony Coral Species Richness

High Fish Species Richness

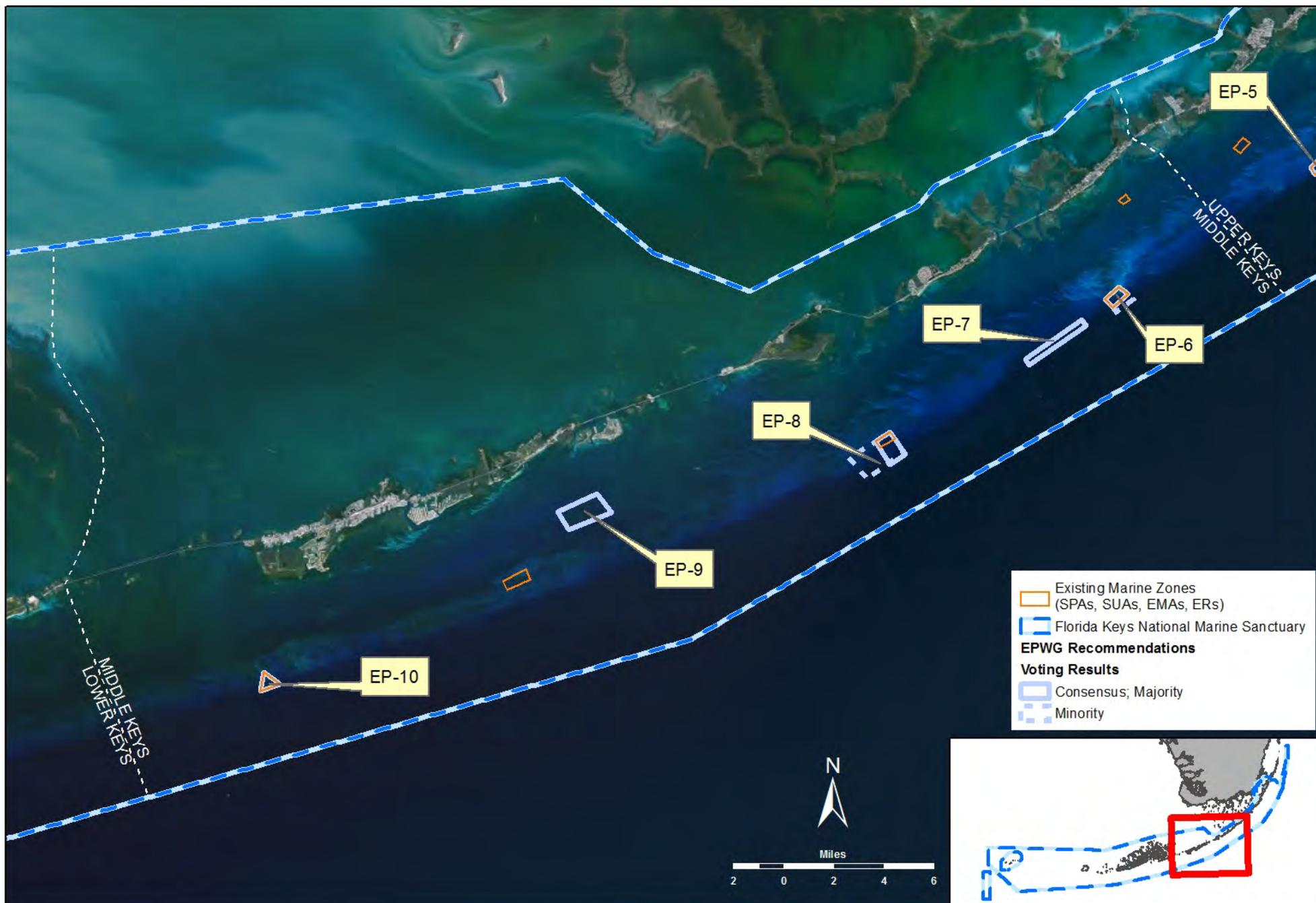
NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



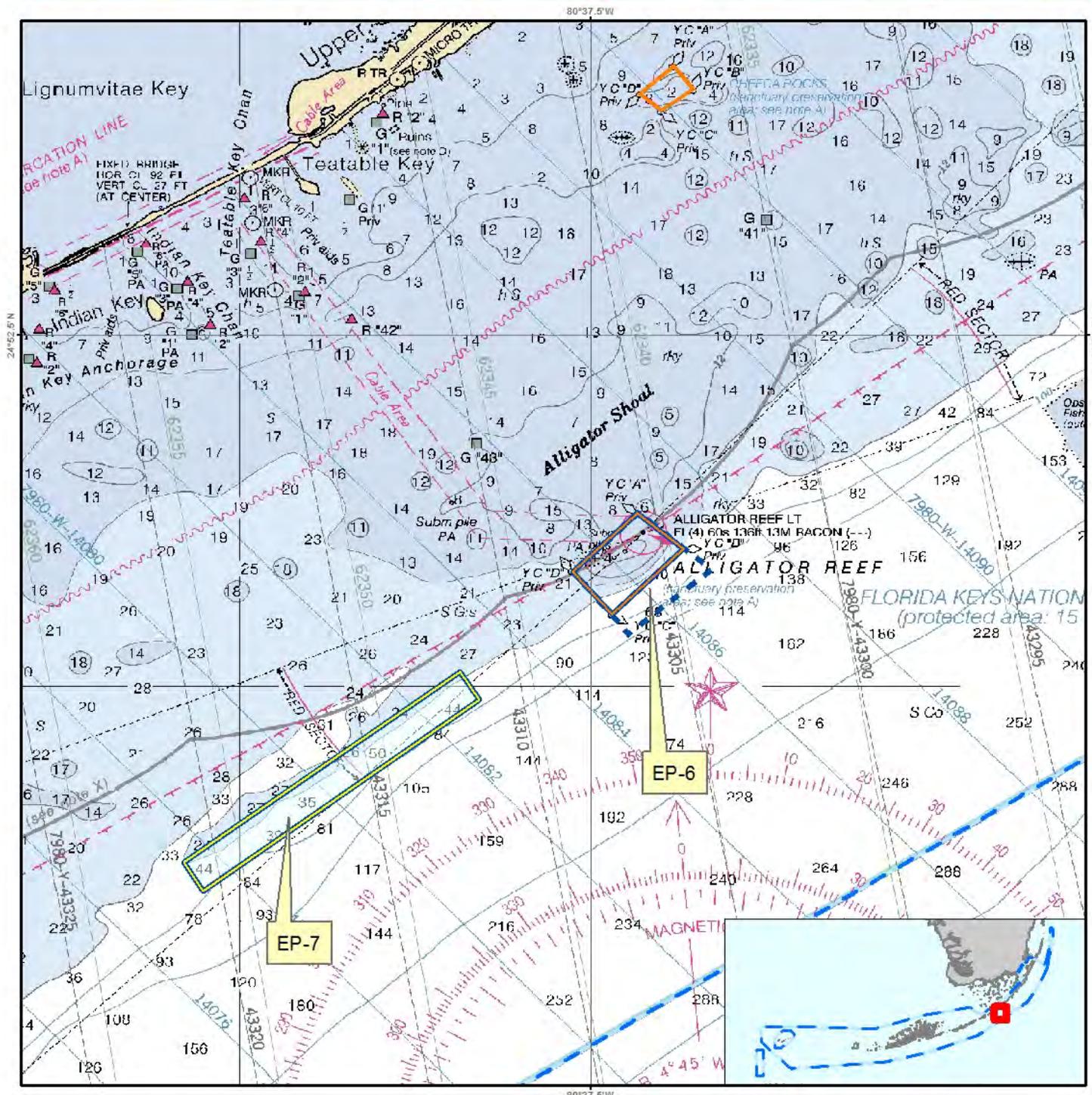
# Middle Keys Region Map



# Middle Keys Region Map



# Alligator Reef



### EP Recommendation - 6, Alligator Reef

#### Modify Zone

1. Extend outer boundary seaward by 2/10th of a mile. *3 in favor, 13 present*
2. Maintain existing zone boundary. Eliminate exception to allow catch and release by trolling. *Consensus*

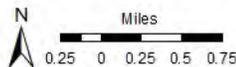
NOTE: While shown here, detailed information about EP-7 can be found on a following page.

#### EPWG Recommendations

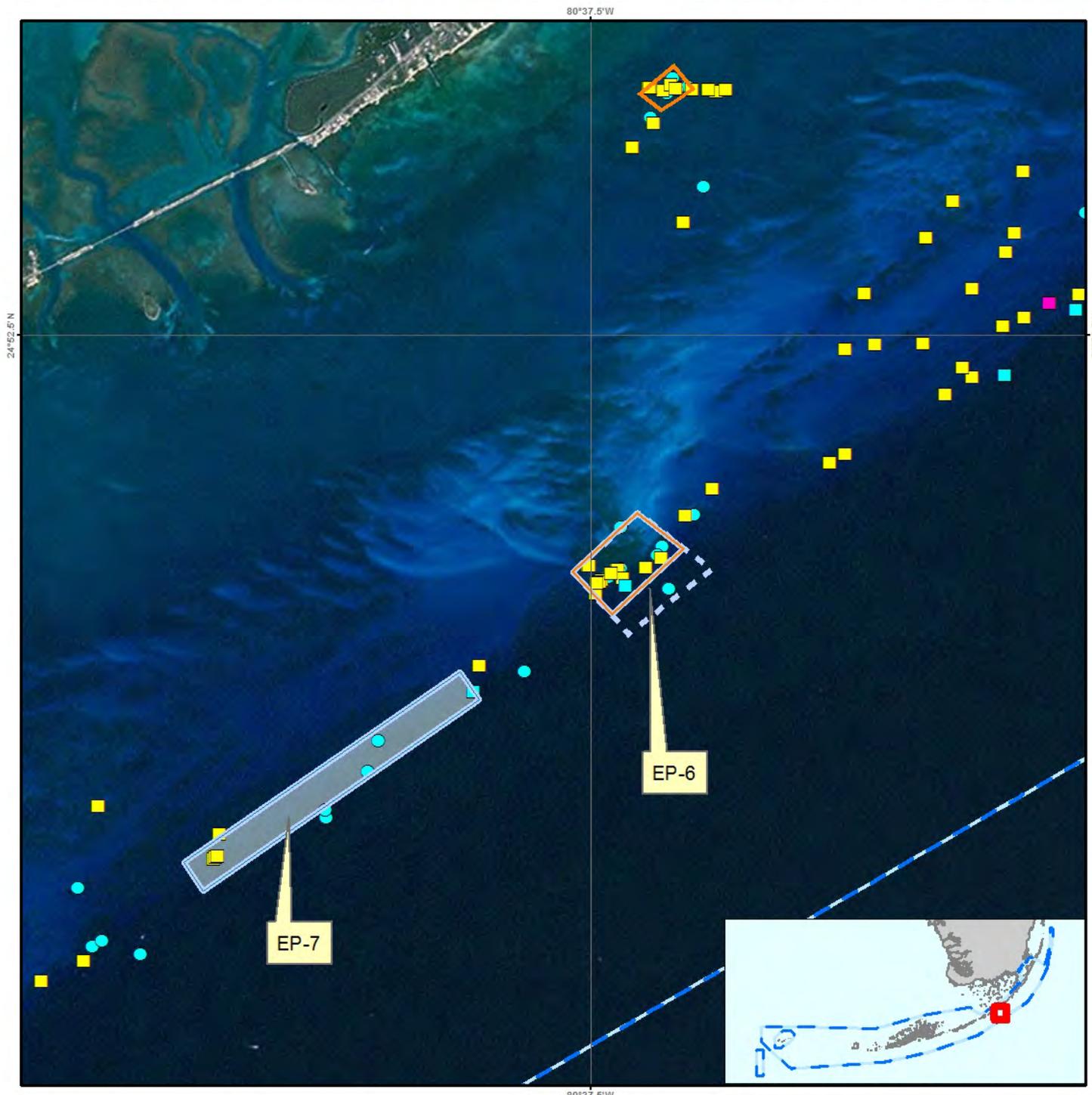
##### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary
- Area Closed to Lobster Trap Gear (NMFS)

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# Alligator Reef



## EP Recommendation - 6, Alligator Reef

### Modify Zone

1. Extend outer boundary seaward by 2/10th of a mile. *3 in favor, 13 present*
2. Maintain existing zone boundary. Eliminate exception to allow catch and release by trolling. *Consensus*

NOTE: While shown here, detailed information about EP-7 can be found on a following page.

### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary
- Area Closed to Lobster Trap Gear (NMFS)
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral

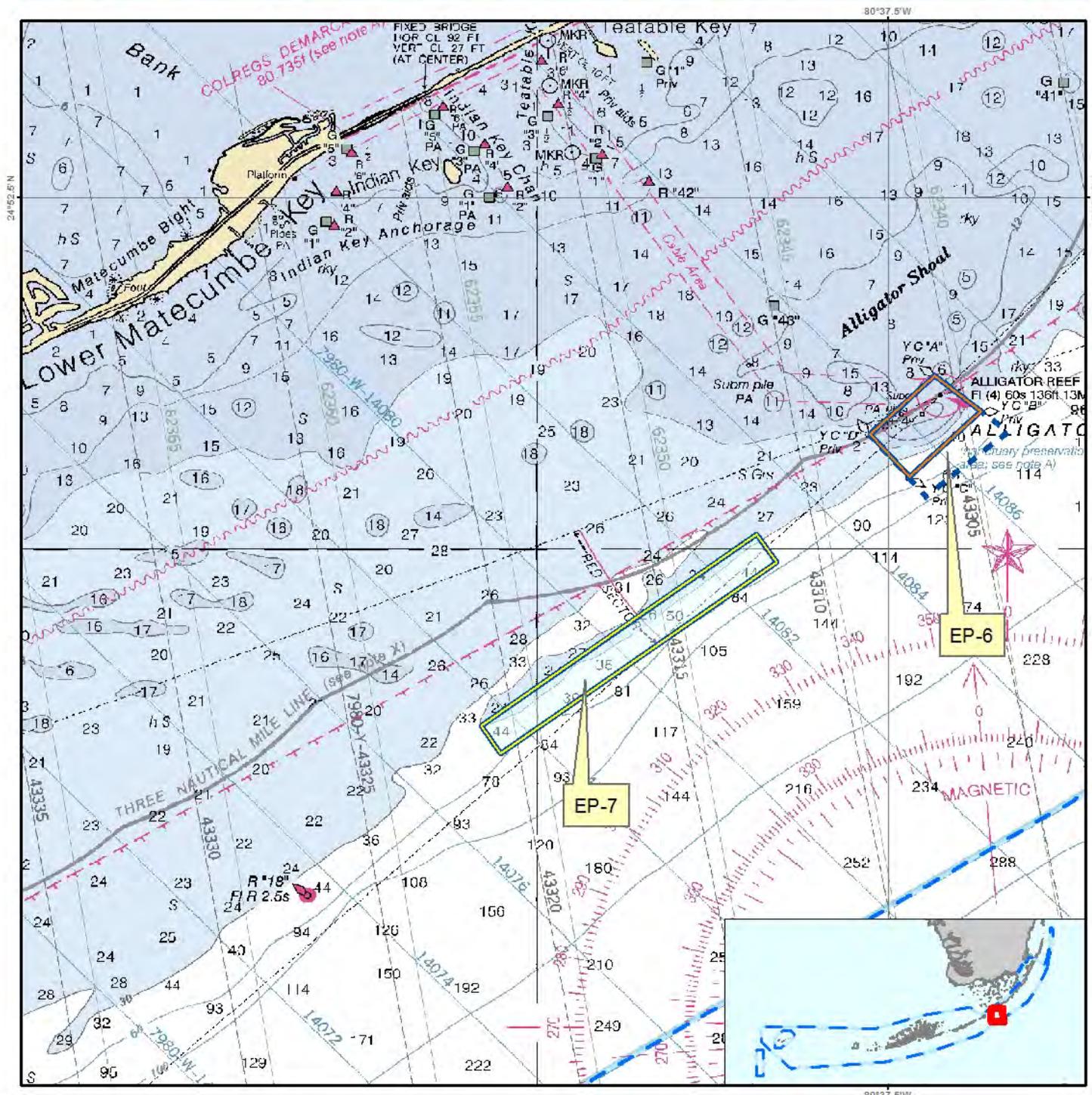
- High Stony Coral Species Richness
- High Fish Species Richness

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# FMP Area Closed to Lobster Trap Gear

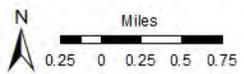


**EP Recommendation - 7, Fisheries Management Plan Areas Closed to Lobster Trap Gear**  
 Modify Zone  
 1. Mark zone near Alligator Reef. *Consensus*  
 2. Prohibit anchoring in FMP Areas Closed to Lobster Trap Gear. *Consensus*

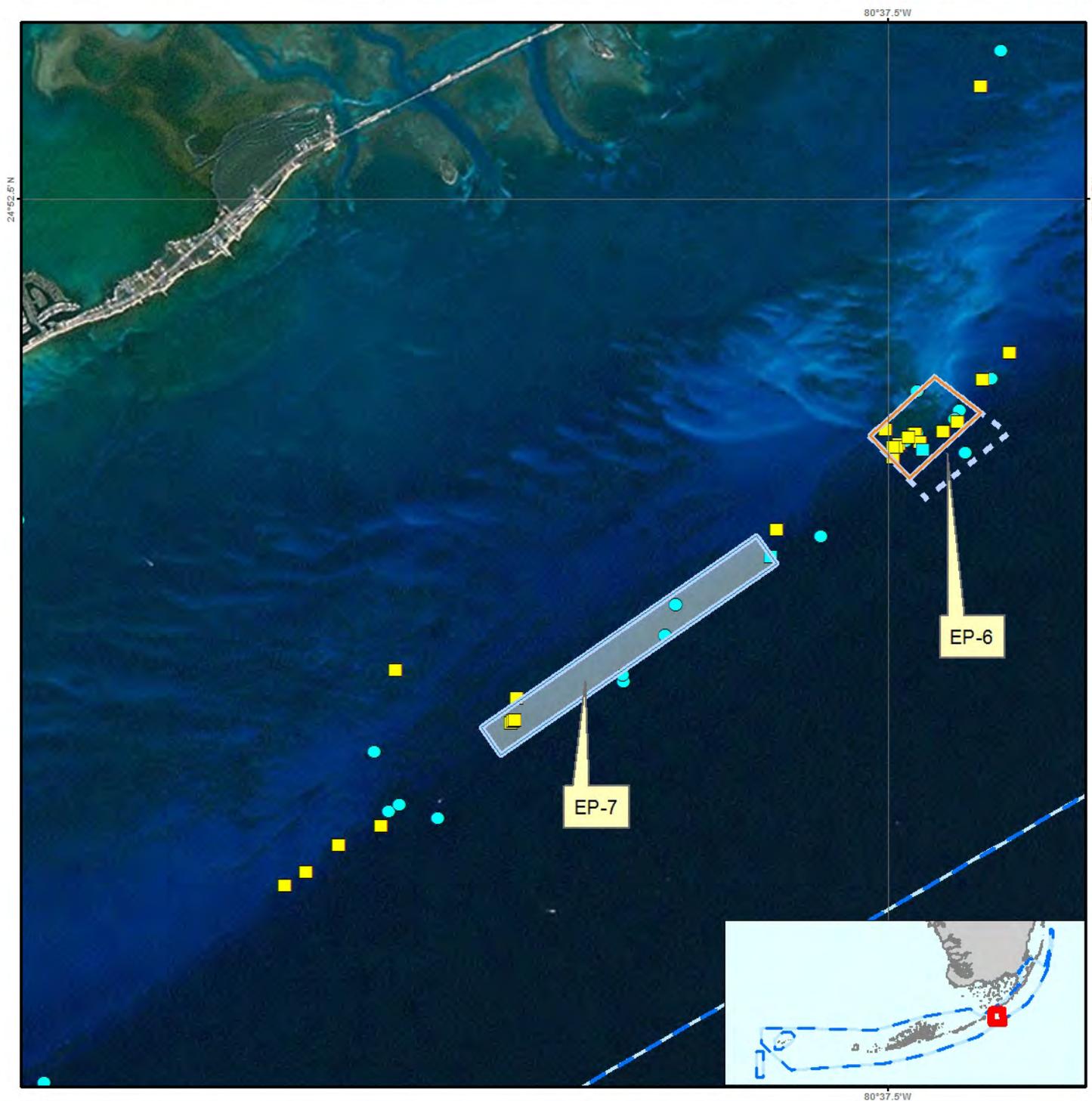
NOTE: While shown here, detailed information about EP-6 can be found on a previous page.

- EPWG Recommendations**  
 Voting Results  
 Consensus; Majority  
 Minority  
 Existing Marine Zones (SPAs, SUAs, EMAs, ERs)  
 FKNMS Boundary  
 Area Closed to Lobster Trap Gear (NMFS)

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# FMP Area Closed to Lobster Trap Gear

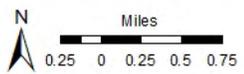


**EP Recommendation - 7, Fisheries Management Plan Areas Closed to Lobster Trap Gear**  
 Modify Zone  
 1. Mark zone near Alligator Reef. *Consensus*  
 2. Prohibit anchoring in FMP Areas Closed to Lobster Trap Gear. *Consensus*

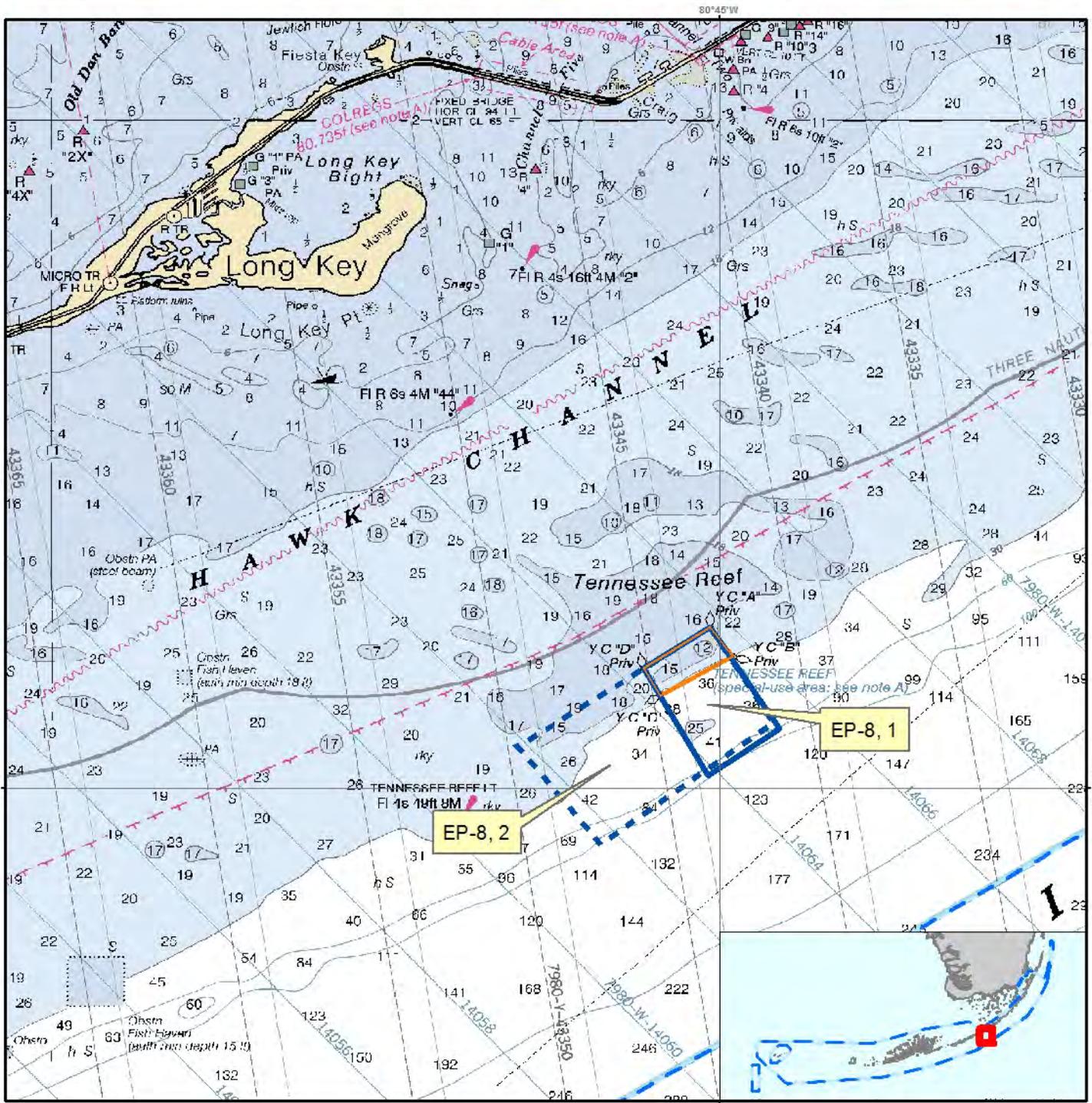
NOTE: While shown here, detailed information about EP-6 can be found on a previous page.

<p>EPWG Recommendations Voting Results</p> <ul style="list-style-type: none"> <li><span style="border: 1px solid blue; padding: 2px;"> </span> Consensus; Majority</li> <li><span style="border: 1px dashed blue; padding: 2px;"> </span> Minority</li> <li><span style="border: 2px solid orange; padding: 2px;"> </span> Existing Marine Zones (SPAs, SUAs, EMAs, ERs)</li> <li><span style="border-bottom: 1px dashed blue; display: inline-block; width: 1em; margin-right: 0.5em;"></span> FKNMS Boundary</li> <li><span style="background-color: lightblue; border: 1px solid blue; padding: 2px;"> </span> Area Closed to Lobster Trap Gear (NMFS)</li> <li><span style="background-color: yellow; border: 1px solid black; padding: 2px;"> </span> Federal ESA Coral Species, Elkhorn and Staghorn Coral</li> </ul>	<ul style="list-style-type: none"> <li><span style="background-color: cyan; border: 1px solid black; width: 1em; height: 1em; display: inline-block; margin-right: 0.5em;"></span> High Stony Coral Species Richness</li> <li><span style="color: cyan; font-size: 1em; display: inline-block; margin-right: 0.5em;">●</span> High Fish Species Richness</li> </ul>
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# Tennessee Reef



### EP Recommendation - 8, Tennessee Reef

#### Modify Zone

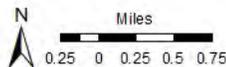
1. Extend zone to the 90' drop off and close area to all uses. *9 in favor, 13 present*
2. Extend zone to the 90' drop off and westward by approximately 1.2 miles. Close area to all uses. *2 in favor, 13 present*

#### EPWG Recommendations

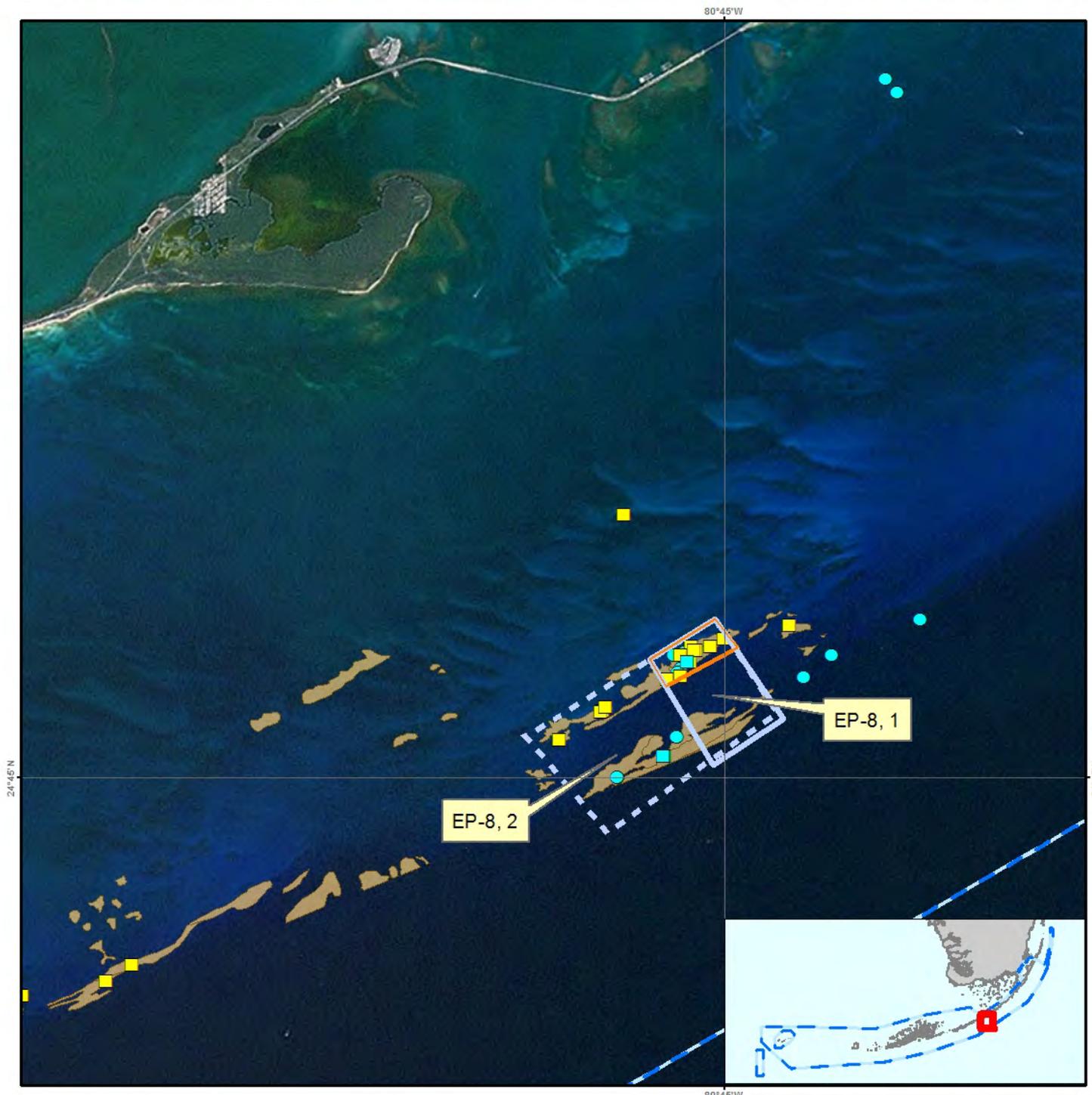
##### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Tennessee Reef



### EP Recommendation - 8, Tennessee Reef

#### Modify Zone

1. Extend zone to the 90' drop off and close area to all uses. *9 in favor, 13 present*
2. Extend zone to the 90' drop off and westward by approximately 1.2 miles. Close area to all uses. *2 in favor, 13 present*

#### EPWGW Recommendations Voting Results

- Consensus; Majority
- Minority

Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

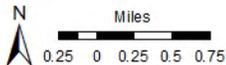
FKNMS Boundary

Florida Reef Resiliency Program Resilient Reefs

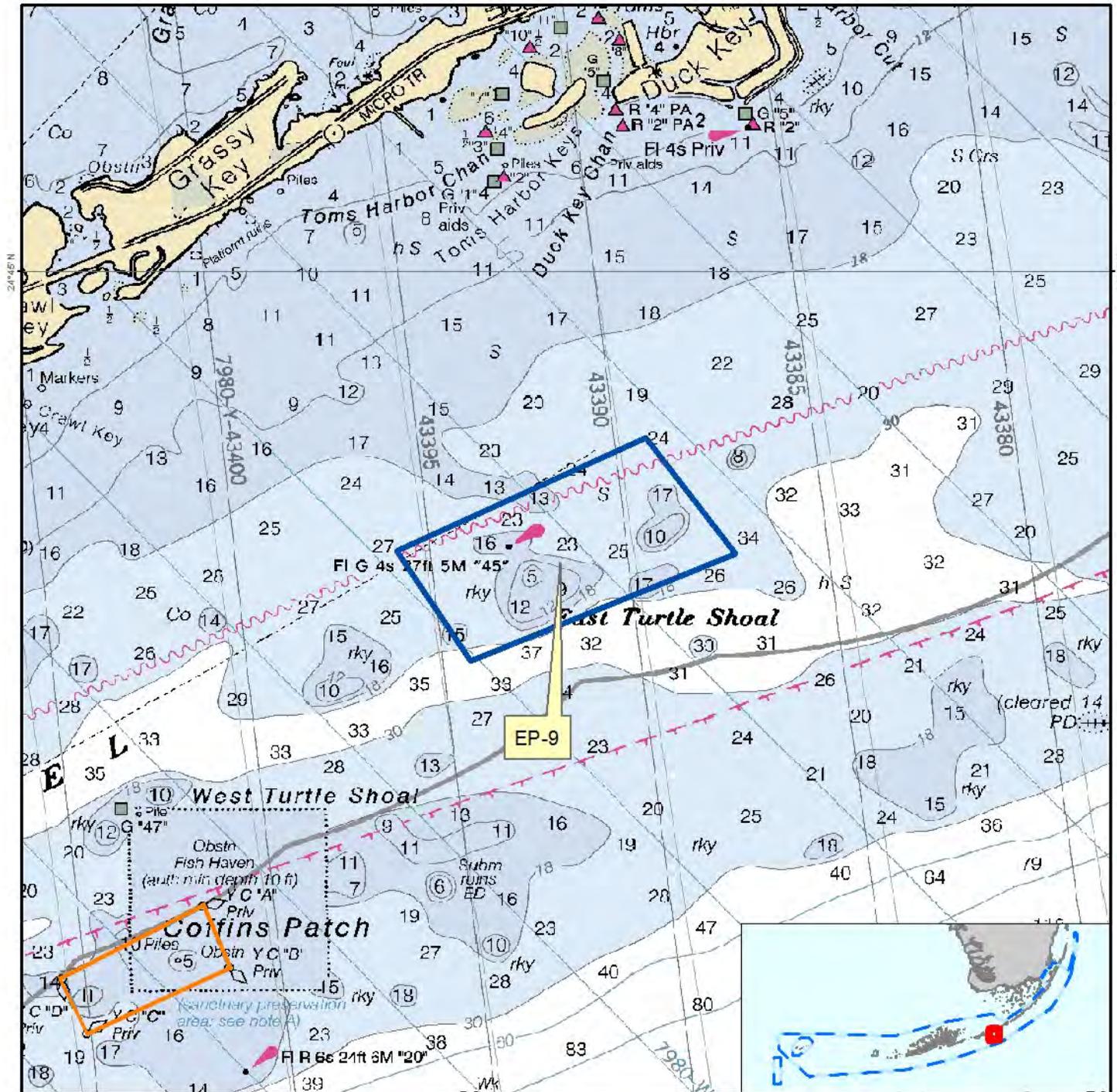
Federal ESA Coral Species, Elkhorn and Staghorn Coral

- High Stony Coral Species Richness
- High Fish Species Richness

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Turtle Shoals



### EP Recommendation - 9, Turtle Shoals

#### New Zone

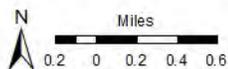
1. Create a zone around the patch reefs at East Turtle Shoals. 11 in favor, 13 present
2. Close area to all uses. 10 in favor, 13 present

#### EPWG Recommendations

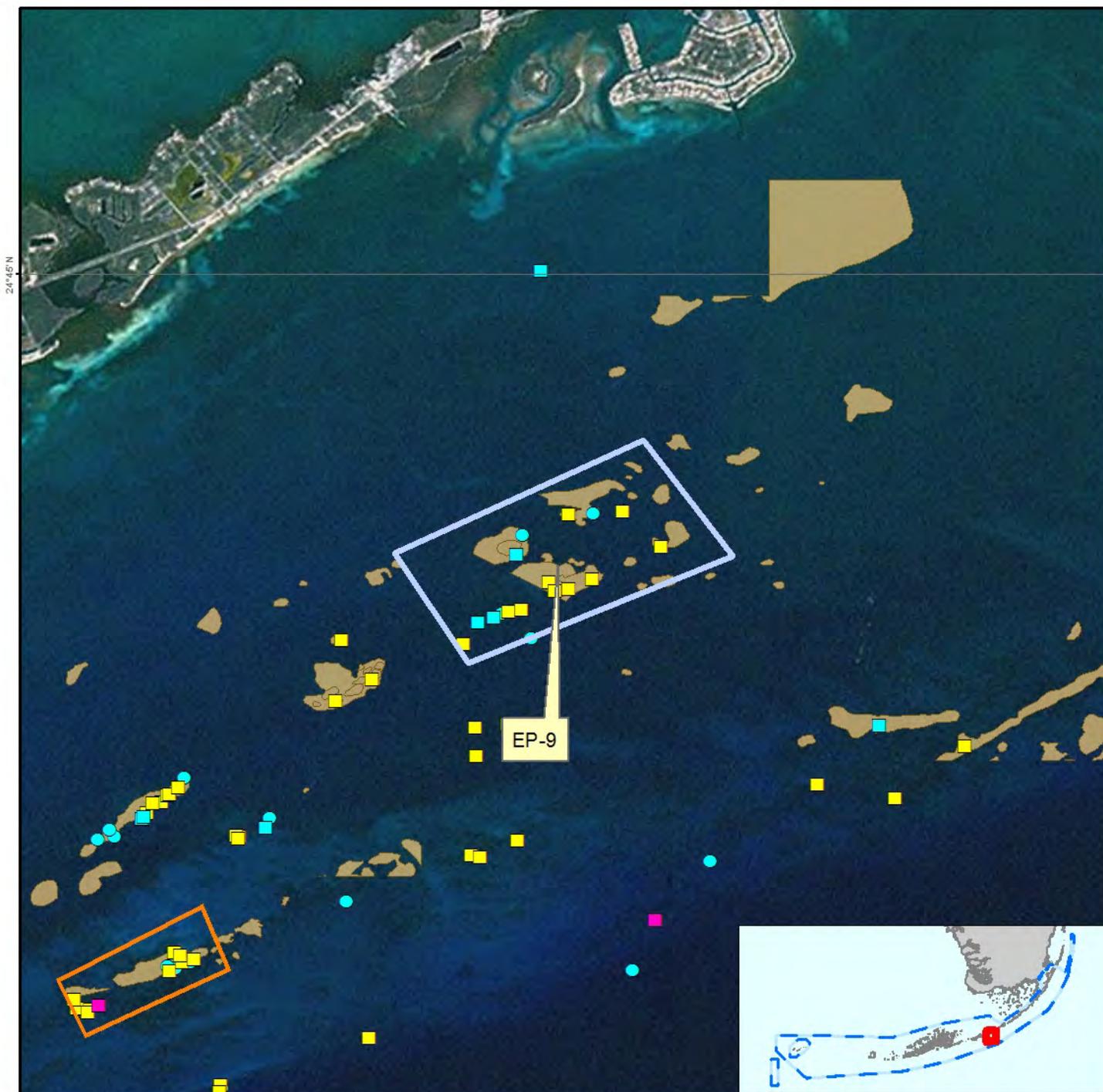
#### Voting Results

- Consensus; Majority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Turtle Shoals



## EP Recommendation - 9, Turtle Shoals

### New Zone

1. Create a zone around the patch reefs at East Turtle Shoals. *11 in favor, 13 present*
2. Close area to all uses. *10 in favor, 13 present*

### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority

Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

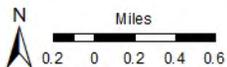
Florida Reef Resiliency Program Resilient Reefs

State Threatened Coral Species, Pillar Coral

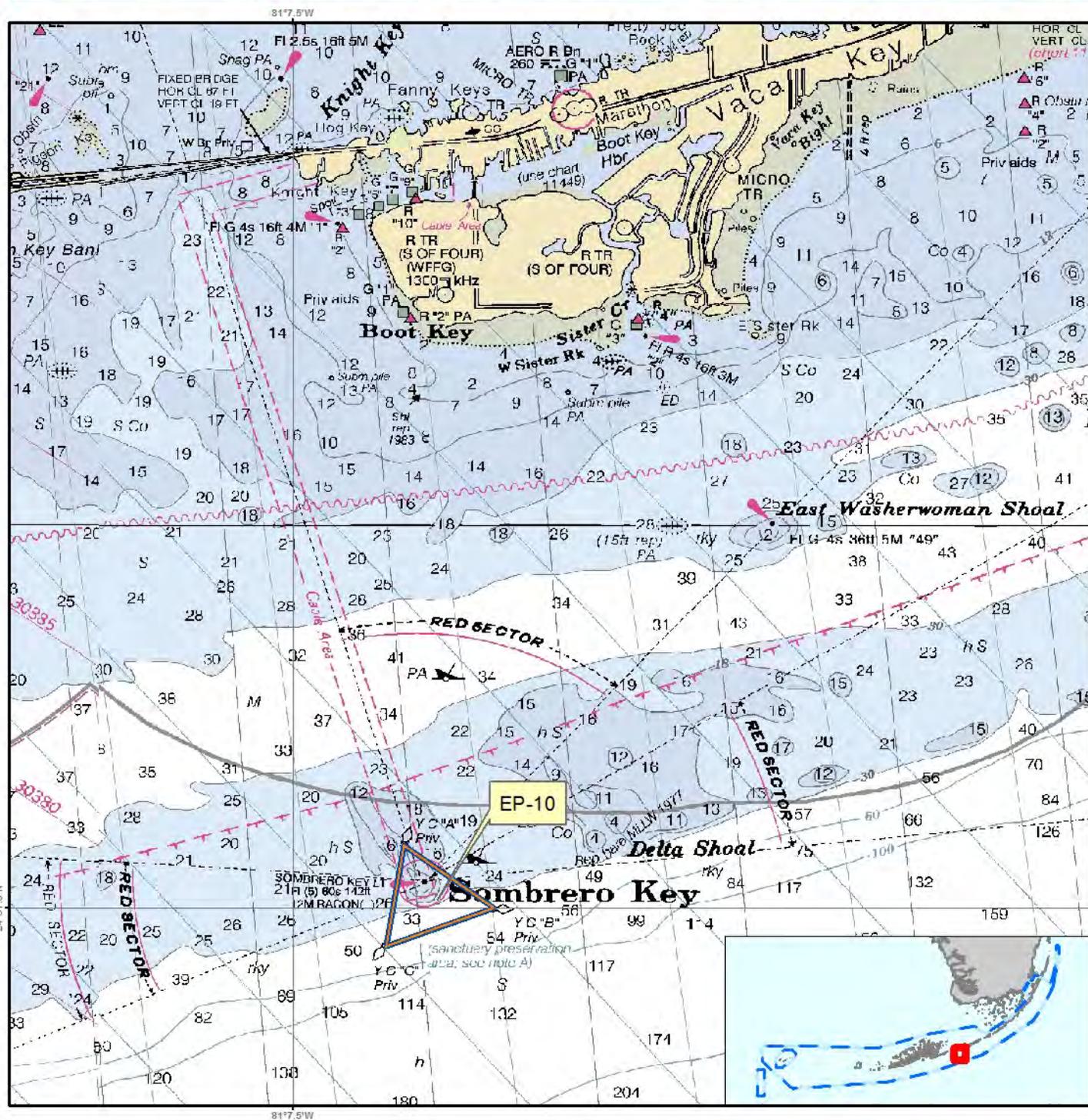
Federal ESA Coral Species, Elkhorn and Staghorn Coral

- High Stony Coral Species Richness
- High Fish Species Richness

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# Sombrero Key



### EP Recommendation - 10, Sombrero Key

#### Modify Zone

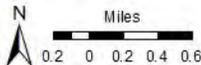
- 1. Eliminate exception to allow catch and release by trolling. *Consensus*

#### EPWG Recommendations

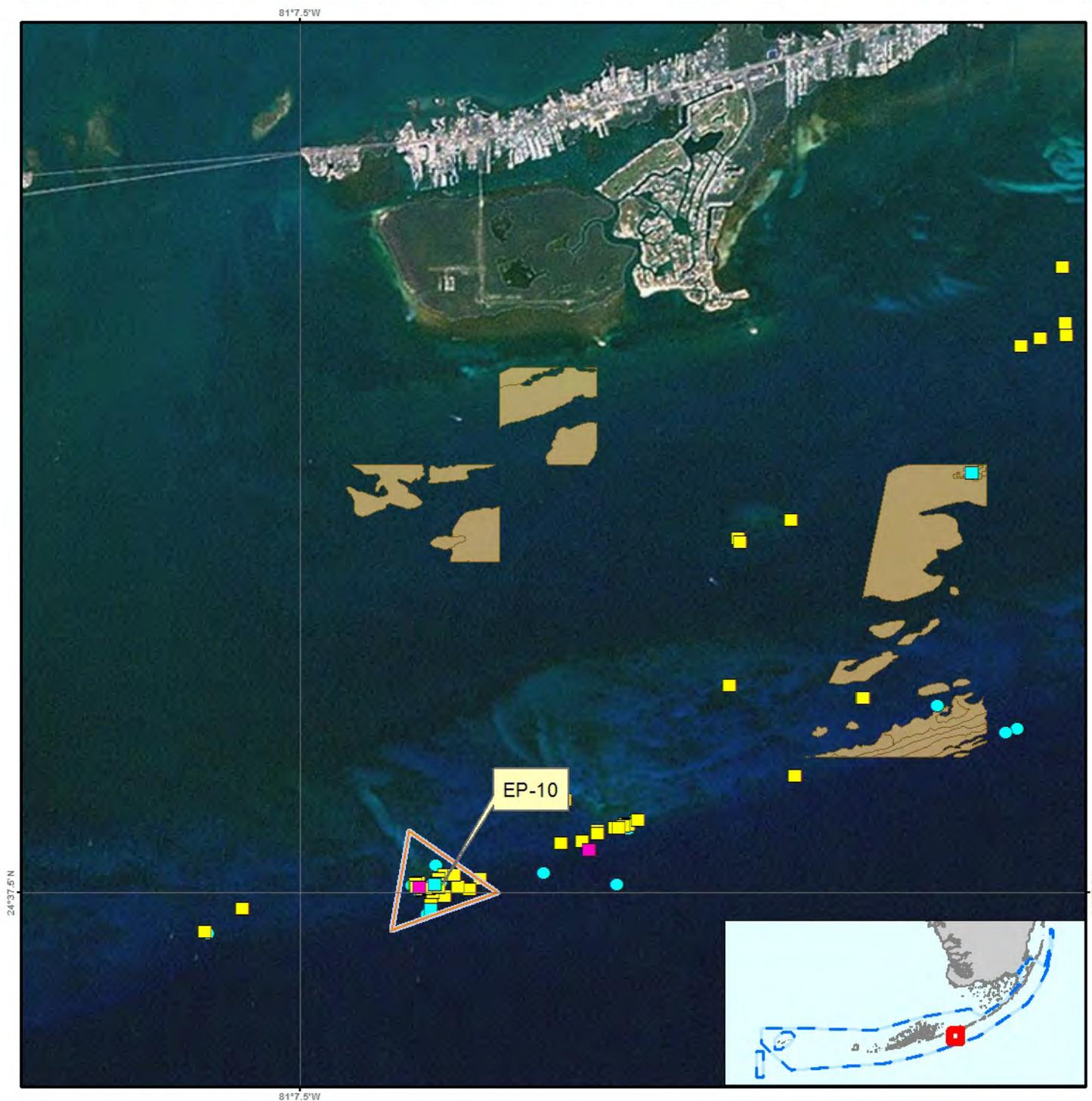
#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

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# Sombrero Key



## EP Recommendation - 10, Sombrero Key

### Modify Zone

1. Eliminate exception to allow catch and release by trolling. *Consensus*

### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority

  Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

  Florida Reef Resiliency Program Resilient Reefs

  State Threatened Coral Species, Pillar Coral

  Federal ESA Coral Species, Elkhorn and Staghorn Coral

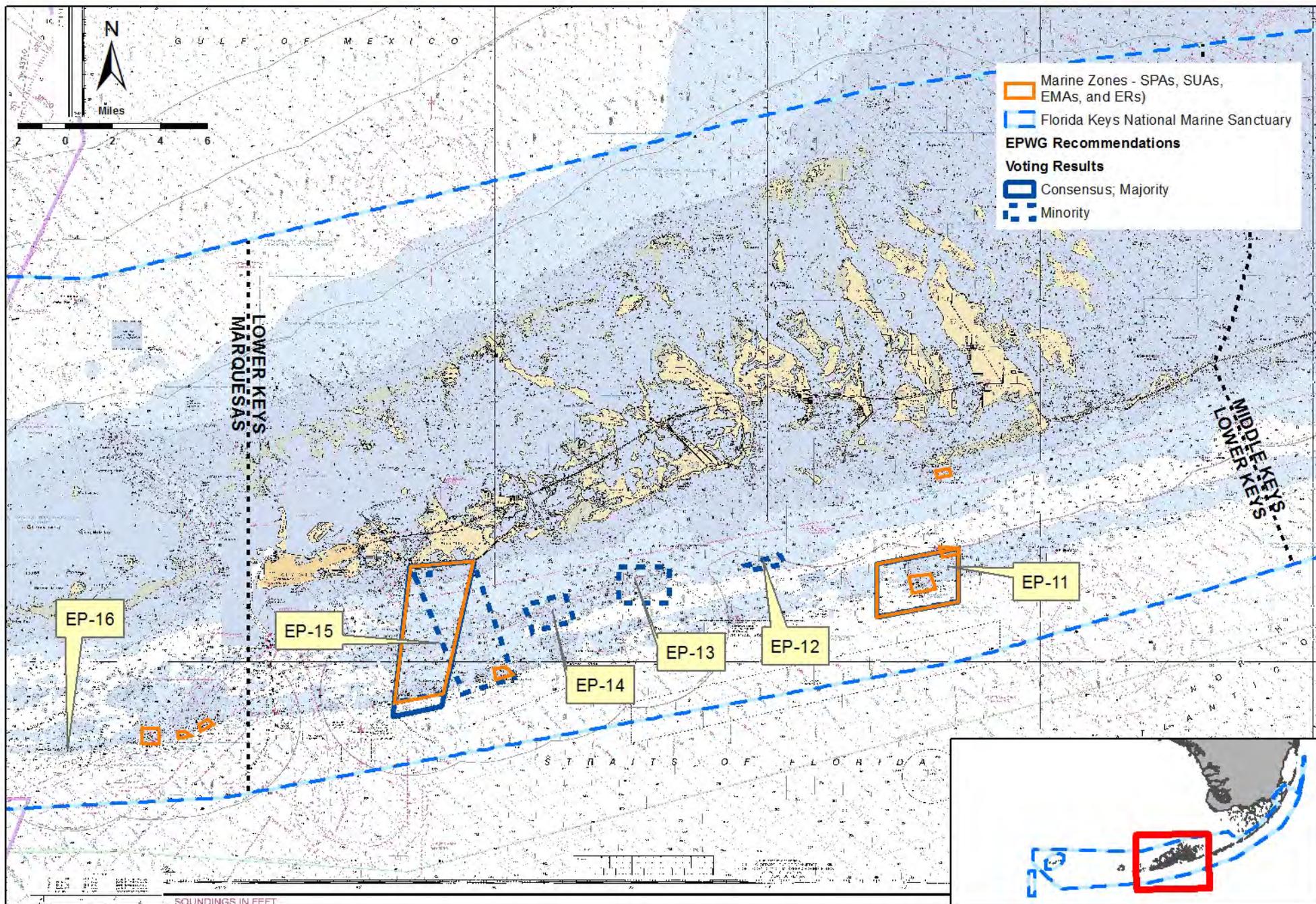
  High Stony Coral Species Richness

  High Fish Species Richness

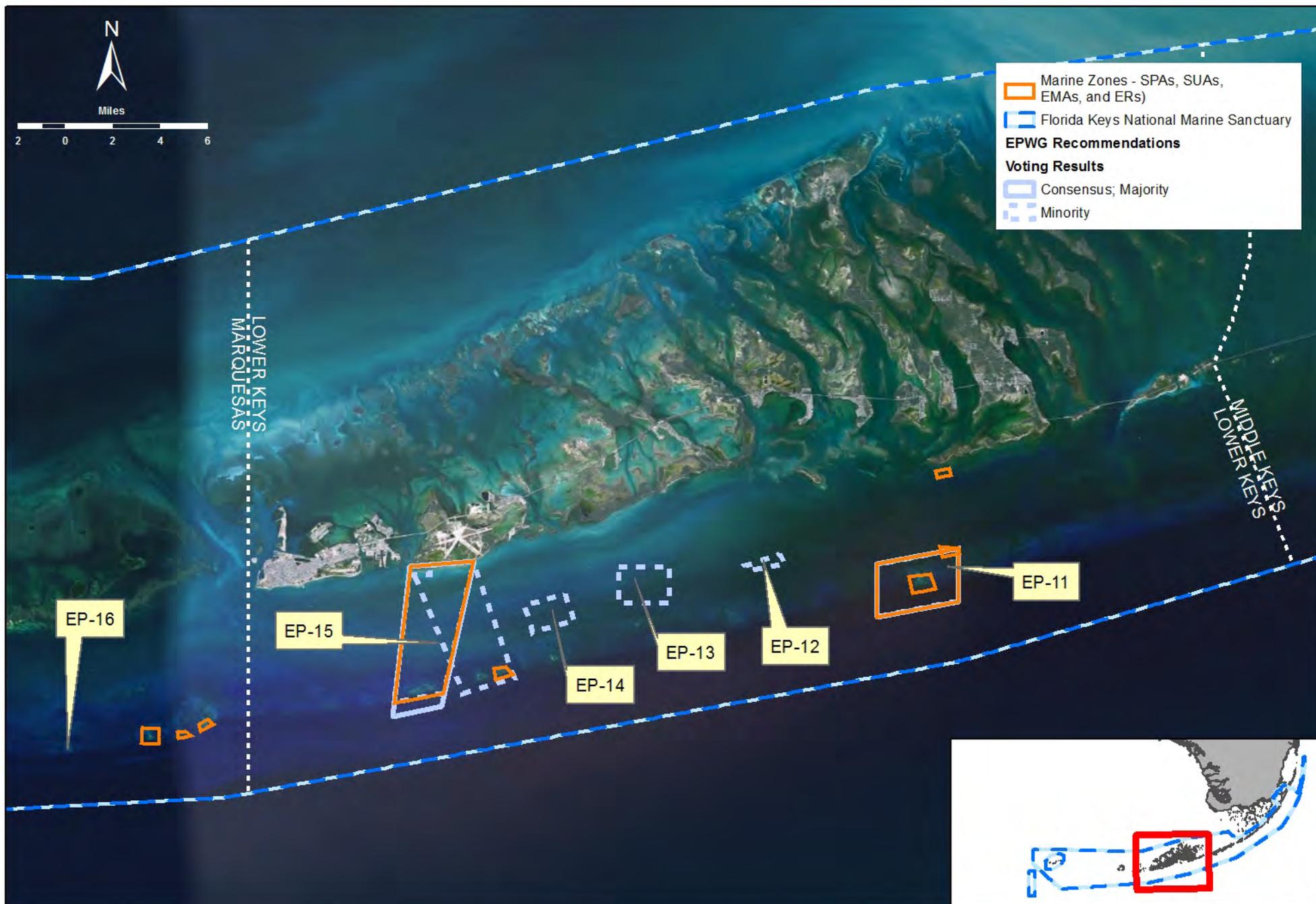
NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



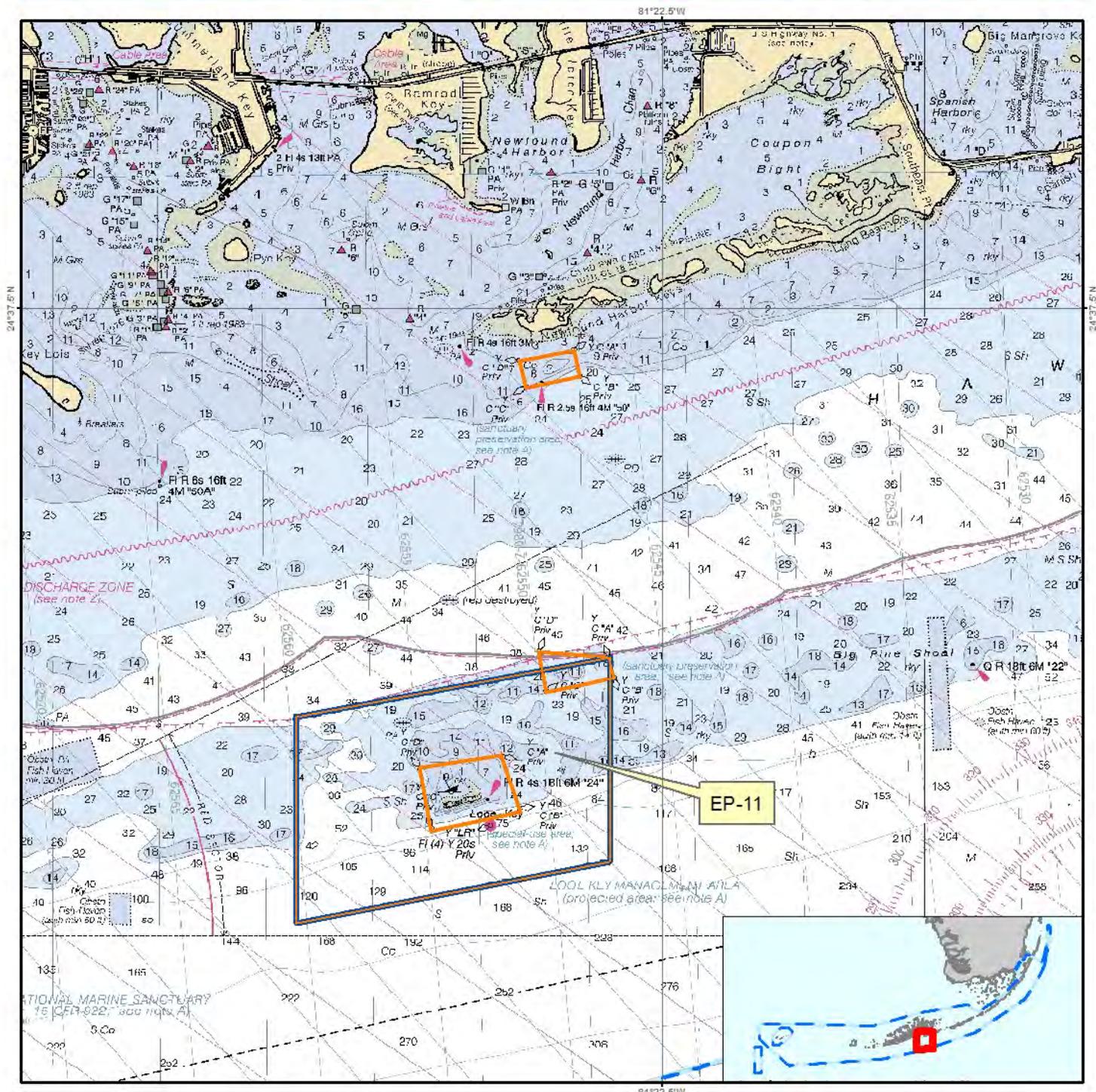
# Lower Keys Region Map



# Lower Keys Region Map



# Looe Key



### EP Recommendation - 11, Looe Key

#### Modify Zone

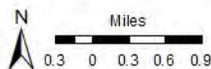
1. No anchoring in Looe Key Existing Management Area; status quo in Looe Key Sanctuary Preservation Area and Looe Key Research Only Area. *Consensus*
2. Remove ban on marine life collection in Looe Key Existing Management Area. *6 in favor, 14 present*
3. Maintain the ban on spear-fishing in Looe Key Existing Management Area. *13 in favor, 14 present*

### EPWG Recommendations

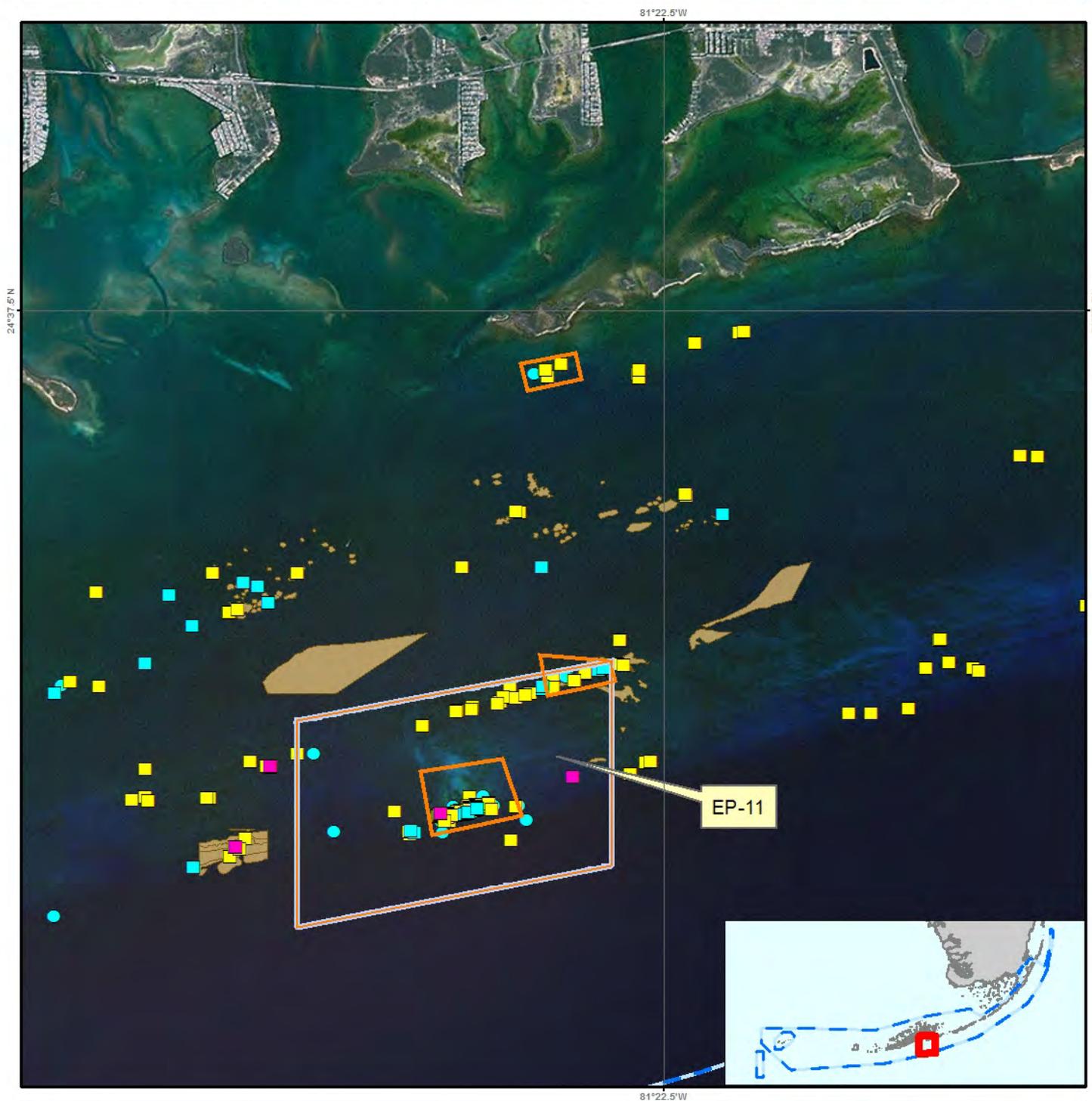
#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

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# Looe Key



### EP Recommendation - 11, Looe Key

#### Modify Zone

1. No anchoring in Looe Key Existing Management Area; status quo in Looe Key Sanctuary Preservation Area and Looe Key Research Only Area. *Consensus*
2. Remove ban on marine life collection in Looe Key Existing Management Area. *6 in favor, 14 present*
3. Maintain the ban on spear-fishing in Looe Key Existing Management Area. *13 in favor, 14 present*

#### EPWG Recommendations

##### Voting Results

- Consensus; Majority
- Minority

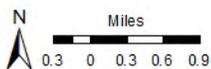
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

- Florida Reef Resiliency Program Resilient Reefs

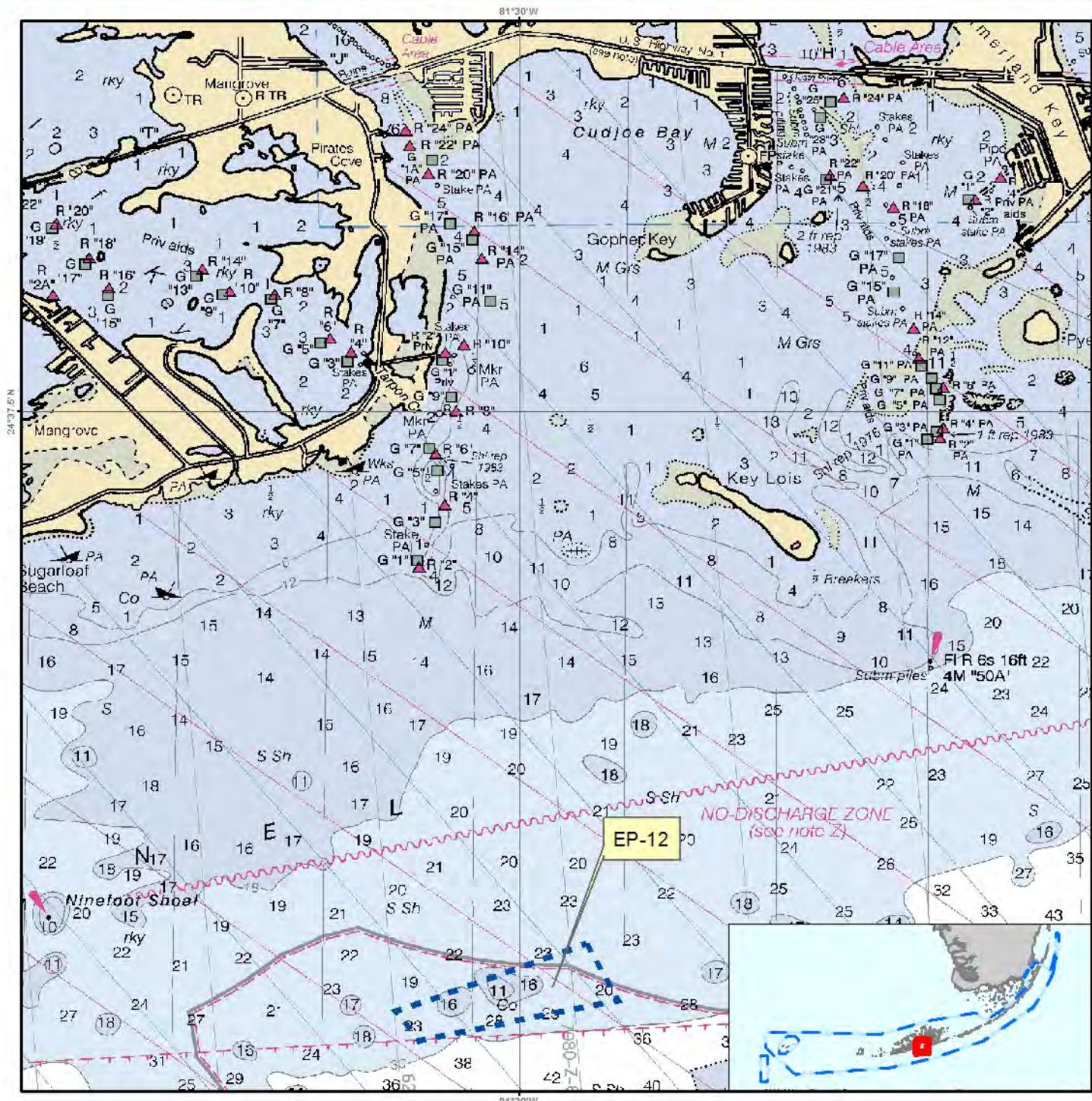
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral

- High Stony Coral Species Richness
- High Fish Species Richness

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# Wonderland



### EP Recommendation - 12, Wonderland

#### New Zone

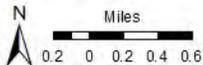
1. Create a zone around the patch reefs at Wonderland. 3 in favor, 13 present

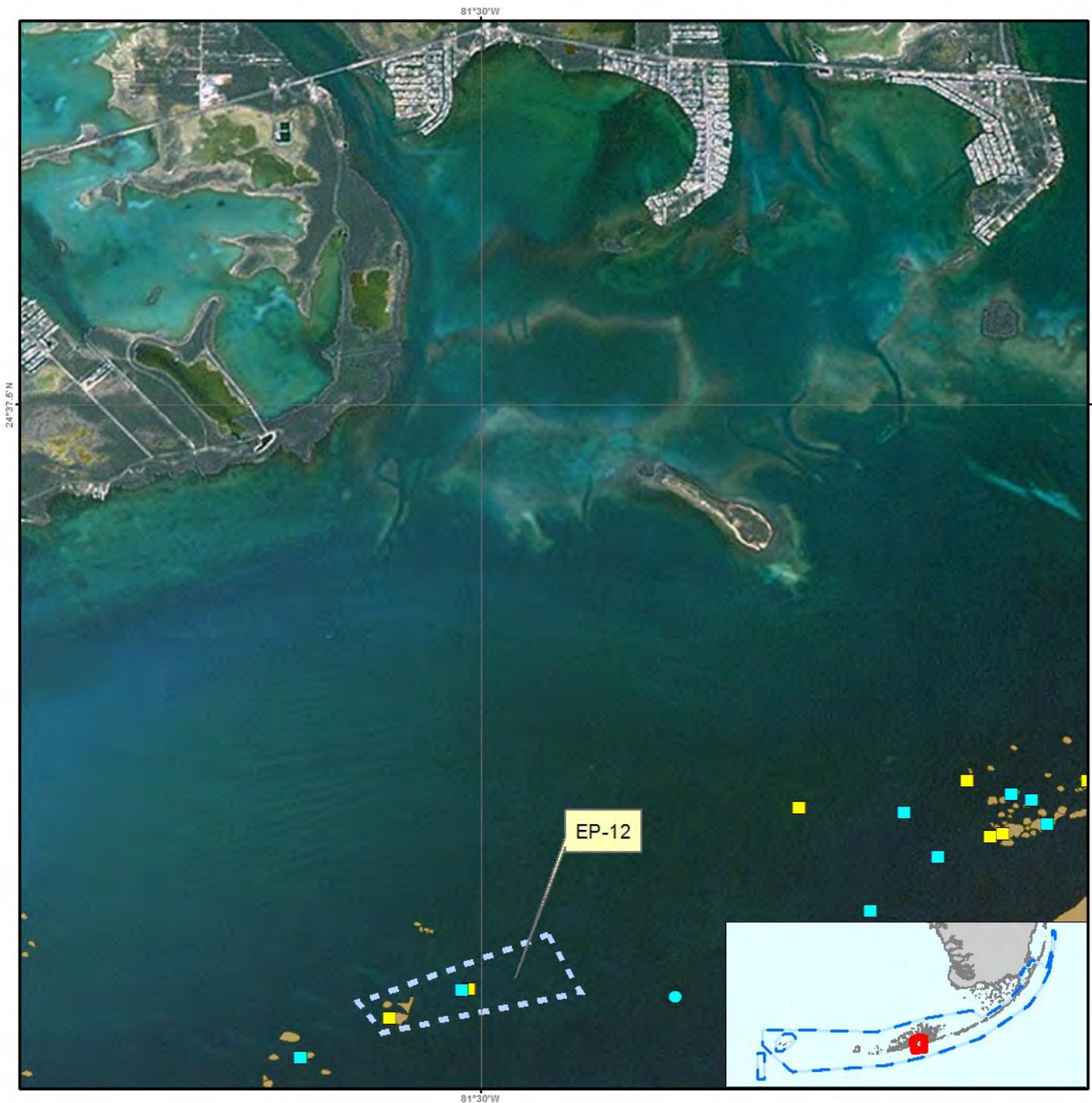
#### EPWG Recommendations

#### Voting Results

Minority

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### EP Recommendation - 12, Wonderland

#### New Zone

1. Create a zone around the patch reefs at Wonderland. *3 in favor, 13 present*

#### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority

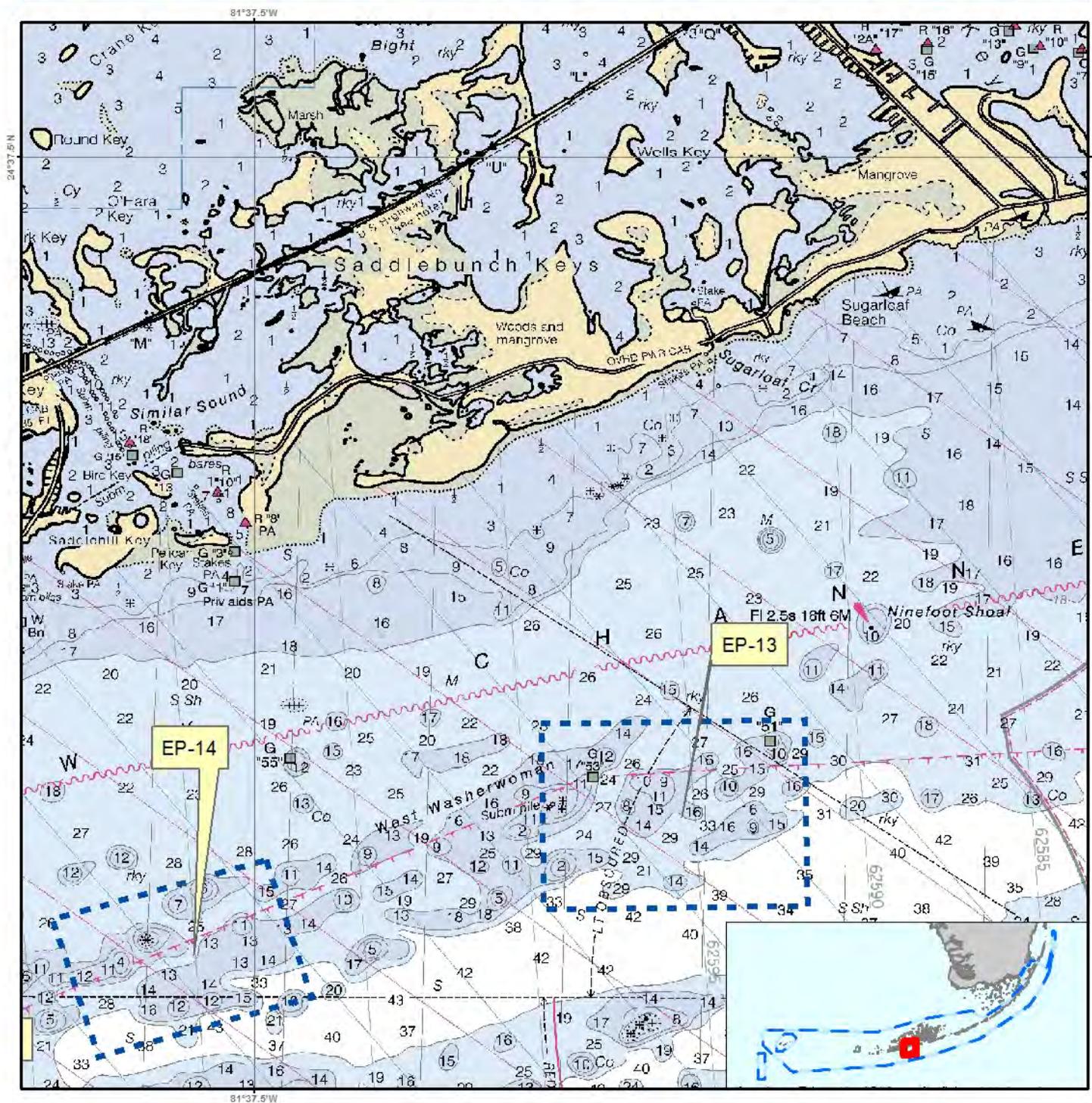
- High Stony Coral Species Richness
- High Fish Species Richness

- Florida Reef Resiliency Program Resilient Reefs
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral

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# West Washerwoman, East



### EP Recommendation - 13, West Washerwoman, East

#### New Zone

1. Create a zone around the patch reefs at the east portion of West Washerwoman. 3 in favor, 13 present

NOTE: While shown here, detailed information about EP-14 can be found on a following page.

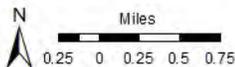
### EPWG Recommendations

#### Voting Results

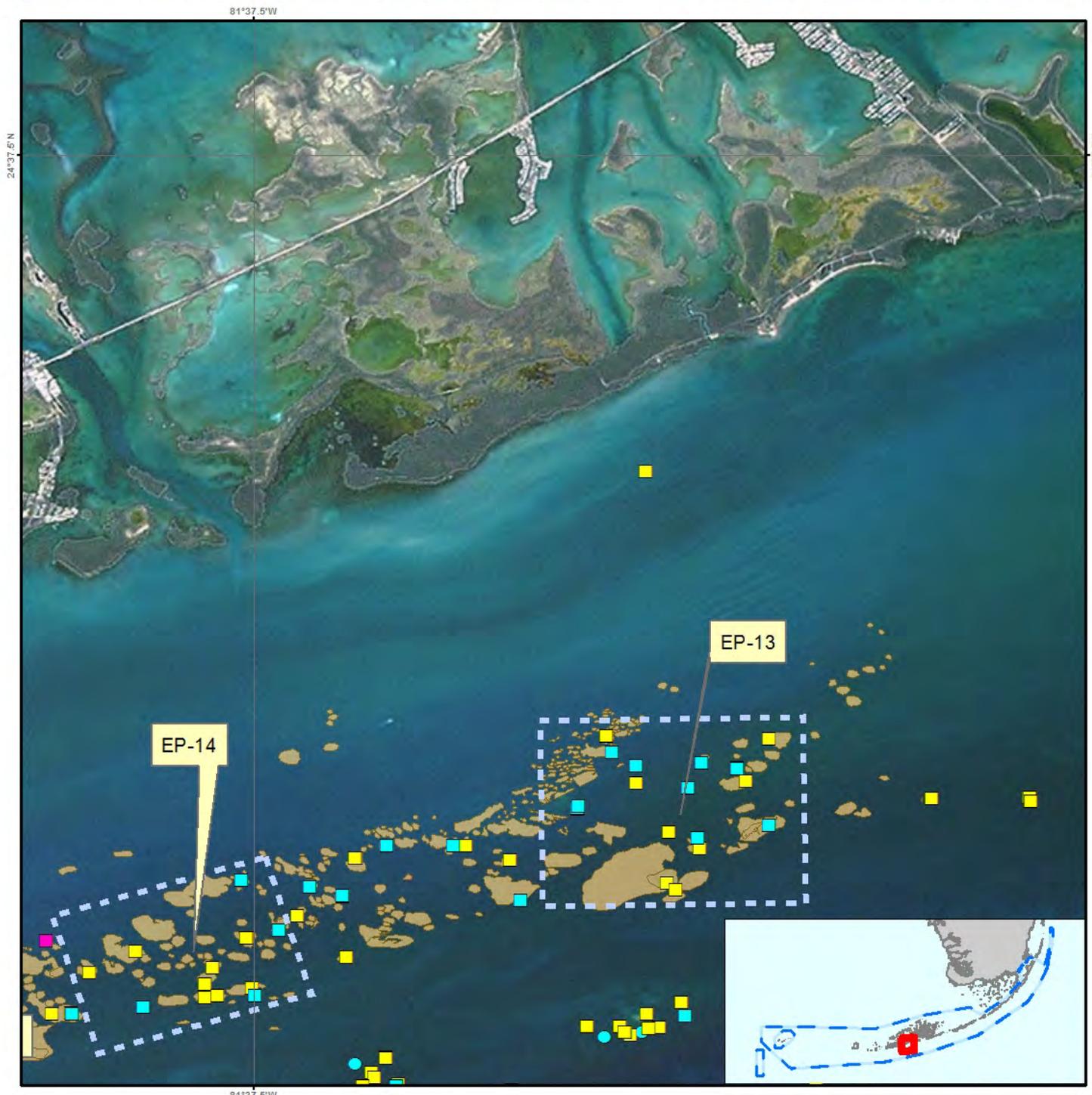
Consensus; Majority

Minority

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# West Washerwoman, East



### EP Recommendation - 13, West Washerwoman, East

#### New Zone

1. Create a zone around the patch reefs at the east portion of West Washerwoman. *3 in favor, 13 present*

NOTE: While shown here, detailed information about EP-14 can be found on a following page.

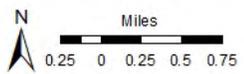
### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority

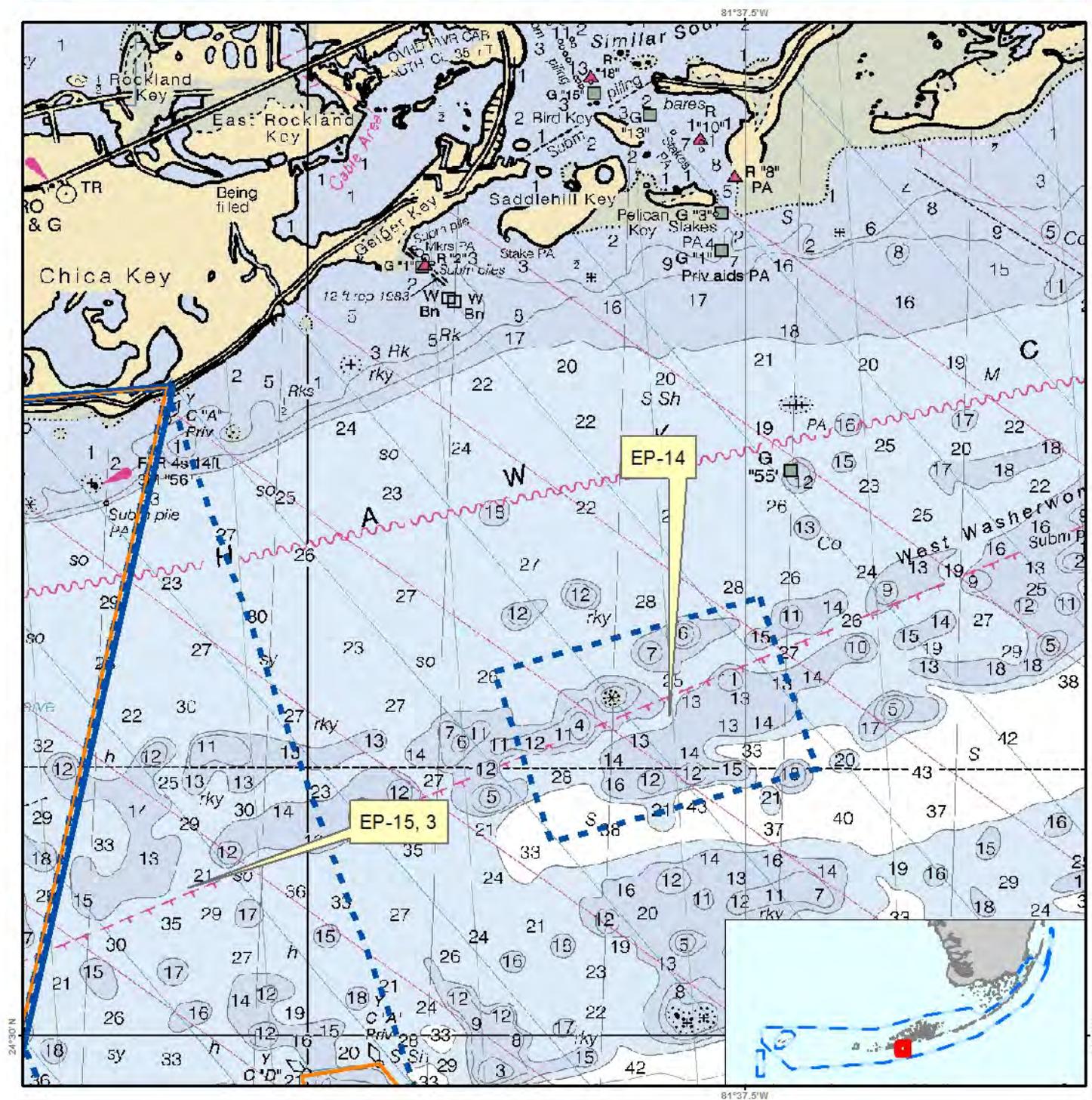
- High Stony Coral Species Richness
- High Fish Species Richness

- Florida Reef Resiliency Program Resilient Reefs
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral

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# West Washerwoman, West



### EP Recommendation - 14, West Washerwoman, West

#### New Zone

1. Create a zone around the patch reefs at the west portion of West Washerwoman. 1 in favor, 13 present

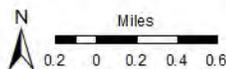
NOTE: While shown here, detailed information about EP-15 can be found on a following page.

### EPWG Recommendations

#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

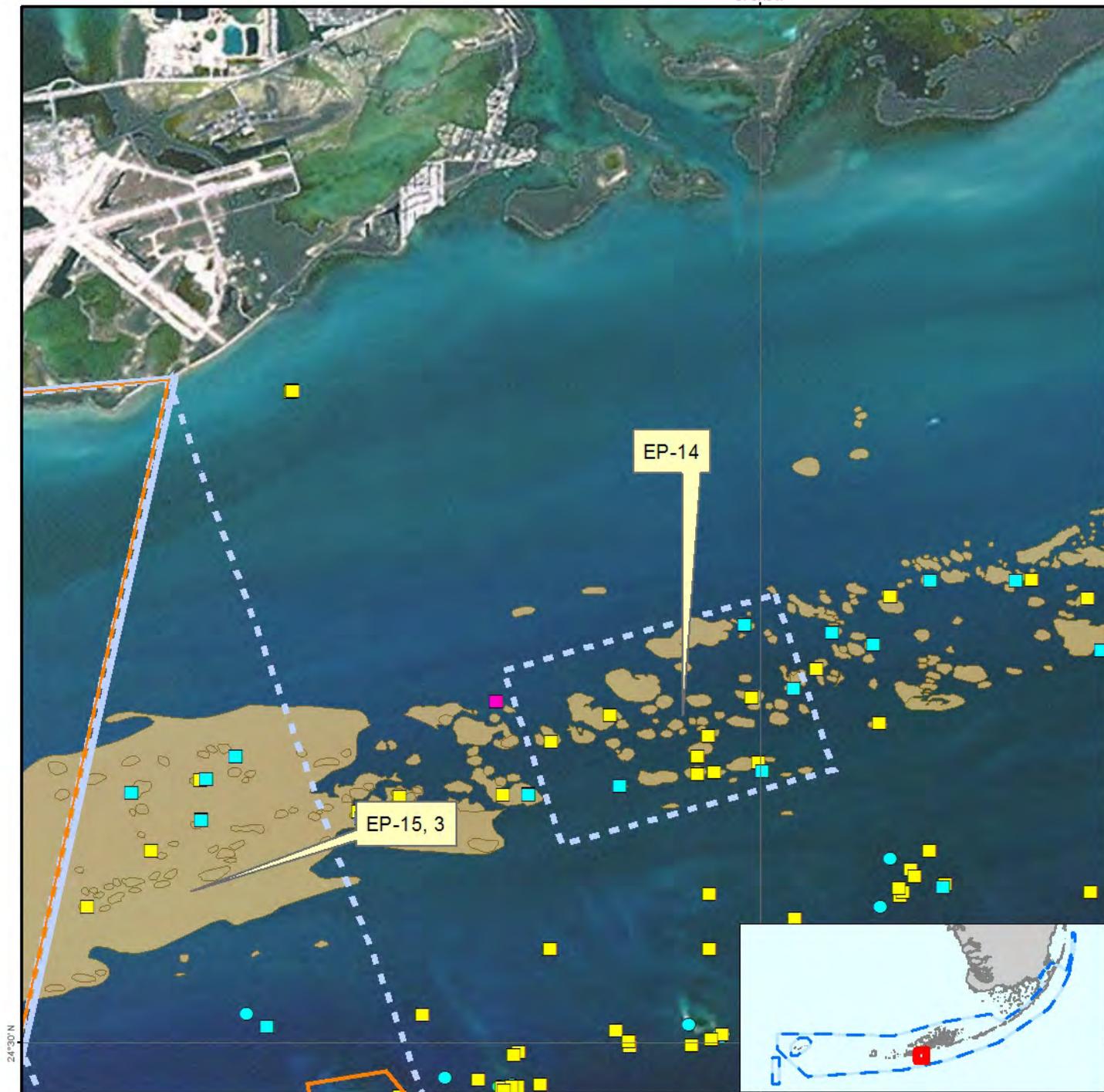
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# West Washerwoman, West



81°37.5'W



24°30'N

24°30'N

81°37.5'W

### EP Recommendation - 14, West Washerwoman, West

#### New Zone

1. Create a zone around the patch reefs at the west portion of West Washerwoman. *1 in favor, 13 present*

NOTE: While shown here, detailed information about EP-15 can be found on a following page.

### EPWG Recommendations Voting Results

Consensus; Majority  
Minority

Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

Florida Reef Resiliency Program Resilient Reefs

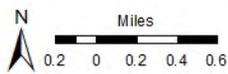
State Threatened Coral Species, Pillar Coral

Federal ESA Coral Species, Elkhorn and Staghorn Coral

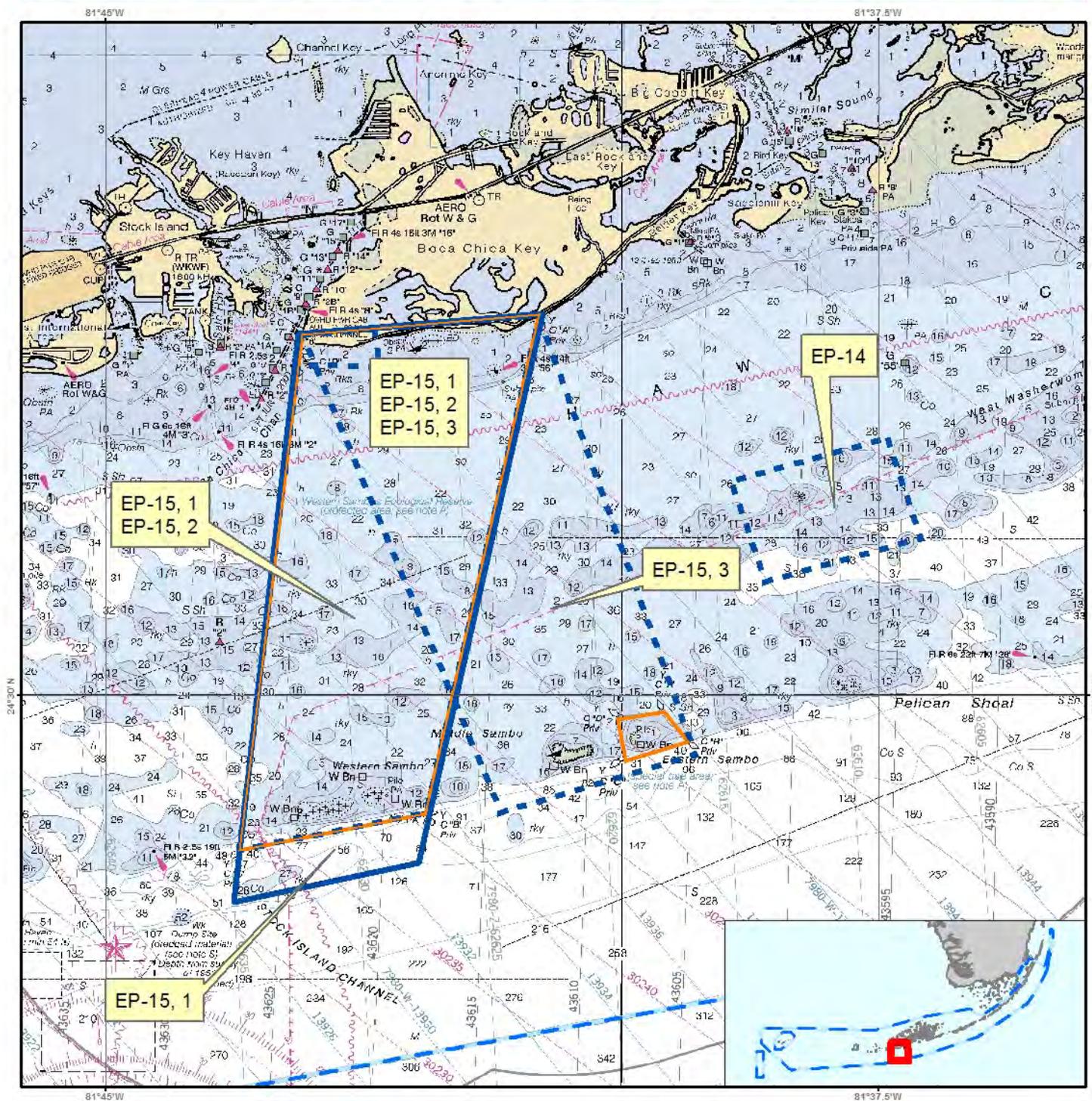
High Stony Coral Species Richness

High Fish Species Richness

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# Western Sambo



### EP Recommendation - 15, Western Sambo

#### Modify Zone

1. Extend the southern boundary to the 90' depth contour to include the area known as the "bar". Close the area to all uses, transit only. *9 in favor, 14 present*
2. Extend the southern boundary to the 90' depth contour to include the area known as the "bar" and shift the northwest boundary at the shoreline to allow access to the area known as the "sandbar". Close the area to all uses, transit only. *6 in favor, 14 present*
3. Shift the zone to the east to encompass the Eastern Sambo Special Use Area and extend the southern boundary to the 90' depth contour to include the area known as the "bar". Close the area to all uses, transit only. *2 in favor, 14 present*
4. Maintain existing zone. *5 in favor, 14 present*
5. Eliminate Zone. *1 in favor, 14 present*

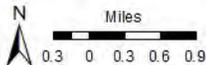
### EPWG Recommendations

#### Voting Results

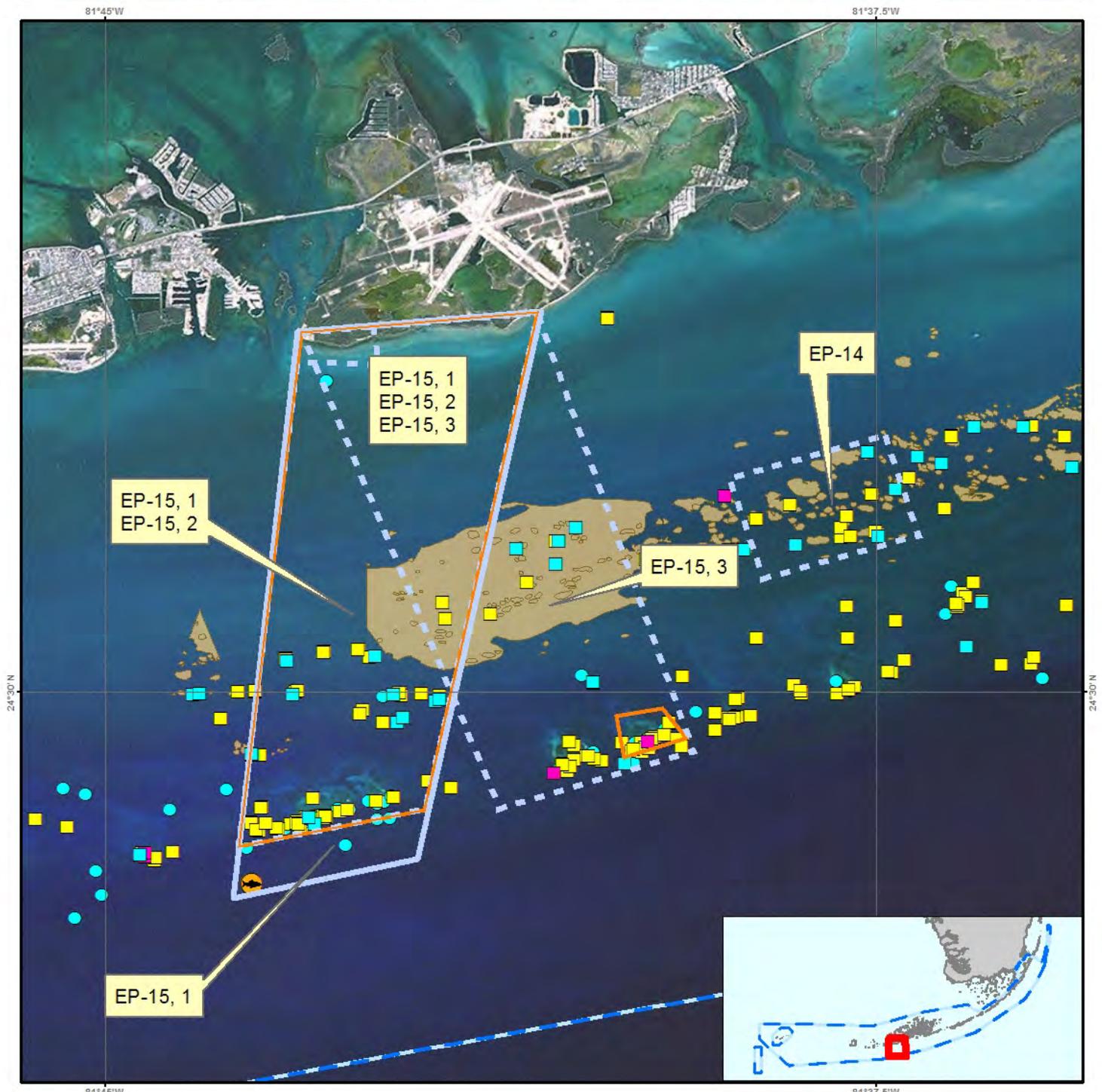
- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

NOTE: While shown here, detailed information about EP-14 can be found on a previous page.

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# Western Sambo



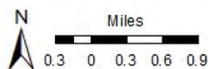
## EP Recommendation - 15, Western Sambo

### Modify Zone

1. Extend the southern boundary to the 90' depth contour to include the area known as the "bar". Close the area to all uses, transit only. *9 in favor, 14 present*
2. Extend the southern boundary to the 90' depth contour to include the area known as the "bar" and shift the northwest boundary at the shoreline to allow access to the area known as the "sandbar". Close the area to all uses, transit only. *6 in favor, 14 present*
3. Shift the zone to the east to encompass the Eastern Sambo Special Use Area and extend the southern boundary to the 90' depth contour to include the area known as the "bar". Close the area to all uses, transit only. *2 in favor, 14 present*
4. Maintain existing zone. *5 in favor, 14 present*
5. Eliminate Zone. *1 in favor, 14 present*

NOTE: While shown here, detailed information about EP-14 can be found on a previous page.

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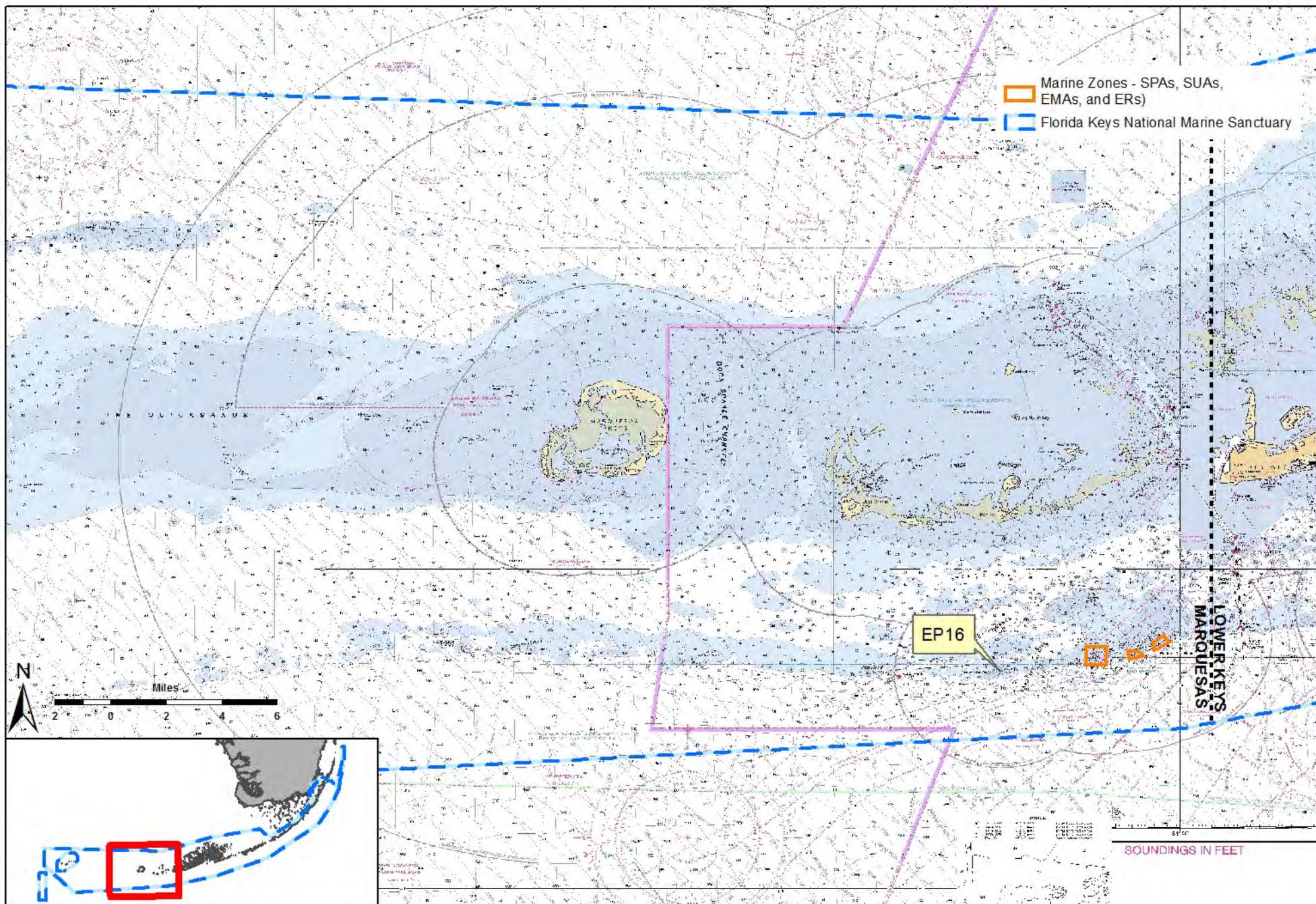
### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

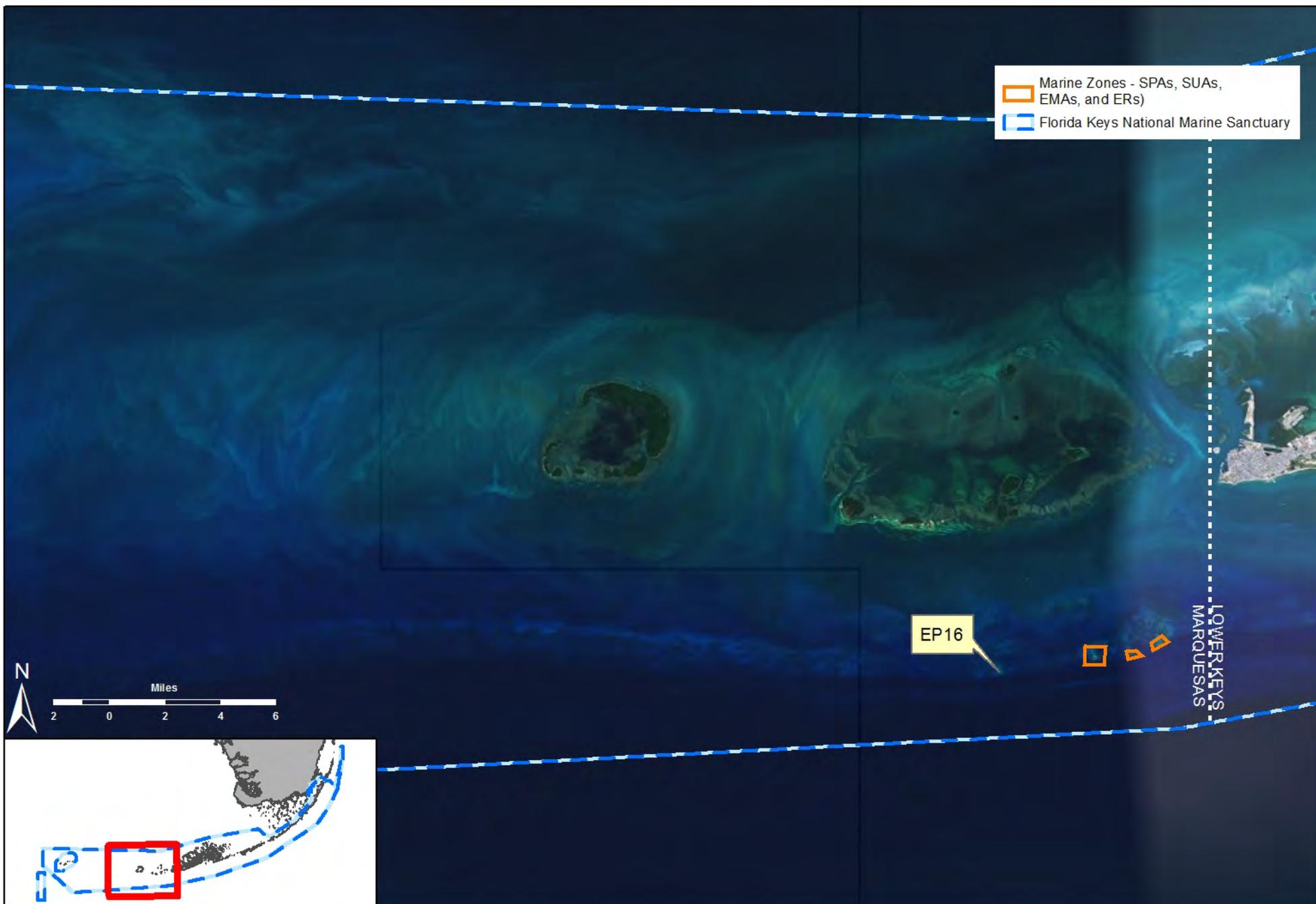
- Florida Reef Resiliency Program Resilient Reefs
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral

- High Stony Coral Species Richness
- High Fish Species Richness
- Fish Aggregations
- Single Species
- Probable

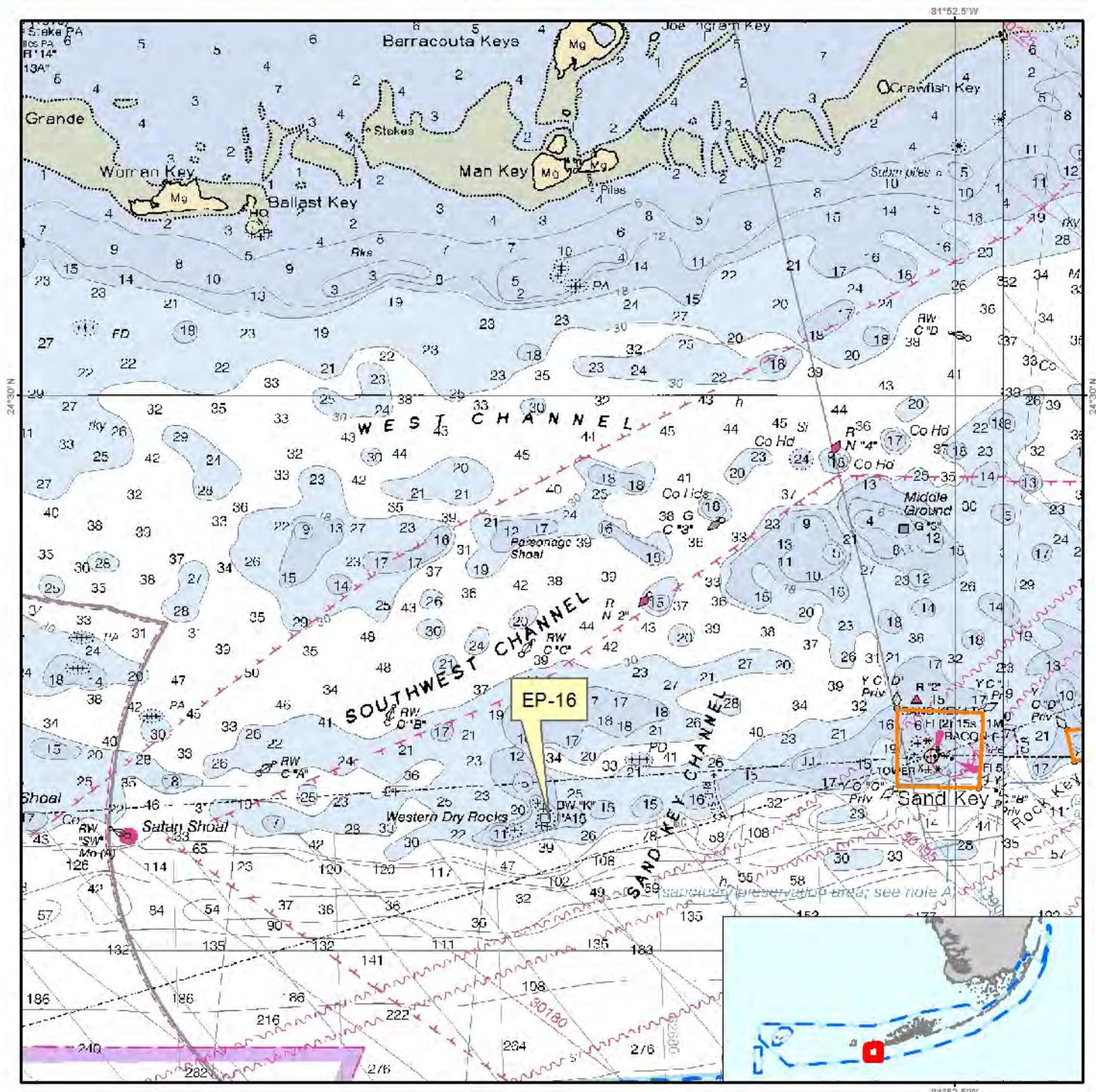
# Marquesas Region Map



# Marquesas Region Map



# Western Dry Rocks



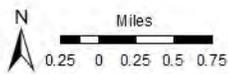
### EP Recommendation - 16, Western Dry Rocks

#### New Zone

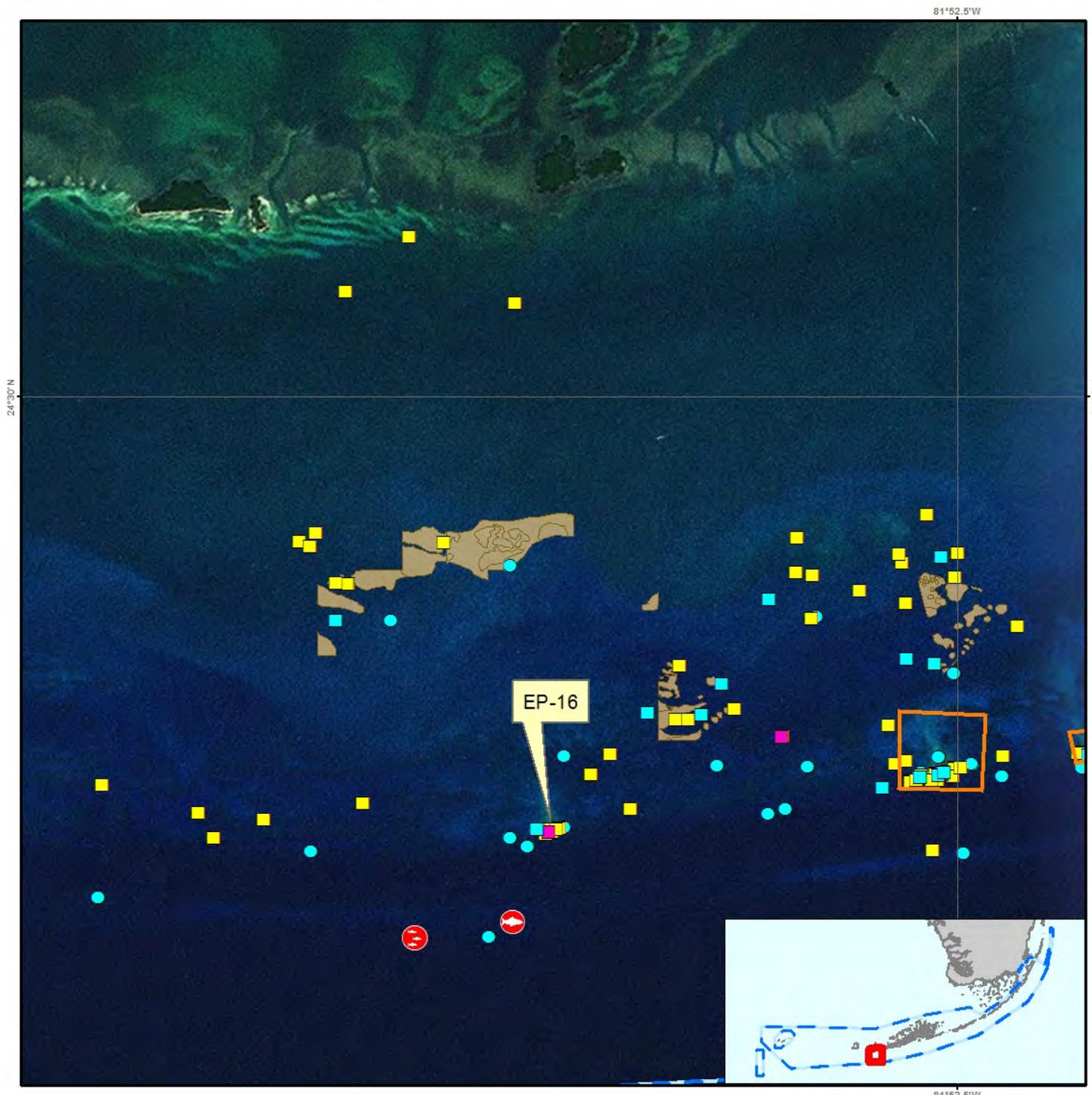
1. Create a zone at Western Dry Rocks. Close zone to all uses. 9 in favor, 13 present

-  Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
-  FKNMS Boundary

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Western Dry Rocks



## EP Recommendation - 16, Western Dry Rocks

### New Zone

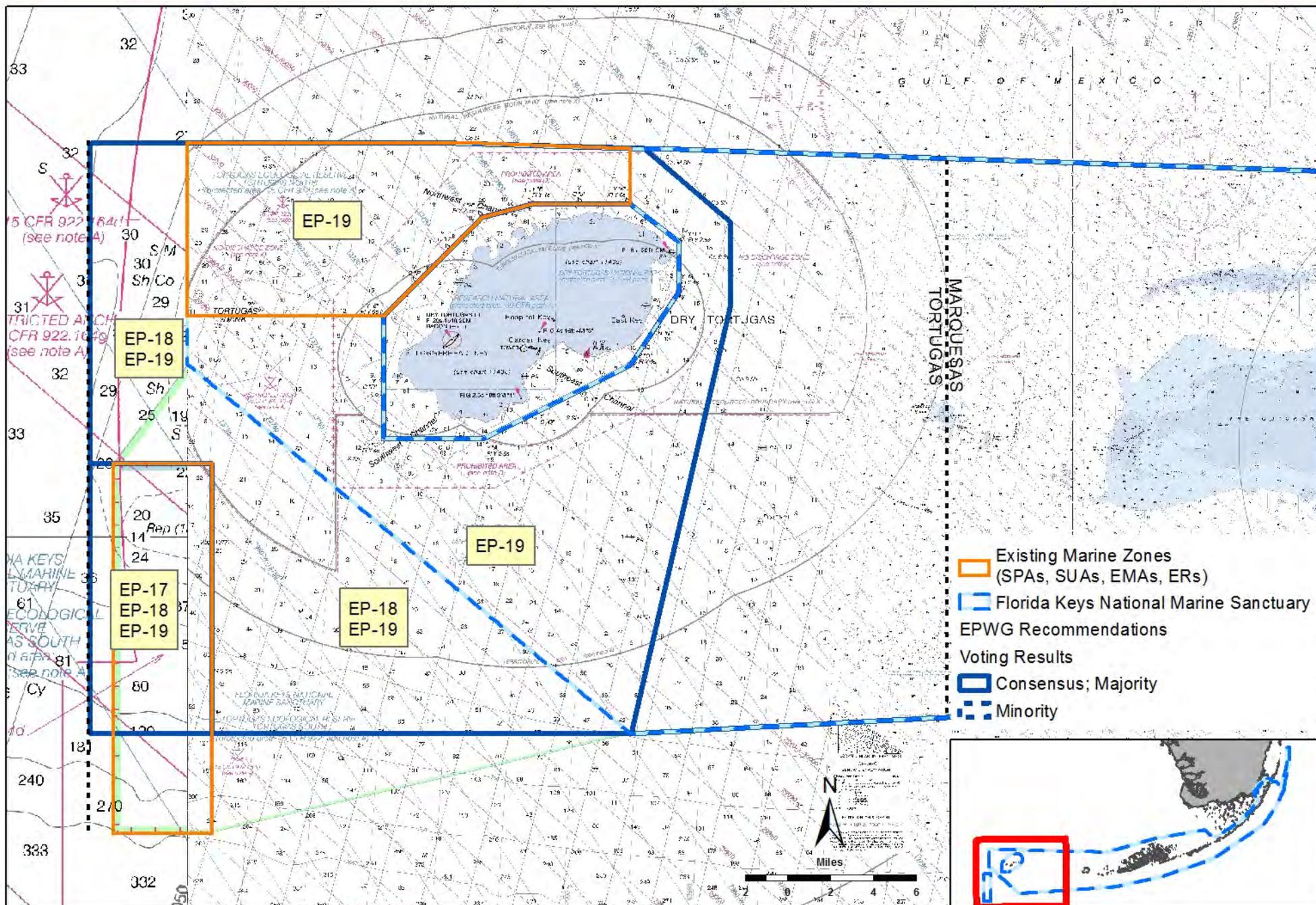
1. Create a zone at Western Dry Rocks. Close zone to all uses. *9 in favor, 13 present*

- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary
- Florida Reef Resiliency Program Resilient Reefs
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral
- High Stony Coral Species Richness
- High Fish Species Richness
- Fish Aggregations Single Species Present
- Fish Aggregations Multiple Species Present

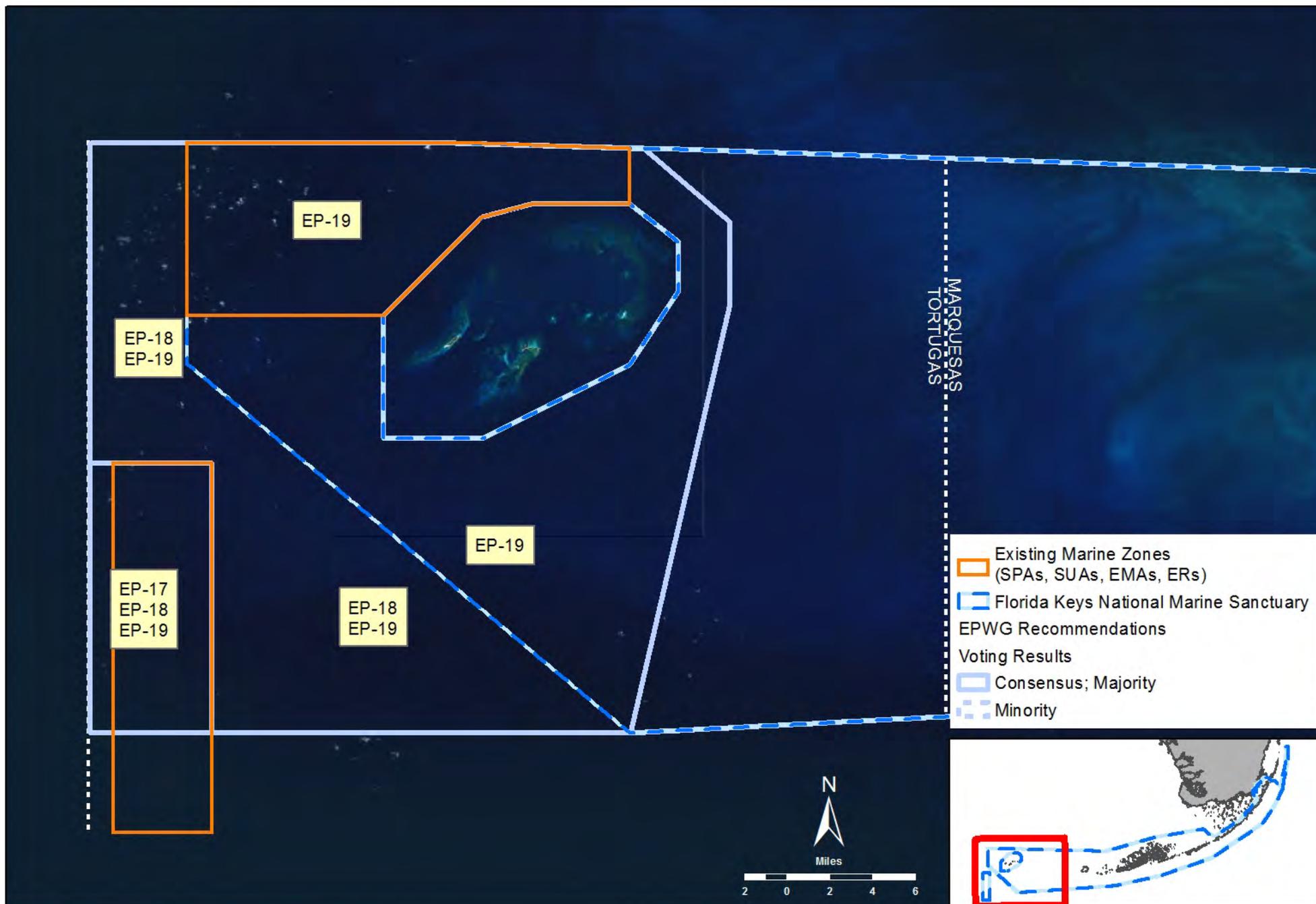
NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



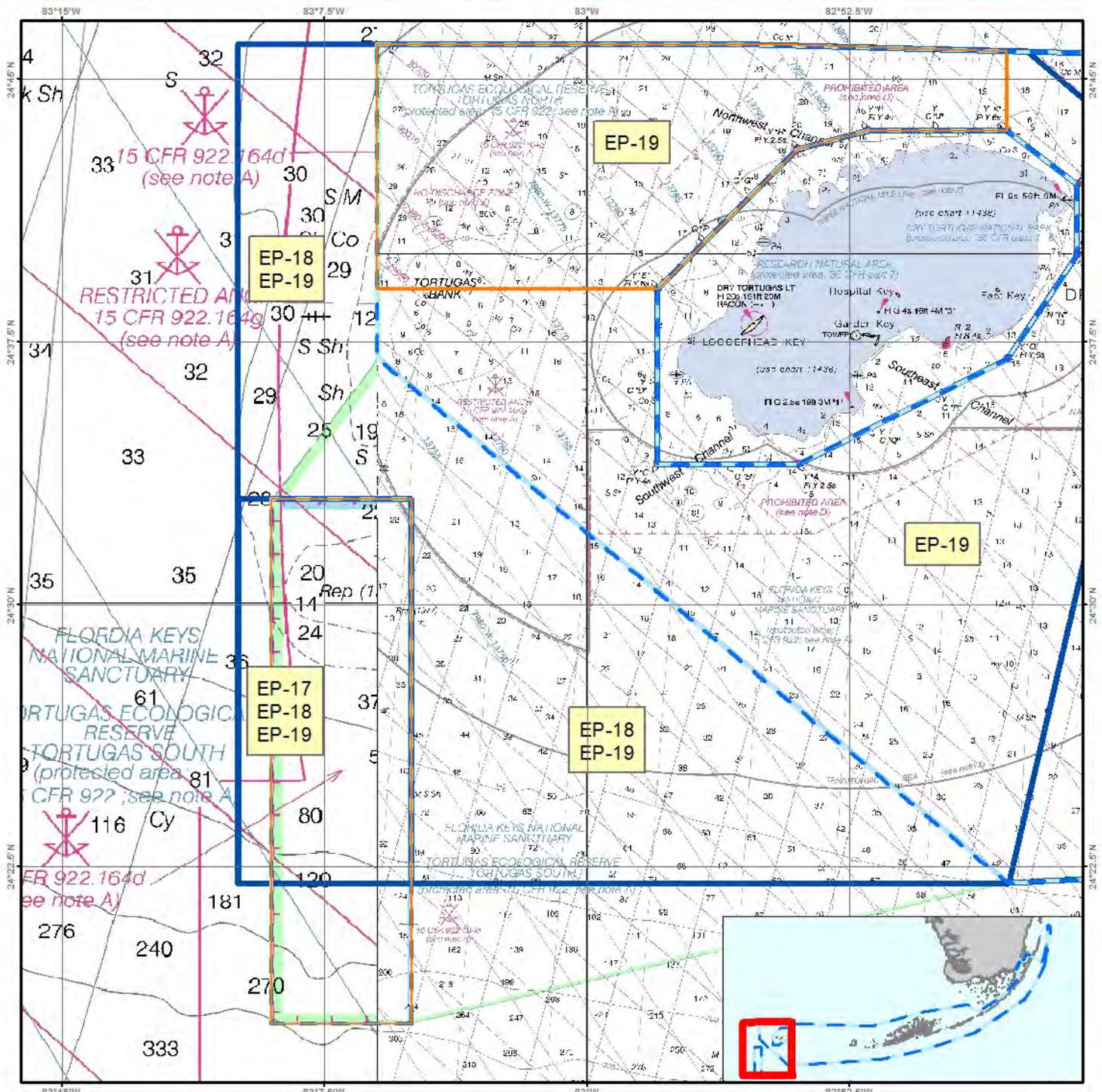
# Tortugas Region Map



# Tortugas Region Map



# Tortugas South



### EP Recommendation - 17, Tortugas South

#### Modify Zone

1. Extend the boundary to the west to include areas potentially important for fish spawning. Move the southern boundary north. Maintain existing Tortugas South regulations. *Consensus*

NOTE: While shown here, detailed information about EP-18 and EP-19 can be found on following pages.

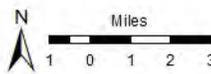
### EPWG Recommendations

#### Voting Results

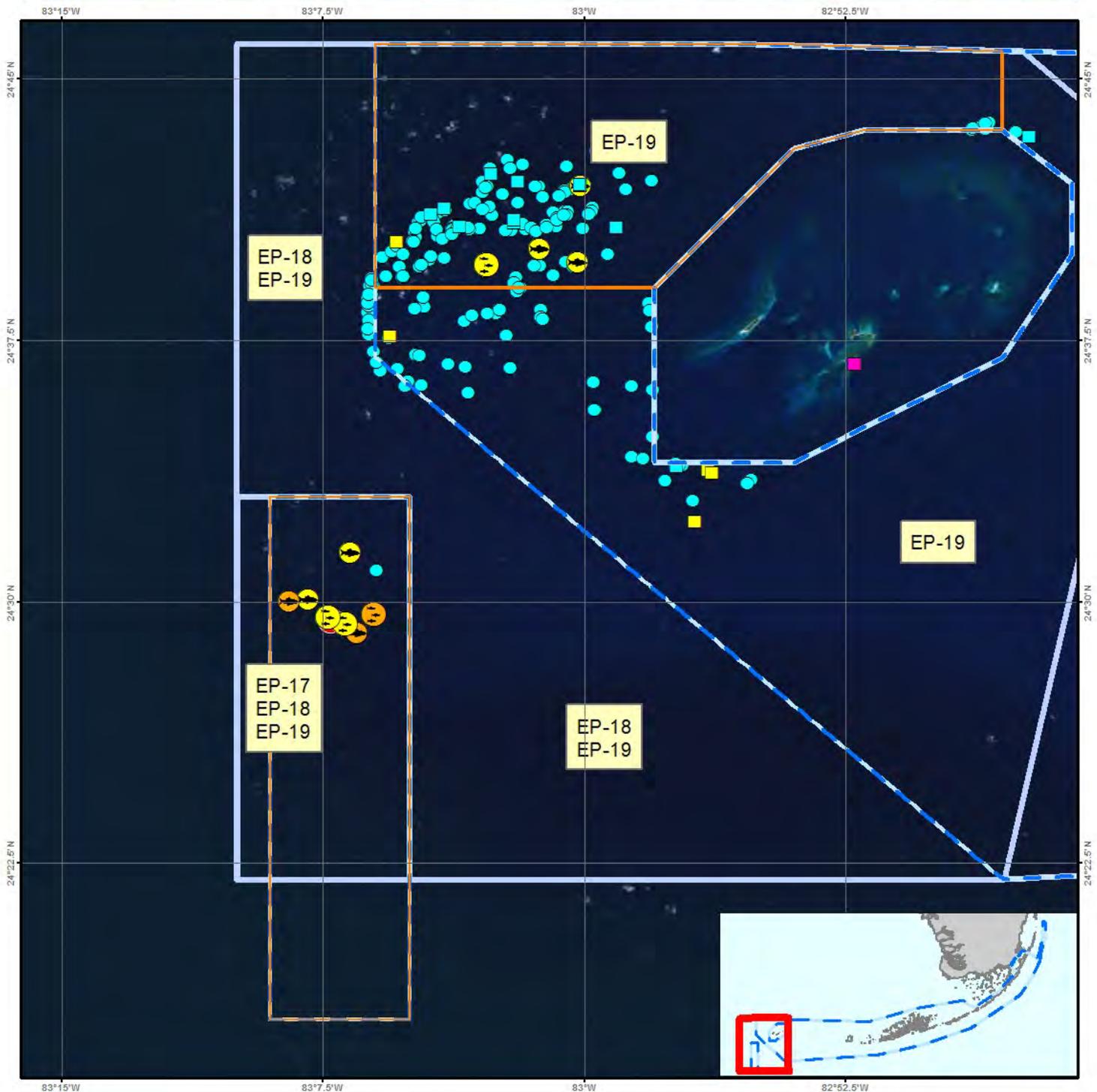
- Consensus; Majority
- Minority

- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Tortugas South



### EP Recommendation - 17, Tortugas South

#### Modify Zone

1. Extend the boundary to the west to include areas potentially important for fish spawning. Move the southern boundary north. Maintain existing Tortugas South regulations. *Consensus*

NOTE: While shown here, detailed information about EP-18 and EP-19 can be found on following pages.

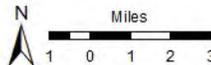
#### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

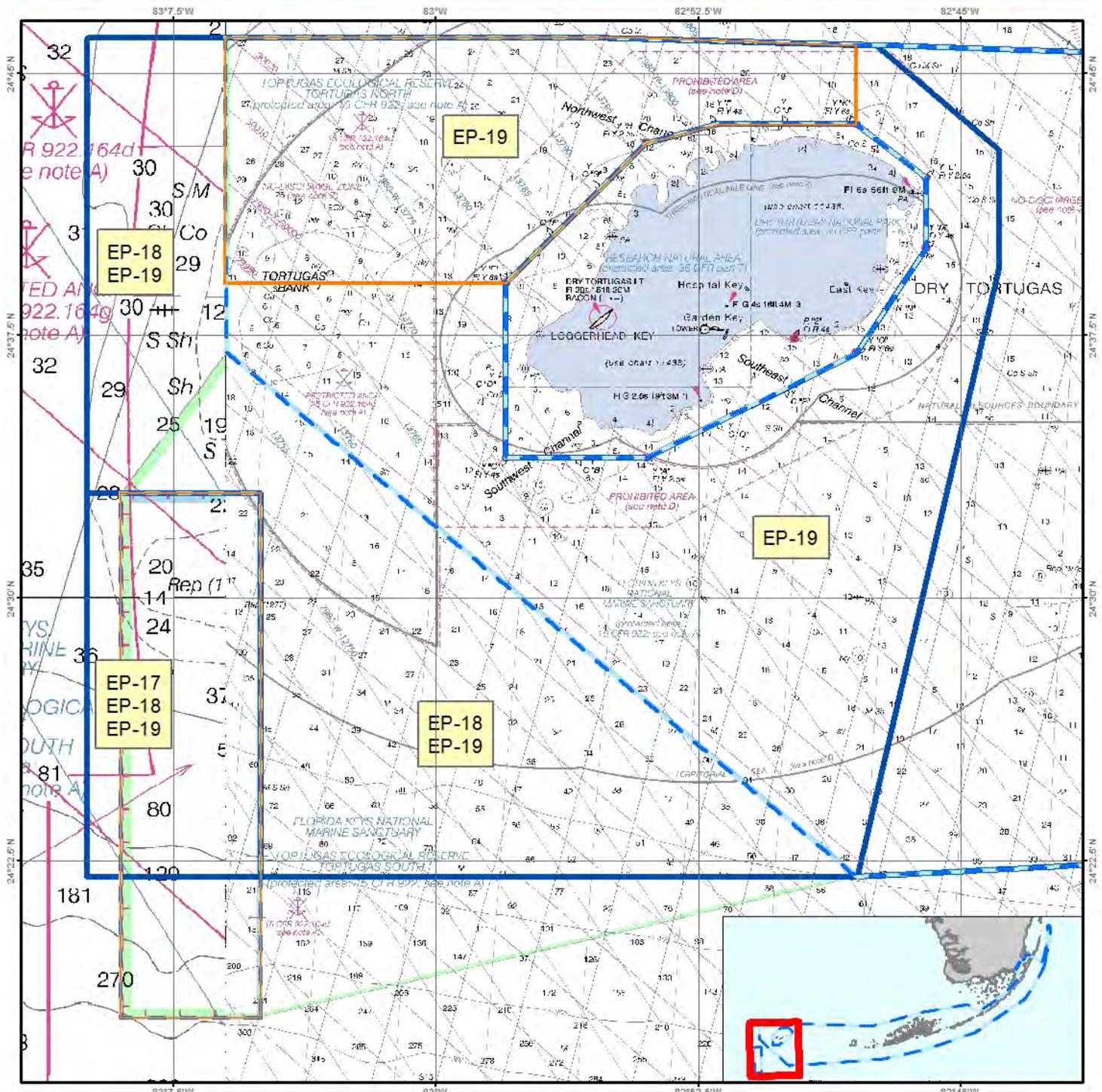
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral
- High Stony Coral Species Richness

- High Fish Species Richness
- Fish Aggregations**
- Single Species**
- Probable
- Potential
- Multiple Species**
- Present
- Probable
- Potential

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Florida Keys National Marine Sanctuary Boundary



### EP Recommendation - 18, Sanctuary Boundary

#### Modify Sanctuary Boundary

1. Extend the Sanctuary boundary to encompass the Tortugas South Ecological Reserve and from the Tortugas North Ecological Reserve to the Study Boundary. Existing general Sanctuary regulations would apply in this area. *Consensus*

NOTE: While shown here, detailed information about EP-17 and EP-19 can be found on previous and following pages.

### EPWG Recommendations

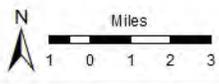
#### Voting Results

- Consensus; Majority
- Minority

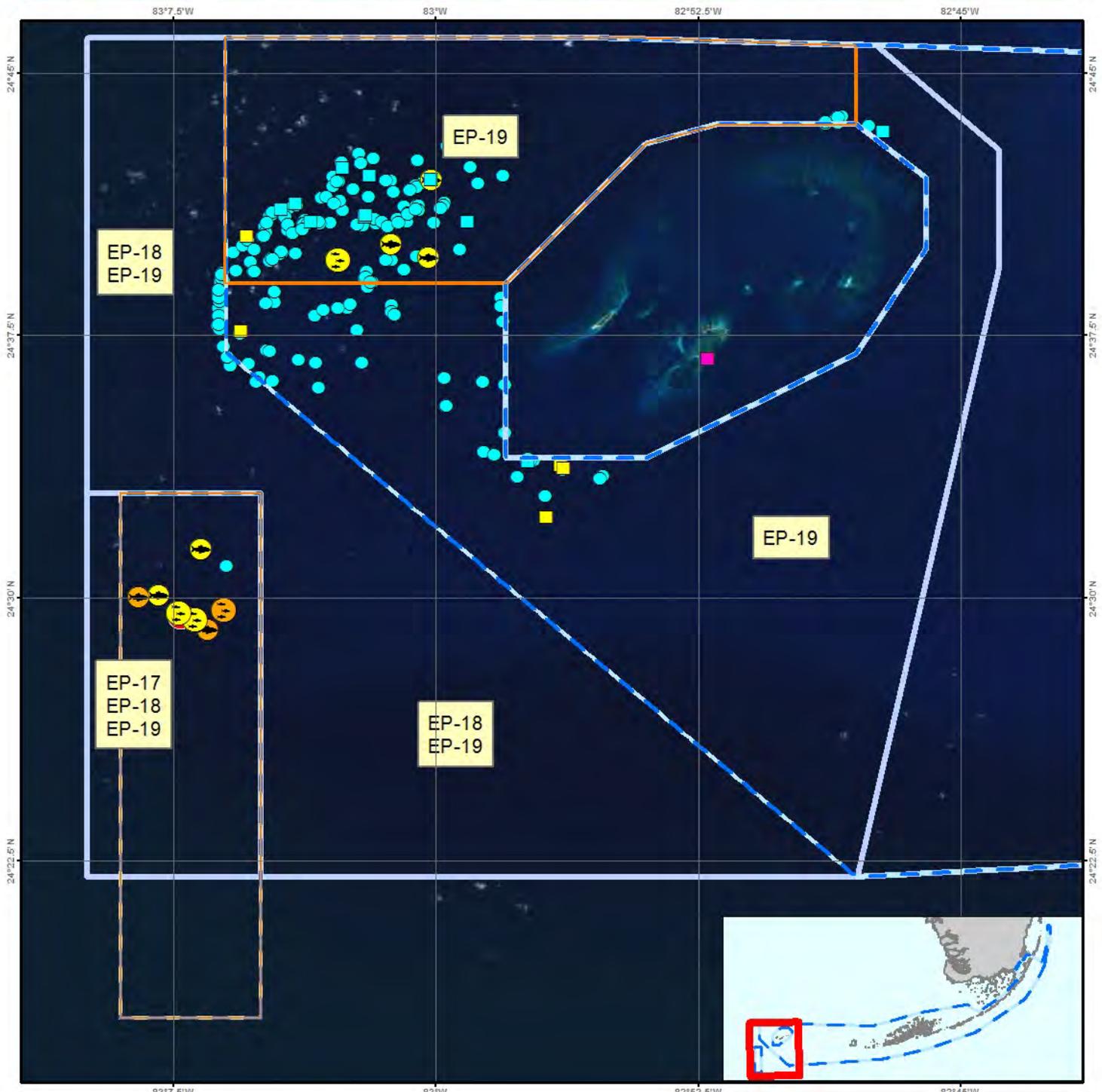
Existing Marine Zones (SPAs, SUAs, EMAs, ERs)

FKNMS Boundary

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Florida Keys National Marine Sanctuary Boundary



## EP Recommendation - 18, Sanctuary Boundary

### Modify Sanctuary Boundary

1. Extend the Sanctuary boundary to encompass the Tortugas South Ecological Reserve and from the Tortugas North Ecological Reserve to the Study Boundary. Existing general Sanctuary regulations would apply in this area. *Consensus*

NOTE: While shown here, detailed information about EP-17 and EP-19 can be found on previous and following pages.

### EPWG Recommendations

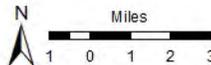
#### Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

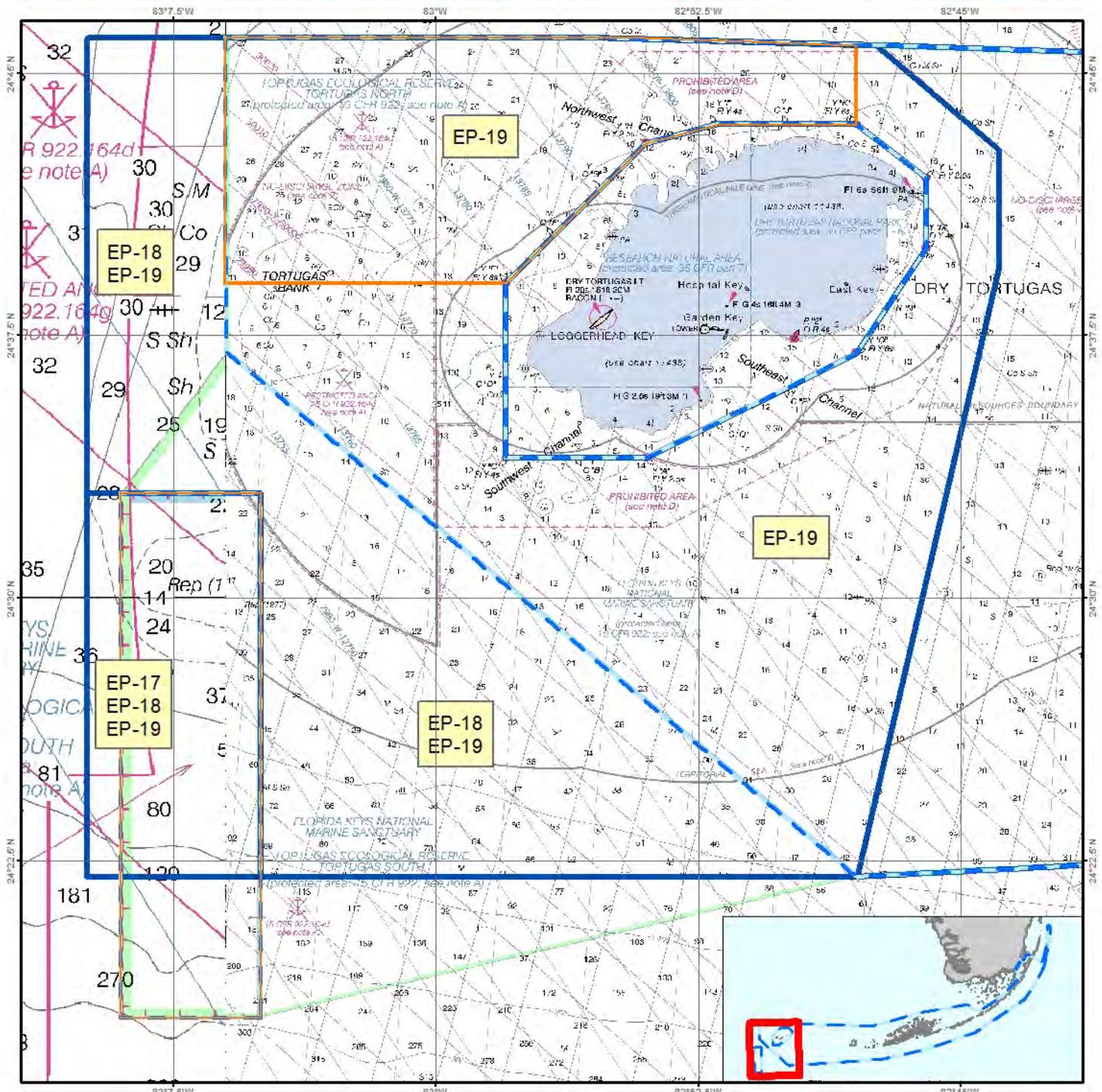
- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral
- High Stony Coral Species Richness

- High Fish Species Richness
- Fish Aggregations**
- Single Species**
- Probable
- Potential
- Multiple Species**
- Present
- Probable
- Potential

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Areas to be Avoided



### EP Recommendation 19 – Area To Be Avoided (ATBA)

#### Modify ATBA Boundary

1. Extend ATBA to include the Sanctuary expansion as noted in EP Recommendation 18. Existing general Sanctuary and ATBA regulations would apply in this area.
- Consensus*

NOTE: While shown here, detailed information about EP-17 and EP-18 can be found on previous pages.

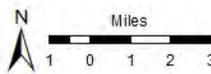
### EPWG Recommendations

#### Voting Results

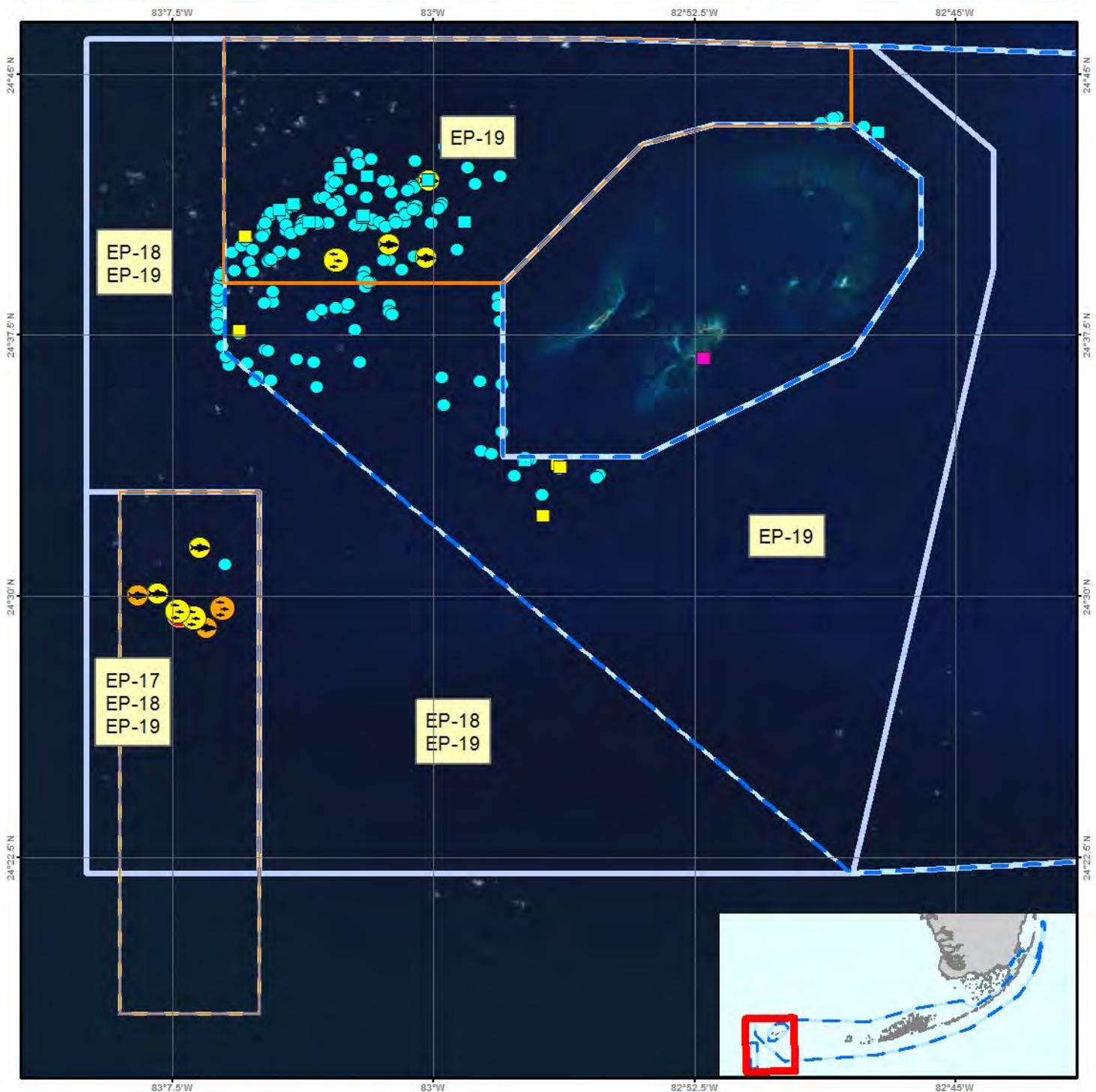
- Consensus; Majority
- Minority

- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



# Areas to be Avoided



### EP Recommendation 19 – Area To Be Avoided (ATBA)

#### Modify ATBA Boundary

1. Extend ATBA to include the Sanctuary expansion as noted in EP Recommendation 18. Existing general Sanctuary and ATBA regulations would apply in this area.  
*Consensus*

NOTE: While shown here, detailed information about EP-17 and EP-18 can be found on previous pages.

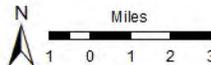
#### EPWG Recommendations Voting Results

- Consensus; Majority
- Minority
- Existing Marine Zones (SPAs, SUAs, EMAs, ERs)
- FKNMS Boundary

- State Threatened Coral Species, Pillar Coral
- Federal ESA Coral Species, Elkhorn and Staghorn Coral
- High Stony Coral Species Richness

- High Fish Species Richness
- Fish Aggregations**
- Single Species**
- Probable
- Potential
- Multiple Species**
- Present
- Probable
- Potential

NOTE: This map contains draft working group recommendations for consideration by the Sanctuary Advisory Council. This does not constitute a proposal or recommendation from NOAA, the U.S. Fish and Wildlife Service, or the Florida Fish and Wildlife Conservation Commission.



## **Appendix I: Working Group Recommendations, Phase I Meetings**

### **Florida Keys National Marine Sanctuary Marine Zoning and Regulatory Review Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection**

#### **Recommendations for Sanctuary Advisory Council Consideration**

Approved on July 29, 2013 by the Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection Working Group

#### 1. Zones for Ecosystem Protection:

- Host regional meetings (one/region) to facilitate region and site-specific input and information exchange
- Reconvene the full working group following regional meetings to consider input and develop recommendations for SAC consideration.
- Working Group members will participate for their specific region
- SAC members are requested to participate for their specific region
- Meetings could include:
  - Review existing zones, modifications to existing zones, and potential new zones
  - Cross-cutting issues
  - Science and economic impact
  - Meetings should include a range of user groups that could contribute ideas or be impacted by potential modifications
- Meeting administration and logistics:
  - One meeting per region; Regions are: (1) Upper Keys, (2) Middle Keys, (3) Lower Keys, and (4) Marquesas and Tortugas (also identified by general area recognizable landmarks)
  - Held in September
  - Evening meetings
  - Publicize meetings through various mechanisms (suggestions included: web, radio, newspaper, National Weather Service notice)

#### 2. Additional Issues for SAC Consideration:

The working group noted that the following issues are of concern and should be considered by the SAC through the marine zoning and regulatory review process:

- Education
- Enforcement
- Water Quality

## **Appendix II: Working Group Recommendations, Phase II Meetings**

### **Florida Keys National Marine Sanctuary Marine Zoning & Regulatory Review Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection**

#### **Recommendations for Sanctuary Advisory Council Consideration**

Approved on July 9, 2014 by the Ecosystem Protection: Ecological Reserves / Preservation  
Areas and Wildlife Protection Working Group

This document presents the Ecosystem Protection working group discussion, zone and regulation concepts, and recommendations for the Sanctuary Advisory Council. The details of areas discussed, issues noted, and record of decision and recommendation are outlined in a series of region specific and general/Sanctuary-wide tables. The information included in the tables reflects discussion and statements made by the Ecosystem Protection working group.

Ecosystem Protection Working Group Objectives:

1. Review and evaluate existing reserves designated for protection of coral reef ecosystems.
2. Review current exceptions to regulations in Sanctuary Preservation Areas and Ecological Reserves.
3. Review and evaluate Sanctuary Preservation Areas reduction of conflicting uses.
4. Recommend new or modified ecological reserves to ensure protection of a diversity of resources:
  - a. Spawning aggregations
  - b. Full suite of marine flora and fauna (i.e., seabird, marine mammal, turtles, seagrass, soft corals, hard corals)
5. Consider temporal zoning to address seasonal impacts associated with intense uses or seasonal ecological activities (i.e., nesting, breeding, spawning).
6. Ensure the FKNMS zoning scheme promotes sustainable use of the sanctuary resources and protects areas that represent diverse habitats as well as areas important for maintaining natural resources and ecosystem functions.

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Upper Keys Region

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Upper Keys region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Upper Keys Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concepts	Regulation Concepts	Consensus
Carysfort Reef	More protective of deeper reefs and historic black grouper spawning aggregation.	Concept 1: Move outer boundary line to 30-m contour to encompass deeper reefs and historic spawning aggregation (black grouper). Consider moving the inner boundary east just in-shore of the reef-line.	Concept 2: Consider allowing certain level of bait-fishing (limit number of permits allowed in zone). Concept 3: Make it a no anchoring zone. Limit number of mooring balls, limit use. Concept 4: Consider making part of this zone as an ecological reserve/research type area. Close to all user groups. (allow traditional use at existing mooring balls).	Consensus: Support zone and regulation concepts 1, 2, & 3  Show of hands for Concept 4: 6 in favor of 12 present
<p><b>Issues to Consider for Carysfort Reef and associated Concepts:</b></p> <p>Need to consider a buffer zone on the inner reef line for natural resources that zone is designed to protect. Concern about lots of trap fishing gear and proximity to boundary and potential that it could impact resources in the zone.</p> <p>If no anchoring regulations are put in place, need to allow anchoring for bait-fishing (if the bait-fishing exception is still allowed). If manage through mooring buoys: how many and where they are placed should be determined by those who use the reef, which will enhance effectiveness. Be clear about what the concept of Limit Use means. Consider allowing continued use in areas where mooring bouys exist (or are placed) and designate the remaining area as an ecological reserve/transit only type zone. Modifications to Carysfort Reef need to consider Biscayne National Park and management.</p>				
Basin Hill Shoals and/or Turtle Rocks	Area is already a Pennekamp Coral Formation Zone, includes patch reefs, high relief. Inner patch reefs are not currently well represented in FKNMS zoning scheme and represent a different habitat than fore-reef area. Considers charge to working group to include range of habitats; this could serve as in in-shore stepping stone to Carysfort reef (would not capture contiguous zone, but could serve as a patchwork to capture intent of SAC goals). Higher number of diversity and abundance of coral. Could serve as the resilient corals in the face of future impact. Many users are already not allowed in zones, would create equitable no use for all. Area is complex for navigation.	Concept 1: Create a new zone in this area - Basin Hill Shoals (considered creating zone that matched existing Pennekamp Coral Formation Zones, but no draft or final coordinates were recommended).  Concept 3: Create a new zone in this area - Turtle Rocks (considered creating zone that matched existing Pennekamp Coral Formation Zones, but no draft or final coordinates were recommended).	Concept 2: Consider no take, close to all uses.  Concept 4: Consider no take, close to all uses.	Show of hands for Concept 1 & 2: 6 in favor of 13 present.  Show of hands Concept 3 & 4: 10 in favor of 13 present
<p><b>Issues to Consider for Basin Hill Shoals and associated concepts:</b></p> <p>Basin Hill area should most closely match existing Pennekamp Coral Formation zones to most closely match existing managed zone and have least impact to existing uses. If closed to all uses, need to evaluate impact and benefit from closing area to all.</p> <p>State research 20-years of data – loss from 2010 cold front was minimal, indicate higher resilient reef. Aggregation of a lot of small patch reefs. Area includes high diversity coral and seagrass. Staghorn presence</p> <p>Evaluate use and impact to charter fishing and bait-fishing.</p> <p>Consider that area is self-regulated due to shallow areas.</p> <p><b>Issues to Consider for Turtle Rocks and associated concepts:</b></p> <p>State research shows high range of coral species, more of a bank reef habitat, appears to be resilient site. Planning for a long-term monitoring site.</p> <p>Evaluate use and impact to charter fishing and bait-fishing.</p>				

Upper Keys Region

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Upper Keys region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Upper Keys Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concepts	Regulation Concepts	Consensus
Snapper Ledge & Pickles Reef	This area is a hot spot for pillar coral. This area also includes coral nursery. This is the first big reef area just south of the no spearfishing area. Long standing proposal from the dive community that this area become a SPA.	Concept 1: Do not create a zone at this site.		Show of hands for Concept 1: 12 in favor of 13 present.
		Concept 2: Create a new zone that includes the existing Closed Area for Lobster Trap Gear area at Pickles Reef and include an additional ½ mile area of Snapper Ledge to protect whole area.	Concept 3: Make into an ecological reserve/research only type zone to protect this area more fully. No take, closed to all uses.	No show of hands taken for other concepts
			Concept 5: No anchoring zone (believe 4 mooring buoys exist).	No show of hands taken for other concepts
<p><b>Issues to Consider for Snapper Ledge &amp; Pickles Reef and associated concepts:</b></p> <p>This area was brought to the SAC as an area to consider for additional protection through this review process.</p> <p>Area around Pickles – where no trapping is currently allowed, consider if there is a way to address the anchoring impact through regulations rather than creating a no-take zone. Snapper Ledge area would be specific to the ledge area and would allow use around that area.</p> <p>Due to the number of zones in the Upper Keys Region, decision to not create a new zone in this area.</p>				
Davis Reef Sanctuary Preservation Area	The working group discussed the Davis Reef Sanctuary Preservation Area and value of keeping that area as a marine zone. Noted that the original reason for creating a zone in this area was primarily to separate use. The area includes a ledge on the landward side, the zone is almost identical to Conch and Alligator, and includes four-mooring buoys.	No Recommendation Made	No Recommendation Made	Consensus: No Action
<p><b>Issues to Consider for Davis Reef and associated concepts:</b></p> <p>FWC and Coral Restoration Foundation have permits to conduct coral restoration activities in this zone.</p>				
Key Largo Existing Management Area	Marine life collection is allowed, with limited entry, in other places. This is an area where marine life collection has not been allowed for many years, there is little evidence that the closure has made a difference for the region. Consider the issue of users and commercial activities allowed in this region.	No zone concept.	Concept 1: consider removing ban on marine life collection.	No vote taken, decision to leave the area as zoned.
<p><b>Issues to Consider for Key Largo Marine Life Collection Ban</b></p> <p>Noted the challenge regarding opening area for marine life collection for commercial vs. recreational use.</p>				

Middle Keys Region

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Middle Keys region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Middle Keys Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concepts	Regulation Concepts	Consensus
Tennessee Reef	The areas under consideration include ESA listed coral species, high fish abundance and diversity, and high coral reef resilience. Fish movement is seasonal and includes juvenile to adult stages and movement through the area and from in-shore to off-shore. This would modify and build off an existing area that is already protected through zoning (Tennessee Reef Special Use Area). For Concept 3: proposed to meet the Advisory Council goal to protect large, contiguous, diverse and interconnected habitats, including for fish moving in-shore to off-shore through their life cycle. Achieves deep reef protection, and this is an area where this might be done with minimal impact to users.	Concept 1: Extend Tennessee Reef Special Use Area to the 90' drop off, which is approximately 0.6 miles.	Concept 4: Close area to all use.	Show of hands for Concept 1 & Concept 4: 9 in favor of 13.
		Concept 2: Extend Tennessee Reef Special Use Area to the 90' drop off, which is approximately 0.6 miles and expand westward by about 1.2 miles. This encompasses the resilient reef area adjacent to and offshore from Tennessee reef Special Use Area.		Show of hands for Concept 2 & Concept 4: 2 in favor of 13.
		Concept 3: Create a zone that extends from the shoreline at Long Key State Park to the 90' drop off and include Tennessee Reef Special Use Area in the zone.		Consensus: Do not consider Zone Concept 3.
<p><b>Issues to Consider for Tennessee Reef and associated Concepts:</b></p> <p>No action alternative should be considered.</p> <p>Impact to fishing, both commercial lobster and recreational, not known. Noted good yellowtail fishing in this area. There will be impacts to fishing but noted the impact is not likely detrimental.</p> <p>Area that would likely be detrimental for fishing the Tennessee Reef light area near the Fishery Management Plan No Lobster Trap Gear zone.</p> <p>For Concept 3: impact to fishing and to individuals using areas along the shoreline; potentially not worth extending zone to shore.</p> <p>For Concept 3: Consider the idea of a seasonal (May to July) catch and release / idle zone from shore to about 4' to 6' of water.</p>				
Alligator Reef	This area includes a lot of diversity and has possible significance to the life cycle of groupers.	Concept 1: Extend outer boundary of the existing Alligator Reef SPA seaward by 2/10ths of a mile.	Concept 2: Close area to all uses but still allow exception for catch and release by trolling. **	Show of hands for Concept 1: 3 in favor; no show of hands taken for Concept 2.
<p><b>Issues to Consider for Alligator Reef and associated Concepts:</b></p> <p>Clarify that the exception to allow trolling was discussed in relation to the expanded zone; noted that the exception to trolling could be removed from the current Alligator reef SPA area (Islamorada Fishing Guides have considered this issue and agree to removing exception to allow trolling).</p> <p>Noted that grouper are already protected through Fishery Management Plan during spawning season and bag limit.</p> <p>If the nearby Fishery Management Plan No Lobster Trap Gear zone becomes a no-anchor zone, leave Alligator Reef alone.</p> <p>This area would be too difficult to close to all uses as it is a large area and is likely used for catch and release trolling.</p>				
<p>**Note: Working Group voted separately to eliminate the exception to allow catch and release by trolling in the four SPAs where it is currently allowed. Alligator reef is one of those SPAs.</p>				

**Middle Keys Region**

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Middle Keys region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Middle Keys Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concepts	Regulation Concepts	Consensus
Turtle Shoals	Includes ESA and State listed coral species including staghorn, elkhorn and pillar; high stony coral cover and fish diversity. Includes resilient reefs. This area is more protected from Florida Bay water and environmental conditions than other areas in the Middle Keys.	Concept 1: Create a zone around the patch reef at East Turtle Shoals.	Concept 4: Close area to all use.	Show of hands for Concept 4: 10 in favor of 13 present; Show of hands for Concept 1: 11 in favor of 13 present.
		Concept 2: Create a zone around the patch reefs at East and West Turtle Shoals.		Show of hands for Concept 2: none in favor.
		Concept 3: Create a zone that extends from the shore at Curry Hammock State Park, extends to the deep reef and encompasses the area at Turtle Shoals with the greatest species abundance and diversity.		Consensus none in favor of Concept 3.
<b>Issues to Consider for Turtle Shoals and associated Concepts:</b> Close to all use - need to allow transit and access to evaluate/research effectiveness of zone. This area has a lot of patch reefs so should evaluate more closely to determine the premium habitat areas to protect in the smallest way possible while also impacting the fewest users. This area is a good historical site for coral so could be a good site for further coral restoration work. Note from commercial fisherman present that they could live with not fishing in this area (this is better than Tennessee Reef suggestion). This is an important area for the dive and marine life protection industries; however are willing to give this area up for its high ecological value.  If taking this high value area need to consider impact to economy particularly the recreational charter fishing and marine life protection. Closing the western portion will have a greater impact to marine life protection. To allow for some fishing, could set a line of buoys at the southern edge of zone to allow some use; however noted that if this area is significant it should be protected, concern raised about angling gear and potential impact to resources.				
Coffins Patch	Consider opening area back up.	Concept 1: Remove the current Sanctuary Preservation Area.	Concept 2: Remove the current regulations for Coffins Patch Sanctuary Preservation Area.	Consensus: No Action, leave as zoned.
<b>Issues to Consider for Coffins Patch and associated concepts:</b> Note that there are only 4 SPAs in the middle keys, they are spread out widely, and are heavily used by the dive community, this area serves the purpose to separate use, is a known area and includes known resources. Not against giving back, but if give this area back would increase user conflict and would impact the dive industry. There are four distinct areas in Coffins patch, which are managed by where the mooring bouys are placed. Large area of pillar coral is included in the SPA.				
Mid-Channel Patch Reefs	Mid-channel patch reefs support high coral cover and diversity and provide the opportunity to protect large number of species in a small space. This habitat type is under-represented in the current zoning scheme.	Concept 1: Create at least one zone to protect mid-channel patch reefs.	No specific regulation concepts discussed or identified.	No further discussion. Noted that mid-channel patch reefs for the Middle Keys Region are protected through Turtle Shoals concepts.
<b>Issues to Consider for Mid-Channel Patch Reef zones</b> Washer Woman was proposed as a potential area for consideration. Note that Turtle Shoals area is a significant Mid-Channel Patch under discussion for potential protection through zoning. Noted that Washer Woman likely gets more use than Turtle Shoals due to proximity to population center. Generally support one area selected for further protection. Area selected should be based on science.				
Fishery Management Plan Areas Closed to Lobster Trap Gear	Existing Fishery Management Plan areas with significant amount of Endangered Species Act listed coral.	Existing Zones. No new or modified zone proposed.	Concept 1: Mark these existing zones.	Consensus: Mark zone near Alligator Reef
			Concept 2: Prohibit anchoring in these existing zones.	
<b>Issues to Consider for Fishery Management Plan Areas Closed to Lobster Trap Gear</b> When an area is not defined or marked, enforcement is difficult. Individuals do not know where these areas are or what the regulations are. Due to the number of these zones in the Upper Keys region, marking all of these zones could create confusion and complications. Considering marking zones where feasible and makes sense.				

Lower Keys Region

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Lower Keys region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Lower Keys Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concept	Regulation Concept	Consensus
Coupon Bight	Not clear what additional protections this zone provides.	Concept 1: Consider eliminating this managed area.		No action taken, determined outside the scope of this working group charge
Looe Key	Simplify zone scheme in this area. This area includes the following existing managed areas: Looe Key Existing Management Area, Looe Key Research Only Area, Looe Key Sanctuary Preservation Area, and three Fishery Management Plan Areas Closed to Lobster Trap Gear.	No zone concept.	Concept 1: Consider no anchor zone in Looe Key Existing Management Area (includes all zones within the EMA); status quo in Looe Key Sanctuary Preservation Area and Looe Key Research Only Area.	Show of hands for Concept 1: consensus;
	Marine life collection is allowed, with limited entry, in other places. This is an area where marine life collection has not been allowed for many years. There is little evidence that the closure has made a difference for the region. Consider the issue of users and commercial activities allowed in this region.		Concept 2: Consider removing ban on marine life collection in Looe Key Existing Management Area.	Show of hands for Concept 2: 6 out of 14 in favor;
	Concept 3: Consider leaving prohibition on spearfishing in place.		Show of hands for Concept 3: 13 out of 14 in favor	
<p><b>Issues to Consider for Looe Key and associated Concepts:</b></p> <ul style="list-style-type: none"> <li>Maintain no spearfishing regulation in the Looe Key Existing Management Area. Safety issue if allow spearfishing and diving.</li> <li>Consider the status quo concept to allow anchoring in the Looe Key SPA; evaluate this when the Keys-wide idea regarding no anchoring in SPAs and FMP Areas Closed to Lobster Trap Gear apply.</li> <li>Consider the challenge of allowing marine life collection related to commercial vs. recreational use.</li> <li>Note that with Concept 1: this could create issues with access to the area.</li> <li>Consider area as a no-take of fin-fish.</li> </ul>				
Western Sambo	Provide an ecological swath that represents all types of ecosystems/habitats (lobster noted); will also capture the Gray Snapper fish spawning aggregation site just to the south.	Concept 1: Consider extending southern boundary to 90' depth contour and include area known as the "bar".	Concept 6: Consider closing area to all uses, transit only.	Show of hands for Concept 1 & 6: 9 of 14 in favor;
	Allow use in near shore areas.	Concept 2: Consider a shift in the northern boundary to the south on the western side just past the area known as the "sandbar."		Show of hands for Concept 2 & 6: 6 of 14 in favor;
	Shift to the east would capture a broader range of resources including fish species, coral, and resilient reefs. This shift could also capture the existing Eastern Sambo Research Only Area. This option allows something positive for natural resources without too much economic impact. Area truly set aside that can be monitored.	Concept 3: Consider shifting this area slightly east (see New Eastern Zone below for details)		See below for New Eastern Zone
		Concept 4: Consider making no changes to existing zone.		Show of hands for Show of hands for Concept 4: 5 in favor of 14;
		Concept 5: Eliminate Zone.		Show of hands for Concept 5: 1 in favor of 14

Lower Keys Region

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Lower Keys region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Lower Keys Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concept	Regulation Concept	Consensus
New Eastern Zone (Concept 3 above)	Will provide an ecological swath that represents all types of ecosystems/habitats (lobster noted); to capture a broader range of resources including fish species, coral, and resilient reefs. This shift could also capture the existing Eastern Sambo Research Only Area. This option allows something positive for natural resources without too much economic impact. Consider extending a portion of this area to the deep reef. Recommend that this area be closed to all uses. Area truly set aside that can be monitored.	Concept 1: Consider establishing southern boundary at 90' depth contour or out to outer edge of are known as the "bar"	Concept 3: Consider closing area to all uses, transit only.	Concept 1 & 6: 2 in favor of 14;
	Leaves beach areas open and allows use in near shore areas.	Concept 2: Consider establishing this zone between the northwestern corner to the right of the area known as the "sandbar" and the northeastern corner to the left of "Rocky Point Beach" area.	Concept 3: Consider closing area to all uses, transit only.	No show of hands for Concept 2 & 6;
<p><b>Issues to Consider for Western Sambo and associated Concepts:</b></p> <p>For any potential changes have to consider socio-economic impacts; for a move to the deeper contour line will need to assess impact to King Fish fishing activity.                      If consider opening near-shore area concern about contiguous habitat and important in-shore area used for juvenile fish.                      Shifting to the east would move the zone a little farther from use centers of charter and recreational fishing and this would incorporate the research only area, which would then take less new area overall.</p> <p>If considering closing area to all use/transit only consider: (1) shifting area to the east does not make sense due to the loss of research history, burden of moving zone for not appreciable gain in natural resource. (2) consider heavy use of existing zone by diving and snorkeling from Key West.                      If close all access to this area, need to consider displacement to other areas.                      Potential support for Concept 1: expansion to 90' contour line, however would be difficult to support if no access is allowed.                      Evaluate options to create a true ecological reserve to serve as a means of assessing affect to environment of closing area to use.                      For the movement of Western Sambo to the east, the boundary at the shoreline should include the mangrove portions and not include the area of the public beach.</p>				
Mid-channel patch reef area in the vicinity of West Washer Woman	Coral reef resilience is high, there is high coral cover and richness, and there is medium to high fish species abundance. Protect an area that provides species for the future; apply the precautionary principle for this habitat type.	Concept 1: Consider creating a zone in the mid-channel patch reefs of the Lower Keys region. The three areas considered include: Wonderland, East portion of West Washerwoman, and West portion of West Washerwoman.		Show of hands for Wonderland Area: 3 of 13 in favor; Show of hands for East portion of West Washerwoman: 3 in favor; Show of hands for West portion of West Washerwoman: 1 in favor
<p><b>Issues to Consider for Mid-Channel Patch Reefs and associated Concepts:</b></p> <p>Request additional information and analysis from staff to better evaluate areas of mid-channel patch reefs to consider creating zones.                      Assess value of protecting an area that is currently thriving. Leave the area alone.                      If mid-channel patch reefs are protected, could serve as pre-emptive protection for potential State counter-part to lobster exclusion zones that were established in Federal waters.                      Establish mid-channel patch reefs as necessary to protect special places.                      If area is established, consider it a no access transit only area; evaluate impact to use if area is closed.</p>				

**Marquesas Region**

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Marquesas region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Marquesas Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concept	Regulation Concept	Consensus
Western Dry Rocks	Research noted an identified spawning aggregation area, distinct upwelling and bottom geology have been identified. Need to protect the area to promote recovery and reseeding of the fish aggregation. Protection is necessary as this appears to be the most well-known and studied aggregation in the Keys.	Create a zone in the area of Western Dry Rocks to protect the area of known fish aggregations.	No preliminary regulation concept recommended, however discussion was noted that if an area is closed it should be closed for all use.	Show of hands in favor of this concept 9 of 13.
<p><b>Issues to Consider for Western Dry Rocks and associated Concepts:</b></p> <p>Noted the need for more data and the ability to use those data to help identify other special areas in the Marquesas region that could be protected with less impact on users.</p> <p>Needs to be a very clear boundary of area identified and considered for potential additional regulation.</p> <p>Noted that this is a really important area for fishermen in Key West. If this area is closed, displacement of fishing pressure will take place.</p> <p>Need to be proactive to set aside special places (small as possible) to promote long term ecosystem health. Protecting Western Dry Rocks is a good ecosystem protection decision. A good insurance policy for fishing, diving, tourism, ecosystem protection.</p> <p>Reduction of bag limit of mutton snapper for recreational fishing could greatly reduce number of mutton spawning fish taken; consider a vessel limit ( Vessel limit discussed in relation to head-boat).</p>				
Marquesas Harbor	Minimize impact to ecosystem, region is one area that could promote additional protection and try a new management tool through catch and release.	Concept 1: Create a catch and release zone within the Marquesas Islands.	Concept 2: No take, catch and release, allow an exception for bait-fishing. Always allow leeward anchoring.	Show of hands - no support for concept.
	Safety.		Concept 3: No recommendation for Marquesas harbor area, however if something were to be proposed in this area, recommend no regulation change that would affect the ability of a vessel to anchor in the Marquesas island region, regardless of weather.	Show of hands for Concept 3: 9 in favor of 11
<p><b>Issues to Consider for Marquesas Harbor and associated Concepts:</b></p> <p>Noted that the area should always be kept open for leeward anchoring; need to provide exception for vessels seeking safe harbor that might have fish product aboard.</p> <p>If the Marquesas harbor area is designated a no-take zone (catch and release only) this will create a legal and enforceability issue due to the need for vessels to anchor within and near the Marquesas for safety. If those vessels have product aboard, that creates a challenge. Area of note is Mooney Harbor and other leeward areas.</p> <p>Noted that this creates additional layer of management to resources that are already managed by a Fishery Management Plan.</p> <p>Concerned about the issue of selective user areas, gets tricky to manage, enforce, and creates an issue with user compliance.</p>				
Mid-Channel Patch Reefs	These are resilient reef areas with populations of rare coral species. ensure representative habitats are protected from as much impact as possible to promote health of these regions. This is a management approach to ensure protection of the range of habitats.	No zone concept recommended.	No regulation concept recommended.	Issues noted, No show of hands taken.
<p><b>Issues to Consider for Mid-Channel Patch Reefs and associated Concepts:</b></p> <p>Needs more data to evaluate. At present the data available does not clearly indicate why or why not to provide additional protection for patch reefs or deep reefs in the Marquesas region. Need to have a clear why if we are making a decision to change the allowed use.</p> <p>Request more research, particularly to the areas to the west that are down-stream from Western Sambo.</p>				

**Marquesas Region**

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Marquesas region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Marquesas Region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concept	Regulation Concept	Consensus
Resilient Reefs	High resilient reefs seem to make sense as an area to explore for targeted coral restoration.	No zone concept recommended.	No regulation concept recommended, however noted that if an area is selected for restoration it does not necessarily have to impact use of that area.	Issues noted, No show of hands taken.
<b>Issues to Consider for Resilient Reefs and associated Concepts:</b> Discussed challenges and requirements of getting a permit issued. Coral reef restoration sites should be established at the best location for restoration work as determined by scientists.				

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**Tortugas Region**

Ecosystem Protection Working Group concepts presented for potential modifications to marine zones in the Tortugas region. The below table reflects working group discussion, zone and regulation concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Tortugas region recommendation for the Sanctuary Advisory Council.

Area	Rationale	Zone Concept	Regulation Concept	Consensus
Tortugas North		No change recommended	No change recommended	Consensus.
Tortugas South	Known fish aggregations are along the edge of the current boundary, an expansion to the west would provide greater protection. Additional good benthic features would also be captured through the western expansion.	Concept 1: Extend TSER boundary to the west to include areas potentially important for fish spawning		Consensus reached: Support Concept 2
	Known fish aggregations are along the edge of the current boundary, an expansion to the west would provide greater protection. Better benthic features would also be captured through the western expansion. More area made available for fishing in the Southern area.	Concept 2: Extend the TSER boundary to the west to include areas potentially important for fish spawning. Move the TSER southern boundary north, removing some area that is now included in the ecological reserve.		
<b>Issues to Consider for Tortugas South and associated Concepts:</b> For any change to the southern boundary of TSER, need to know what resources are in that area before considering that modification. Concept two is a net gain for fishable area.				
General Sanctuary Area in Tortugas	Square Sanctuary off to make it easier for law enforcement. General Sanctuary regulations would apply in this area.	Concept 1: Extend the sanctuary boundary to include Tortugas South Ecological Reserve (TSER). Essentially close the gap so that general sanctuary regulations would apply in this area. Extend the sanctuary boundary from the west of Tortugas North Ecological Reserve (TNER) to the western side of the study area boundary.	General Sanctuary Regulations would apply	Consensus reached: support zone and regulation concepts.
	Simplify and enhance law enforcement. Minimize the chance of ship groundings, vessel discharge	Concept 2: Extend ATBA to include all Sanctuary as proposed in Concept 1	General Sanctuary and ATBA Regulations would apply.	Consensus reached: support zone and regulation concepts.
<b>Issues to Consider for General Sanctuary Area and associated Concepts:</b> Southern line of sanctuary boundary should follow a straight line of latitude to enhance enforcement and compliance.				

**Sanctuary Wide Concepts for SAC Consideration**

Ecosystem Protection Working Group concepts presented for potential modifications that could apply through-out the Sanctuary. The below table reflects working group discussion, concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Sanctuary-wide recommendation for the Sanctuary Advisory Council.

Regulation Concepts	Rationale	Regulations and Other Concepts	Consensus
No anchoring in SPAs.	<p>Sanctuary Preservation Areas and Areas Closed to Lobster Trap Gear are set aside due to coral reef presence to protect coral; anchoring is destructive and anchor damage can be fairly substantial.</p> <p>If have limited number of mooring buoys and are not allowed to anchor if all mooring buoys are taken, this could help set the carrying capacity of number of boats that can use an area at any one time.</p> <p>Current anchoring regulations are confusing and inconsistent.</p>	Anchoring exception for bait-fishing could be allowed by permit. This exception could be seasonal and could include an educational requirement (i.e. create Blue Star model for charter fishing industry).	Consensus to forward to SAC for consideration (see March, June, and July meeting notes for more detail.)
<p><b>Issues to Consider for No Anchoring Areas</b></p> <p>If no anchoring is allowed, should apply to all users to create equity (example given was bait fishing); need to have enough mooring buoys in the right spots and consider safety issues</p> <p>No anchoring, limited mooring balls to allow for use by bait-fishing, placed strategically by users.</p> <p>Need to consider the practice of vessels rafting-up to the vessel using the mooring buoy.</p> <p>Anchoring is a basic safety issue particularly in the case of vessel issues, bad weather, or other emergency. Decisions to anchor and raft-up to other vessels are often made due to weather, current, and visibility.</p> <p>Some mooring buoys are located in places not close to reef; therefore vessels anchor to be closer to coral for snorkeling, etc. If mooring balls are used, they need to be more strategically placed. Need to consider the operators ability to execute the trip that has been sold. The number and location of mooring balls should be informed by the users; to provide information for use issues and considerations for weather.</p> <p>Noted the intertwined issue of anchoring and bait-fishing in SPAs.</p> <p>Support a Blue Star type certification/training for anchor use.</p> <p>Have to consider issue of safety (potentially discretion of enforcement officer).</p> <p>Need to increase enforcement of anchoring and/or increase available mooring buoys.</p> <p>Note that consideration should be given to special events including holidays and other high use events that have an increased number of vessels that will need to moor and or anchor.</p> <p>Noted financial challenges to installing and maintaining sufficient mooring balls; note the expense involved in installing and maintaining; discussed idea of private funding for mooring balls; however also noted challenge of this approach.</p> <p>Clarified that if allow anchoring, should apply to all forms of anchoring. If anchoring will not be allowed than no type of anchor should be allowed.</p> <p>Note that SPAs contain sand areas.</p> <p>Note the line/chain attached to anchors can do a lot of damage.</p> <p>Could perhaps consider designated anchoring areas or moveable mooring balls.</p>			
No Anchoring in FMP Areas Closed to Lobster Trap Gear	Fishery Management Plan Areas Closed to Lobster Trap Gear should be marked and no anchoring allowed. If not allowed to throw traps because these areas are special areas, no anchoring should be allowed. Protect the coral from traps and anchors and create equity across users.		Consensus: No anchoring. (see March & April meeting notes for further details)
Mark FMP Areas Closed to Lobster Trap Gear	When an area is not defined or marked, enforcement is difficult. Individuals do not know where these areas are or what the regulations are.	Due to the number of these zones in the Upper Keys region, marking all of these zones could create confusion and complications. Considering marking zones where feasible and makes sense.	Consensus: Mark zone near Alligator reef and consider marking other zones where feasible (see March & April meeting notes for further details)

**Sanctuary Wide Concepts for SAC Consideration**

Ecosystem Protection Working Group concepts presented for potential modifications that could apply through-out the Sanctuary. The below table reflects working group discussion, concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Sanctuary-wide recommendation for the Sanctuary Advisory Council.

Regulation Concepts	Rationale	Regulations and Other Concepts	Consensus
<p>Limited Use / Limited Entry</p>	<p>Commercial fishermen already have limited use/ entry; this sort of approach might be appropriate to consider for other commercial uses in the sanctuary. Limited entry provides opportunity for the business to have a greater value and creates greater incentive to protect the value of that business through protecting the resources. Limited use can also serve to protect the resources by limiting overall use pressure.</p> <p>This could provide an opportunity to better track use, impact, and support compliance.</p>	<p>Consider establishing a permit system to limit use in some or all areas. If this is considered for one sector, it should be considered for other sectors including other eco-tourism sectors.</p>	<p>Recommend that the SAC consider limited entry as part of the regulatory review process (6 in favor of 10 present).</p>
<p><b>Issues to Consider for Limited Use / Limited Entry Areas:</b></p> <p>Need to look to the future and how more and more people and uses will be both using and impacting sanctuary resources.</p> <p>Consider starting a Blue Star model for charter vessels, which could serve as a mechanism to lead to limited entry. Blue Star serves as a means to educate people about regulations. Discussed the potential that Blue Star status gives access to catch baitfish in Sanctuary Preservation Areas.</p> <p>If a permit system is established: (1) provide annual training to vessel crews, (2) provide educational programs for recreational users, (3) track use and type of use; and (4) include both commercial and recreational.</p> <p>Discussed the potential opportunity provided through creating a limited entry scenario for recreational charter fishing sector.</p> <p>Noted that if this is considered for one sector, it should be considered for other sectors including other eco-tourism sectors.</p>			
<p>Artificial Reefs</p>	<p>Some studies have shown that artificial reefs can provide benefits to the ecosystem and the economy. However artificial reefs have also been shown to change the topography of the bottom and change the behavior of the fish.</p>		<p>Recommend that a sub-committee be formed to review the benefits and drawbacks of the use of artificial reefs (6 in favor of 10 present).</p> <p>Recommend reconfirming that this is an important issue and the SAC tackle it in the way they see fit (4 in favor of 10 present).</p>
<p><b>Issues to Consider for Artificial Reefs:</b></p> <p>Consider a zone onto themselves for artificial reefs, particularly relevant for the Upper, Middle, and Lower Keys Regions. (Marquesas and Tortugas likely not appropriate for use of artificial reefs.)</p> <p>Consider the use of artificial reefs to create an ecological bridge/corridor between productive patch reef areas and other hard bottom areas.</p> <p>Consider identifying specified areas to consider for artificial reefs. Artificial reef zones should be carefully designed with location and type of material used. Areas should be experimental with one in each region, with no activity allowed for 5-10 years, zones would serve as control areas adjacent to natural areas to determine if artificial reefs could help regrow the natural area. After 5-10 years, evaluate if they have demonstrated to be an effective tool to aid in ecosystem protection/recovery and determine if/how people can then use these areas.</p> <p>Consider including artificial reef sites in Western Sambo Ecological Reserve. This could serve as a means to monitor effectiveness in a closed environment.</p> <p>Discussed the value and opportunity presented through artificial reefs for potential ecological and economic benefit.</p> <p>Noted drawbacks and issues with artificial reefs in that they change the topography of the bottom and change the behavior of the fish</p> <p>Noted the importance of establishing clear goals for artificial reef projects.</p> <p>Question about funds for artificial reefs and if they are not better spent on restoring natural reefs</p>			
<p>Law Enforcement</p>	<p>Request that this working group include strong language to promote better law enforcement. Noted that the charge of the working group cannot be fully implemented without addressing the issue of law enforcement.</p>		<p>Reported to Sanctuary Advisory Council; Enforcement Motion passed Apr15</p>

**Sanctuary Wide Concepts for SAC Consideration**

Ecosystem Protection Working Group concepts presented for potential modifications that could apply through-out the Sanctuary. The below table reflects working group discussion, concepts, issues to note, and status of working group decision. The following are Ecosystem Protection Working Group Sanctuary-wide recommendation for the Sanctuary Advisory Council.

Regulation Concepts	Rationale	Regulations and Other Concepts	Consensus
Use of Technology	Technology is a good way to address management needs and promote education.		Technology identified as a tool to use as appropriate (see March meeting notes for further detail).
<p><b>Issues/Ideas to consider for the use of technology:</b></p> <p>Consider adding a QR code on buoys that can be scanned and provide information on the sanctuary, specific zone, and associated regulations. This could be applied Keys-wide, but first tested in a smaller area.</p> <p>Consider partnership opportunities with GPS manufacturers and electronic charts to ensure that regulations and other relevant information is readily accessible for users.</p> <p>Need to consider that by the time this review is complete and is being implemented, there could be a lot more technology in place that could be used and applied.</p>			
Mini Season			Issue noted for SAC consideration
Coral Reef Restoration & Resilient Reefs	Noted that high resilient reefs seem to make sense as an area to explore for targeted coral restoration.	Concept 1: Consider resilient reefs as important areas to conduct coral restoration activities. (note, this was specifically noted for the Marquesas Region).	Consensus reached to forward concept to the SAC for consideration.
		Concept 2: Ecological Reserve areas should be left natural and that permits should not be issued for restoration work in those areas.	
<p><b>Issues/Ideas to consider for coral reef restoration and resilient reefs:</b></p> <p>Noted that identifying areas for coral restoration would not necessarily impact allowed uses.</p> <p>Discussed challenges and requirements of getting a permit issued.</p>			
Florida Keys Fishery Management Council or Sub-Committee	Florida Keys is a unique ecosystem and has special needs for fishery management; working group pushed for better management for Keys fisheries. Rationale and need exists to manage the Florida Keys separately. Fish that are targeted here are different and/or have different seasons, etc that occur elsewhere in the South Atlantic and Gulf Fishery Management Council management zones. It is important that the Councils recognize the need to integrate ecosystem management.	Recommend the Fishery Management Councils manage the Florida Keys as a distinct area. (Noted that creation of a Fishery Management Council takes an Act of Congress.) The boundary of a Florida Keys Fishery Management Area should be aligned with the northern boundary of the FKNMS SAC Study Boundary. Consistent regulations should apply within the entire area of the Florida Keys.	Consensus Reached to forward concept to the SAC for consideration.
Eliminate exception for catch and release by trolling exception in 4 SPAS		Remove existing exception for Catch and Release by Trolling in 4 SPAS where it is currently allowed: Davis Reef, Conch Reef, Alligator Reef, and Sombrero Reef.	Consensus Reached to forward concept to the SAC for consideration.
Biscayne National Park Coordination	Encourage dialog between the Sanctuary and Biscayne National Park; Request that Biscayne National Park consider impacts of their actions to the adjacent Sanctuary; Request that Advisory Council explore this issue and have an update on the Park's activities and progress.		Consensus Reached to forward concept to the SAC for consideration.
Turtle Research Zone west of Marquesas as recommended by Shallow Water Working Group			No vote taken, working group wanted these issues to be noted
<p><b>Issues to consider for turtle protection zone:</b></p> <p>Boats use this area; most commercial vessels are traveling slow through this area and will not impact turtles; area to west of Marquesas is most popular area to anchor.</p>			