

Items of Interest to the South Atlantic Fishery Management Council from Florida Keys National Marine Sanctuary Restoration Blueprint



Purpose

Florida Fish and Wildlife Conservation Commission (FWC) staff have thoroughly reviewed the Florida Keys National Marine Sanctuary (FKNMS) Restoration Blueprint (or draft Environmental Impact Statement) and met with stakeholders to gather additional input. This document serves to provide South Atlantic Fishery Management Council (Council) an overview of select items of interest from the Restoration Blueprint, share the information gathered by FWC, and help facilitate Council discussion on the Restoration Blueprint.

Why

NOAA's Office of National Marine Sanctuaries (ONMS) is seeking input from the public and management partners, including the Council, on the FKNMS Restoration Blueprint. Comments are due to ONMS before March 13, 2019.

Summary

This FKNMS Restoration Blueprint proposes to expand the FKNMS boundary, modify existing and create new marine zones, and update regulations and the management plan for the FKNMS. The National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries (ONMS) proposes to expand the Florida Keys National Marine Sanctuary (FKNMS) boundary, update sanctuary-wide regulations, modify and establish new marine zones, update marine zone-specific regulations, and revise the sanctuary's non-regulatory management plan.

Topics within the Restoration Blueprint that may be of particular interest to the Council and the Council's stakeholders focuses on the Office of National Marine Sanctuary preferred alternative, or Alternative 3, and include:

1. FKNMS boundary expansion
2. Phase-out of baitfish permits
3. Fish feeding regulations
4. Protection of large, contiguous habitat
5. Expansion of Sanctuary Preservation Areas (SPAs) into deeper waters
6. Limited access to Carysfort, Sombraero, and Sand Key SPAs
7. Creation of new SPAs in South Atlantic federal waters
8. Key Largo Management Area
9. Tortugas Spawning Corridor SPA
10. Marquesas Keys Turtle Wildlife Management Area

Overview

Original Goal and Purpose of the FKNMS

- The 1997 environmental impact statement and management plan implemented sanctuary-wide regulations and established the nation's first comprehensive network of marine zones in FKNMS.
- Marine zones, which have differing levels of use and protection, were established to protect and preserve sensitive parts of the ecosystem while allowing activities that are compatible with resource protection.

Goal and Purpose of the Restoration Blueprint

- The purpose of this Restoration Blueprint is to meet the purposes and policies of the National Marine Sanctuaries Act, to implement specific actions identified in the 2007 FKNMS management plan, and to act upon several recommendations of the FKNMS Sanctuary Advisory Council.
- The need for this Restoration Blueprint is based on widespread, acute, chronic, and emerging threats to marine resources in the Florida Keys.
- The existing regulations, marine zones, and management plan activities designed and implemented by FKNMS in the mid-1990s are no longer sufficient to ensure long-term resource protection and ecosystem function integrity into the future considering those threats
- The Office of National Marine Sanctuaries is considering three alternatives, in addition to status quo, of the FKNMS. The alternatives are summarized below.

Table. 1. Overview of the alternatives being considered by the Office of National Marine Sanctuaries for the FKNMS.

Components	Alternatives			
	Alternative 1 (no action)	Alternative 2	Alternative 3 (preferred)	Alternative 4
Sanctuary boundary	Alt. 1 (no action) 3,800 sq. miles	Existing boundary Area to be avoided (ATBA) Tortugas Region 4,541 sq. miles	Existing Boundary ATBA Tortugas Region 4,541 sq. miles	Existing Boundary ATBA Tortugas Region Pulley Ridge 4,800 sq. miles
Sanctuary-wide regulations	Alt. 1 (no action)	Update 3 existing Proposed 4 new	Update 4 existing Propose 4 new	Update 5 existing Propose 4 new
Marine zone boundaries¹	Alt. 1 (no action) 57 total zones 1033 sq miles	96 total zones 1129 sq miles	98 total zones 1141 sq miles	98 total zones 1433 sq miles ²
Additional marine zone regulations	Alt. 1 (no action)	Eliminate 2 exceptions Update 2 existing Apply more protective regulations than Alt. 1	Same as Alt. 2 or more protective (e.g., greater number of no-entry areas)	same as alt. 2 and 3, or more protective (e.g., greater number of transit- only areas)
Management plan	Alt. 1 (no action)	New proposed management plan	Same as Alt. 2	Same as Alt. 2

Management Authorities

- FWC fishing regulations apply in state waters of the FKNMS:
 - FWC and FKNMS have agreed that consistent fishing regulations throughout the Sanctuary, established by FWC, are in the best interest of all parties.
- Federal waters:
 - South Atlantic Fishery Management Council regulations apply to Atlantic federal waters (implemented by NOAA Fisheries).
 - Gulf of Mexico Fishery Management Council regulations apply to Gulf federal waters (implemented by NOAA Fisheries).
 - For some species (e.g., barracuda, marine life) FWC has extended state regulations into federal waters.
 - FKNMS has additional regulations in federal waters pertaining to FKNMS marine zoning plan (e.g., Sanctuary Preservation Areas, Wildlife Management Areas, no-anchor zones, etc).

FKNMS Stakeholder Input Plan

- FKNMS hosted public workshops during the fall of 2019 in Key West, Marathon, Tavernier, Coral Gables, and Fort Myers.
- FKNMS' Sanctuary Advisory Council met Oct. 15, 2019, and will meet again on Dec. 10, 2019, and public input will be taken.

The following pages detail specific topics for SAFMC consideration.

Topic 1: Florida Keys National Marine Sanctuary Boundary Expansion

Proposed Management Action

Alternative 3 would expand the external boundary on the oceanside of the Keys to match up with an existing demarcation called the Area to be Avoided (ATBA), align with an existing demarcation called the Particularly Sensitive Sea Area (PSSA) and to incorporate a small westward shift in the external boundary west of the Dry Tortugas. In the most restricted alternative, Pulley Ridge, which is home to a diverse deep-water coral community and located approximately 70 miles to the west of the Dry Tortugas in Gulf federal waters, is incorporated within the Sanctuary. See maps of alternatives for expansion on the following page.

Table. 2. Overview of the alternatives being considered by the Office of National Marine Sanctuaries for the FKNMS boundary expansion.

Components	Alternatives Alternative 1 (no action)	Alternative 2	Alternative 3 (preferred)	Alternative 4
Sanctuary boundary	Alt. 1 (no action) 3,800 sq. miles	Existing boundary Area to be avoided (ATBA) Tortugas Region 4,541 sq. miles	Existing Boundary ATBA Tortugas Region 4,541 sq. miles	Existing Boundary ATBA Tortugas Region Pulley Ridge 4,800 sq. miles

Rationale for the Action

The ATBA is an existing demarcation where large vessels (over 50 m) are prohibited due to several large ship groundings in this area in the 1980s. The PSSA is an existing demarcation established by the International Maritime Organization that is designed to protect marine resources of ecological or cultural significance from damage by ships while helping keep mariners safe. By co-locating the boundary with these existing demarcations, the complexity of the various boundaries will be reduced, and the additional protections provided in the FKNMS-wide regulations will be in effect. The slight expansion to the west (in Alternative 3 and 4) will allow for an equivalent expansion of the Tortugas South Reserve (Riley's Hump). This slight expansion will provide greater protection for newly-discovered cubera snapper and black grouper aggregations located along the western edge of Riley's Hump.

Alternative 4 would add Pulley Ridge to the FKNMS and prohibit all anchoring in this area to further protect deep-water coral reef ecosystems. Regulations set by the Gulf of Mexico Fishery Management Council (GMFMC) and implemented by NOAA Fisheries (not FKNMS) prohibit use of bottom gear (i.e., traps, trawls, and bottom longlines) and anchoring by fishing vessels in a large area of Pulley Ridge. In 2018, the GMFMC approved regulations that are pending approval by the U.S. Secretary of Commerce. These pending regulations would prohibit use of bottom gears (except bottom longlines, which have historically been used in this area by commercial grouper fishermen) and anchoring by fishing vessels in the expanded area. If these changes are approved by the U.S. Secretary of Commerce, the area of Pulley Ridge with GMFMC-set regulations would match the area proposed to be added to the FKNMS in Alternative 4. The GMFMC does not have authority to prohibit anchoring by other vessels as proposed in FKNMS Alternative 4.

Background Information

Because these new boundaries will primarily affect large ship traffic, the key FKNMS-wide regulations that will have the greatest effect on use are the existing and proposed modifications to the vessel discharge rules. However, all FKNMS-wide regulations would apply within the proposed boundary expansion, such as fish feeding rules (see Topic 2 for details).

Summary of Public Comments Received So Far

Several commenters have supported overall expansion of the FKNMS as proposed in the preferred alternative (Alternative 3). Support for Alternative 4 (adding Pulley Ridge) has also been received. However, several Gulf and South Atlantic fishery management council advisory panels have opposed expansion of the FKNMS out of concern that expansion could mean more restrictive regulations in the expanded areas in the future.

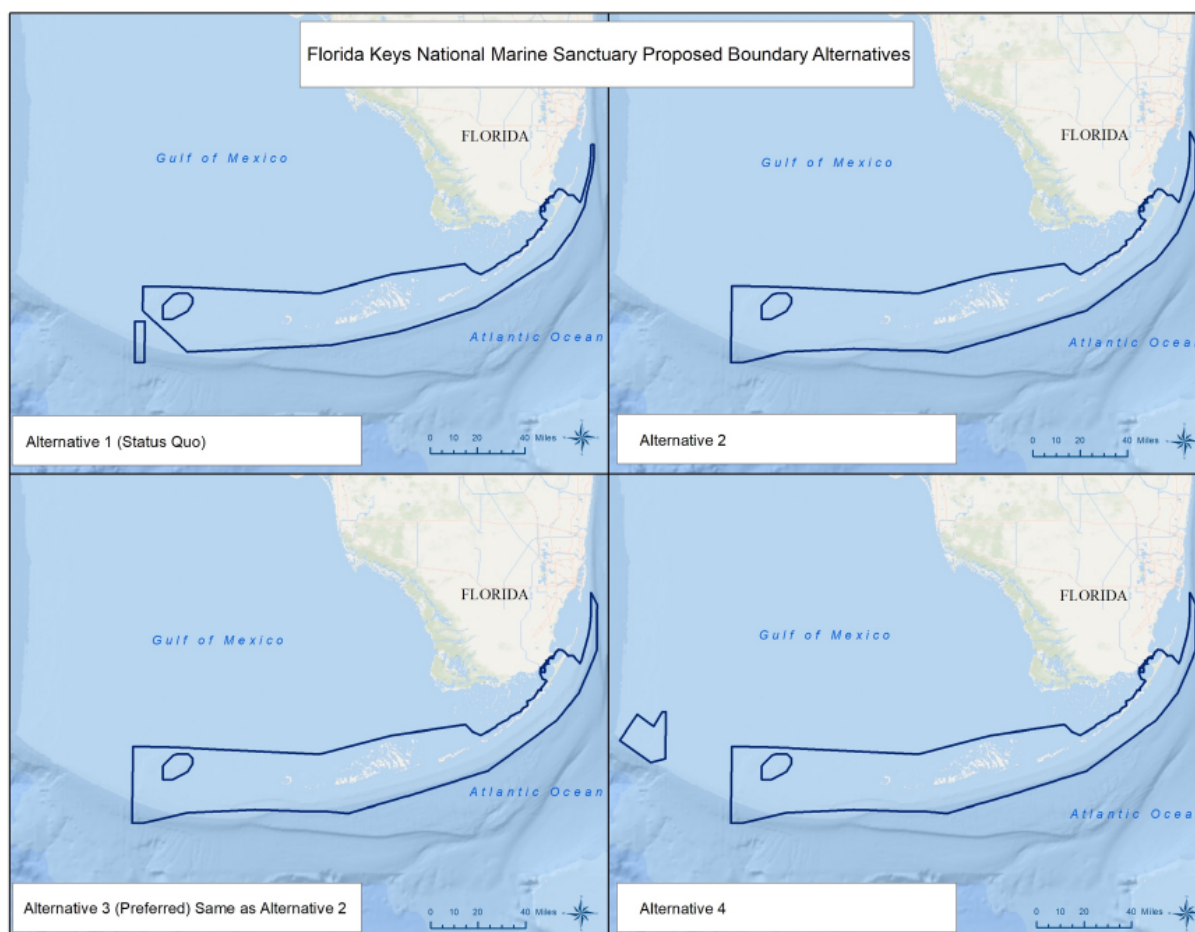


Figure 1. Florida Keys National Marine Sanctuary Boundary Expansion Alternatives.

Topic 2: Phase-out of Baitfish Permits

Proposed Management Action

Alternative 3 proposes to phase out the practice of issuing permits that allow capture of baitfish from within 18 current Sanctuary Preservation Areas (SPA) over a three-year period. SPAs encompass discrete, biologically important areas that help sustain critical marine species and habitats. Regulations for this zone type are designed to limit consumptive activities and to separate users engaged in different kinds of activities. Diving, snorkeling, and boating are allowed inside these zones. This proposal does not impact or change fishing for baitfish outside of SPAs, which is not restricted.

Baitfish permits would be phased-out over a three-year period following the effective date of final regulations. During this time, only individuals who have historically held baitfish permits would be eligible to receive any further permits. Baitfish permit data from 2019 would be used to determine those eligible for permits during the three-year phase out period.

Rationale for the Action

Sanctuary Preservation Area regulations are proposed to be updated so that regulations will be consistent within every SPA, 16 of which are at least partially in South Atlantic federal waters. To achieve this, the existing practice of issuing baitfish permits in SPAs would be eliminated. Baitfishing is one of the only permitted fishing activities allowed within SPAs under current regulations. This proposed update would serve to fulfill the original intent of the SPA zone type to separate conflicting uses.

Background Information

Reduced baitfish availability has been documented to impact seabird and wading bird populations. Therefore, depending on whether fishing effort shifts to other locations and if baitfish harvest decreases, the proposed regulation could have an indirect beneficial impact on baitfish-dependent birds and other species higher on the trophic chain (e.g., barracuda, other pelagic fish, dolphins, and seabirds) that eat baitfish within SPAs. Baitfish permits (for harvest using a lampara net) are already limited by FWC to a small universe of fishermen.

Summary of Public Comments Received So Far

At this time, there has been no public comment submitted on this proposal.

Considerations

FKNMS indicates that the phase-out of issuing baitfish permits in SPAs would have a negligible impact as baitfishing is not restricted in the non-zoned areas of the Sanctuary. Given that 50% of current fishers catch baitfish outside SPAs, the FKNMS believes fishers would be able to catch baitfish in non-zoned areas. FKNMS anticipates a potential economic loss of \$42,356 to commercial baitfishers if they do not adjust their efforts to fish outside of the SPAs.

Topic 3: Fish Feeding Regulations

Proposed Management Action

Alternative 3 would implement a new regulation to clarify prohibitions specific to the practice of fish feeding. To address the potential impact that the feeding of fish, sharks, or other marine species poses for human safety, the environment, and changes in behavior of such species, NOAA would update its regulations to prohibit the feeding of fish, sharks, or other marine species from any vessel and/or while diving. The proposed regulation would not affect the existing exemption which allows discharge of fish, fish parts, chumming materials, or bait used incidental to and only while conducting traditional fishing activities. In conjunction with this proposed prohibition, the following definitions would be added to FKNMS regulations to clarify the specific applicability of this regulation.

Feeding means offering, giving, or attempting to give any food or other substance to fish, sharks, or other marine species except for the purpose of harvesting such marine species as otherwise allowed by state and federal law.

Diving means any person who is wholly or partially submerged in the water and is equipped with a face mask, face mask and snorkel, or underwater breathing apparatus.

Rationale for the Action

Existing FKNMS regulations do not adequately address activities associated with feeding fish, sharks, or other marine life species from vessels or divers. Existing FWC regulations prohibit: (1) divers from engaging in the practice of fish feeding statewide, and (2) anyone from operating any vessel for hire for the purpose of carrying passengers to any site in the marine waters of the state to engage in fish feeding or to allow passengers to observe fish feeding. Current FWC regulations do not extend into Sanctuary South Atlantic federal waters.

Background Information

The practice of fish feeding has resulted in human safety issues and has been shown to alter fish behavior. Recreational fish feeding increases the frequency of predation of fish being fed and may cause fish to become malnourished, stressed, and even cause death.

Summary of Public Comments Received So Far

The prohibition of fish feeding in federal waters minimizes risk to public safety and adverse human impacts on animal behavior. However, some dive tour and ecotour operators oppose the prohibition because it would impact their ability to conduct dive tours where they currently feed fish in federal waters of the FKNMS.

Considerations

Shore-based fish feeding would not be impacted based on Alternative 3. FWC has supported and advocated for federal legislation that would prohibit shark feeding in all federal waters off Florida. The proposed prohibition of fish feeding by the FKNMS under Alternative 3 is slightly more restrictive than current state regulations as current FWC regulations only prohibit fish feeding while divers are in the water.

Topic 4: Protection of large, contiguous habitat – Long Key Tennessee Reef and Carysfort Reef

Proposed Management Action

Currently, a small Conservation Area (CA; 0.2 sq. miles) in federal waters is the only marine zone near Tennessee Reef and it is “transit-only.” Alternative 3 proposes to expand the CA seaward from 0.2 sq. miles to 0.7 sq. miles. Alternative 3 would also create a Sanctuary Preservation Area (SPA) from Long Key State Park in state waters to Tennessee Reef (9.6 sq. miles) with regulations including idle speed and no anchoring. NOAA’s Alternative 4 (which is NOAA’s most restrictive, but not preferred alternative) would make the Long Key Tennessee Reef SPA/CA a transit only zone. Alternative 4 would also modify the existing Carysfort Reef SPA (2 sq. miles) to extend the zone to the shoreline (13 sq. miles). The expanded Carysfort Reef SPA would be a no anchor and idle speed zone.

Rationale for the Action

These proposals would protect large, contiguous, interconnected seagrass, shallow hardbottom, aggregate patch reef, and deep spur-and-groove reef habitats. This would provide some protection to encompass entire life cycles of fish and invertebrates as they grow and move from nearshore waters in Florida Bay to other habitats. Protection of these areas and application of existing and proposed new SPA regulations would have a direct beneficial impact on the habitats and associated wildlife in this area by avoiding adverse impacts associated with human use of this area, including anchoring.

The proposed Long Key Tennessee Reef SPA/CA historically supported large assemblages of ESA-listed staghorn coral, is currently a target for coral restoration, and an important research site to evaluate how changes in environmental conditions impact coral reef ecosystems. Expanding the Carysfort SPA would protect the best developed spur-and-groove reef system in the Upper Florida Keys, which formerly supported extensive thickets of ESA-listed elkhorn/staghorn corals and diverse deep-water reef habitats. This area is currently the largest restoration site for ESA-listed elkhorn/staghorn coral in the Florida Keys. Recent FWC surveys have found a large number of healthy (but susceptible to stony coral tissue loss disease) coral colonies in the proposed expanded area of Carysfort SPA. Furthermore, the expanded area would encompass a historic black grouper spawning aggregation site.

Background Information

The proposed SPAs in Long Key Tennessee Reef and Carysfort Reef are important for recruitment of fishes/invertebrates due to the influence of downstream flow of the Florida Current and Tortugas gyre. A portion of each of the proposed large contiguous habitat, mainly in deeper waters is in South Atlantic federal waters. These areas are similar in size/shape to Western Sambo Ecological Reserve (WSER) and could reasonably be expected to have similar benefits, such as “spillover” effects in which fisheries populations just outside of the closed area are improved. For example, research has shown that the size of spiny lobsters markedly increased within and just outside of WSER. In addition, reef fishes are larger inside WSER as it is large enough to encompass entire red grouper and grey snapper home ranges. Thus, it is expected that species inhabiting these areas would be able to forage, grow, and spawn under full protection throughout their entire life cycle. Aggregations of black grouper are known to occur at a historic spawning aggregation site at Carysfort Reef and mutton snapper and cubera snapper aggregate in reefs adjacent to Carysfort Reef. These sites are important to both fisheries populations and the larger reef community within the Keys and SE Florida and would be protected under Alternative 4.

Summary of Public Comments Received So Far

Supporters of the proposed Long Key Tennessee Reef SPA/CA note that it would protect habitats adjacent to Long Key and that it is directly located adjacent to Florida Bay nursery habitats. They note that no anchor zones will protect diverse hardbottom and coral reef habitats that are characteristic of the area. However, the Long Key Tennessee Reef SPA/CA proposal is somewhat controversial because many find it unreasonable to limit boaters to idle speed as they travel through Hawks Channel, which is a major vessel thoroughfare. Some flats fishers oppose the proposal as it limits access to historical tarpon fishing grounds. Commercial trappers are opposed because they harvest lobsters there during their offshore migration and because there is limited reef and hardbottom in this area.

This proposal for Carysfort Reef SPA is part of NOAA's most restrictive (but not preferred) alternative and is expected to minimize diving/fishing user conflict while preserving important benthic habitat and historical spawning aggregation locations. However, fishers who operate in the region may oppose the proposal as they would be prohibited from fishing within the proposed expanded Carysfort Reef SPA. Additionally, Hawks Channel is a major transit area in the Florida Keys that is relatively deep, and boaters feel the idle speed regulation is too restrictive in such a large area.

Considerations

The Long Key Tennessee Reef Sanctuary Preservation Area/Conservation area would meet goal 2 of the Sanctuary Advisory Council regulatory and zoning alternatives development workplan, which is to "protect large, contiguous, diverse, and interconnected habitats that provide natural spawning, nursery, and permanent residence area for the replenishment and genetic protection of marine life, and protect and preserve all habitats and species." However, although the proposal for Long Key Tennessee Reef was discussed, a location was not recommended by the Ecosystem Protection Working Group. Instead, the proposal was put forth by the Sanctuary Advisory Council so that public comment could be received.

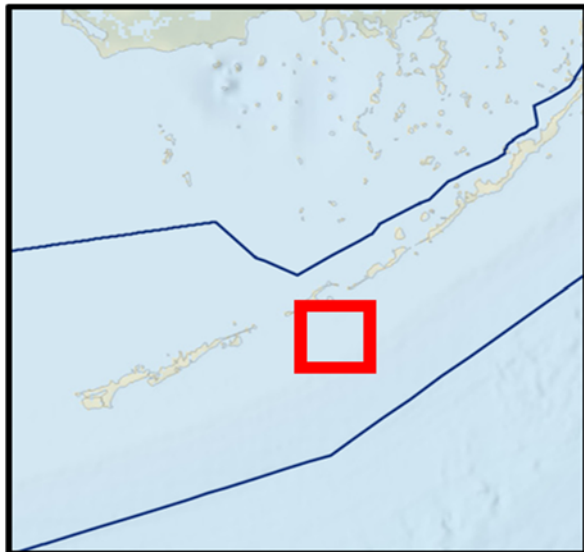


Figure 2. General location of Long Key/Tennessee Reef.

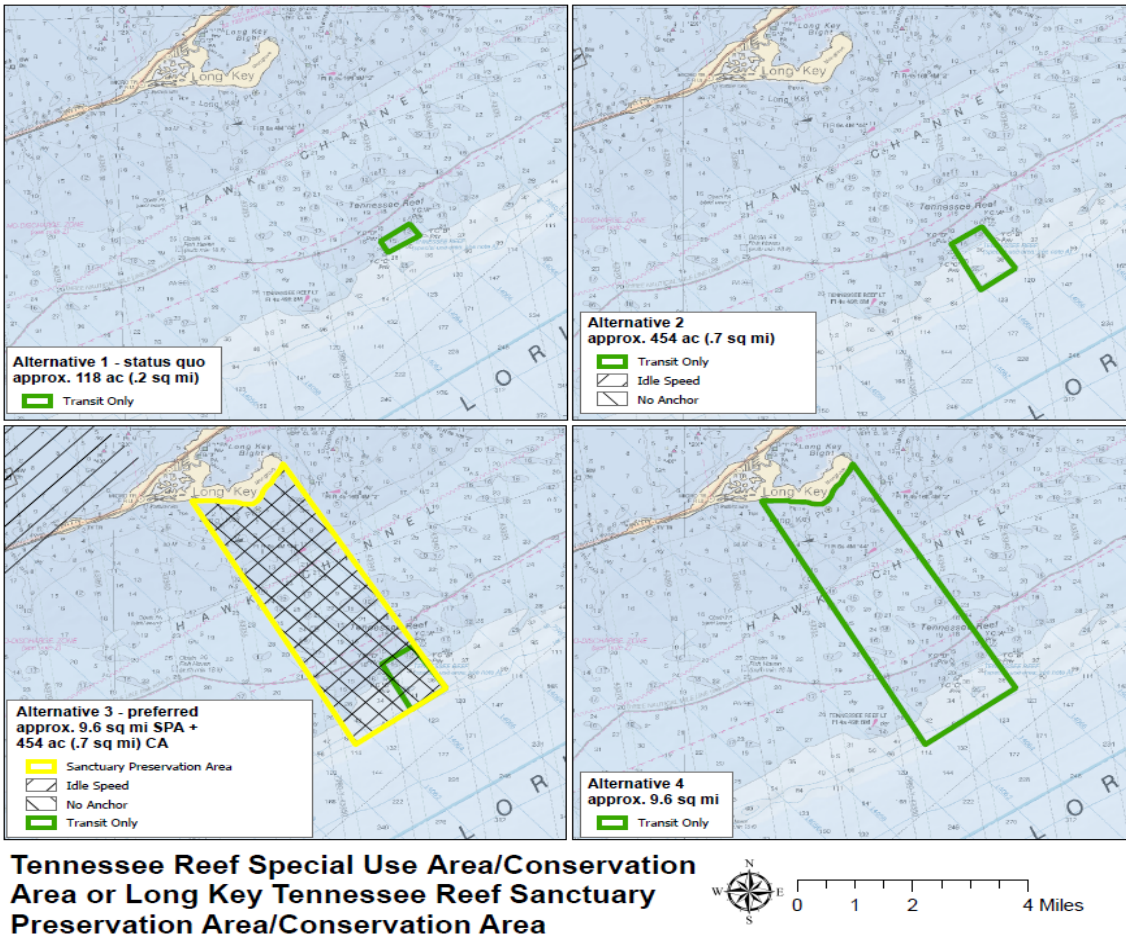


Figure 3. Alternatives for Tennessee Reef Special Use Area/CA and Long Key Tennessee Reef SPA/CA.

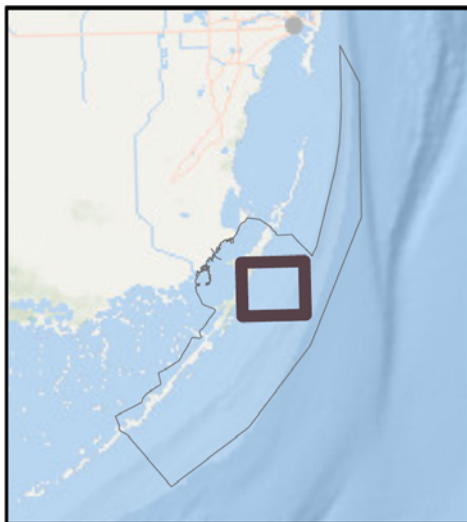


Figure 4. General Location of Carysfort Reef.

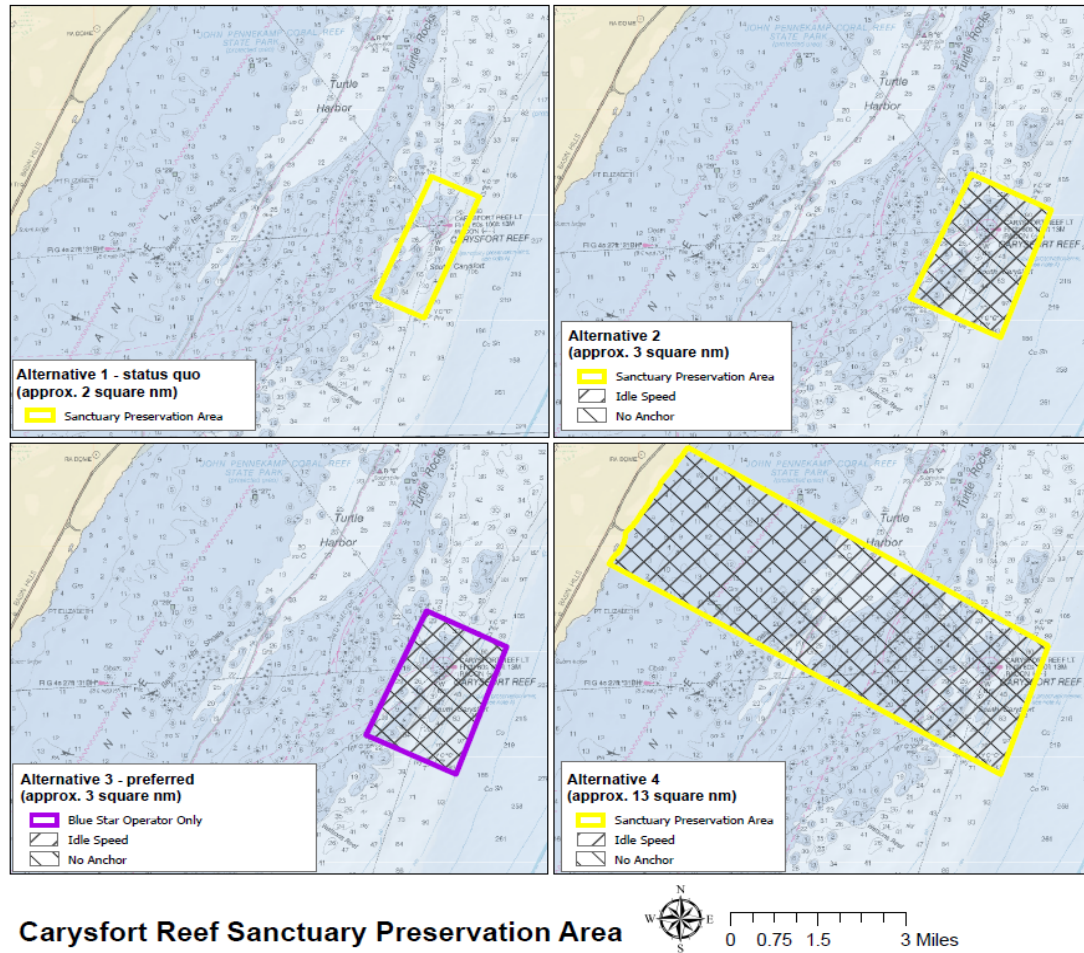


Figure 5. Alternatives for Carysfort Reef SPA.

Topic 5: Expansion of SPAs into Deeper Water

Proposed Management Action

The Sanctuary proposes to expand a portion of existing Sanctuary Preservation Areas, namely Carysfort Reef, Alligator Reef, Looe Key, and Tennessee Reef Special Use Area, to incorporate the reef areas just offshore from the existing SPAs. For these reefs, the southern boundary will be adjusted offshore to just beyond the deep reef areas. Depths will vary.

Rationale for the Action

This expansion will increase protection of deep reef habitats from activities that affect the bottom, including an expected reduction in damage to corals and provide an increased measure of protection for those fish and invertebrates that dwell and shelter on the spur-and-groove forereef SPAs but move off of them for various time frames (daily to multi-day excursions) to the adjacent deep reefs. These deep reef habitats are not well-represented in the current scope of the FKNMS management plan.

Background Information

Much of the background information regarding the increased measure of protection for fish and invertebrates comes from FWC research. For example, acoustically tagged female lobsters routinely made spawning migrations from the patch reefs and the spur-and-groove forereef within Western Sambo Ecological Reserve out to the deep and outlier reefs. Once they spawned, typically within a few days of arriving at the outlier reefs, they returned to the reefs they left. Many females, especially larger ones, conducted multiple spawning migrations. Additionally, studies determined some home ranges of groupers incorporate the shallow reef and the adjacent deep reef, with home range areas ranging from 0.42 sq. miles to 0.75 sq. miles.

Aggregations of black grouper are known to occur at a historic spawning aggregation site at Carysfort Reef and mutton snapper and cubera snapper aggregate in reefs adjacent to Carysfort Reef. These sites are important to both fisheries populations and the larger reef community within the Keys and SE Florida.

Summary of Public Comments Received So Far

There is support within the scientific community for expansion of SPAs into deeper water. Some fishermen also support this expansion because of the “spillover effect” that has been documented in at Western Sambo Ecological Reserve, in which larger lobsters are observed outside the existing boundary. Some recreational/commercial fishers have shown opposition to area closures that would restrict their ability to fish, including the proposed deep-water habitat expansion.

Considerations

This management action is planned for multiple offshore reefs. These areas contain ESA-listed and susceptible coral species and the proposed expansion into deeper water would better protect them and the surrounding habitat. Further expansion into deeper water would also better protect spawning populations of fishes and lobster and could provide added value to fisheries due to the “spillover” effect.

Topic 6: “Limited Access” to Carysfort, Sombrero, and Sand Key SPAs

Proposed Management Action

The FKNMS has selected three Sanctuary Preservation Areas (SPA; Carysfort Reef, Sombrero Reef, and Sand Key) to develop procedures to manage the number of divers that can dive within those SPAs at any one time. Both Carysfort Reef and Sombrero Reef are in South Atlantic federal waters. Alternative 3 proposes to accomplish diver management at these locations by making these locations accessible by Blue Star Diver Operators only. Blue Star Dive Operators have completed extra training with the Sanctuary and commit to a high level of conservation management in their daily operations. The Restoration Blueprint remains silent regarding divers that dive recreationally from their personal vessels.

Rationale

These spur-and-groove reefs at these SPAs are some of the areas of greatest dive and snorkel activity within the FKNMS. An increasing body of knowledge recognizes that non-consumptive divers and snorkelers interact with and impact the reef more than previously believed and increasingly common statements made by local stakeholders in the FKNMS that these areas are being overwhelmed with people led the FKNMS to propose this approach to diver management. This action is also designed to enhance the visitor experience at these reefs by reducing overcrowding at peak use periods. These reefs are also slated as high priority locations for coral restoration.

Background Information

As many as 468 vessels at a time, nearly all of them dive vessels, were observed within these SPAs during aerial surveys conducted in the Sanctuary by FWC. Studies indicate that customers diving with a Blue Star operator are 2.5 times less likely to contact the reef compared to divers with non-Blue Star operators. Hawaii and some countries use permit systems as a tool to cap the number of snorkelers/divers on reefs.

Summary of Public Comments Received So Far

The approach of limiting access to Blue Star Dive Operators proposed by the Sanctuary has caused a large and well-coordinated negative reaction to this management action. A Facebook post claiming that locals will be eliminated from using these reefs has been posted and hundreds of Keys residents have attended the FKNMS information sessions to protest this management action. Since this feedback has occurred, the FKNMS has clarified the intent to manage diver access and not eliminate private recreational users. Some have suggested using mooring buoys as a way to reduce diver impacts to these areas. The City Council of the City of Marathon passed a resolution opposing prohibiting recreational boater access to Sombrero Reef SPA as proposed in Alternative 3 and 4.

Considerations

The overarching intent of this management action is the first attempt to manage diver access and to consider the role that divers may play in the changes observed in the Keys ecosystem. Given that the intent of this management action is to find ways to manage diver access on these high use areas and that the Sanctuary has worked to clarify their intent based on public response, this could be an opportunity for the SAFMC to analyze options and consider offering some alternative approaches, including potential alternative locations, for this action after completing our stakeholder consultation.

The FKNMS proposal to limit access to Bluestar Operators (and recreational users) is likely to present logistical issues and may not effectively address the intent to manage carrying capacity at these SPAs. Mooring buoys could be an alternative to this, but they may lead to user conflicts between commercial operators and other boaters vying for space at mooring buoys.

Topic 7: Creation of new SPAs in South Atlantic Federal Waters

Proposed Management Action

The FKNMS has selected four new areas for Sanctuary Preservation Areas (SPA; Key Largo Dry Rocks-Grecian Rocks-North Dry Rocks, Pickles Reef, Delta Shoal, and Marathon) in South Atlantic federal waters. Alternative 3 proposes to protect these areas with existing SPA regulations, which prohibit discharge, touching or anchoring on coral, and fishing. In addition, anchoring would be prohibited and only idle speed transit would be allowed within the proposed SPAs.

Rationale

Alternative 3 aims at protecting benthic habitat and coral restoration sites.

Background Information

These areas encompass important spur-and-groove habitat that includes back reef and shallow reef crests, sloping reef communities, and deeper drowned spur-and-groove habitats. Furthermore, some locations contain historic ESA-listed elkhorn, staghorn, and pillar corals, as well as several highly-visited shipwreck sites. The Key Largo Dry Rocks-Grecian Rocks-North Dry Rocks SPA contains one of the largest remaining healthy populations of ESA-listed star corals on outer reefs in the Upper Keys. Both proposed Delta Shoal and Marathon SPAs represent sites where coral restoration activities are ongoing.

Summary of Public Comments Received So Far

There have been no public comments received on this topic thus far.

Considerations

This management action is planned for multiple offshore reefs. These areas contain ESA-listed and susceptible coral species and the proposed new SPAs would serve to better protect them and the surrounding habitat. Recent Coral Reef Evaluation and Monitoring Project (CREMP) run by FWC estimates percent coral cover on offshore reefs, which has been impacted by many of factors including disease and bleaching events, is around 2%. The additional protection provided by making these locations SPAs would preserve sensitive benthic habitat while also enabling restoration efforts.

Topic 8: Key Largo Management Area

Proposed Management Action

Alternative 3 would transform Key Largo Existing Management Area (132 sq. miles) into Key Largo Management Area (132 sq. miles) with an additional no anchoring restriction throughout. This area is in federal waters.

Rationale for the Action

Alternative 3 of adding anchoring restriction in Key Largo Management Area would provide long-term benefits to corals and hardbottom habitats as well as species that inhabit, forage in or transit through this large area.

Background Information

Research has shown that there is a high frequency of fragmented corals in Upper Keys high use reefs and that 60% of sites in the Upper Keys had anchor damage during lobster sport season. Dive operators removing debris highlighted anchors as the most common item recovered from Upper Keys. Additional research at sites in the Lower Florida Keys have observed 20% of staghorn corals had damage caused by anchors.

Summary of Public Comments Received So Far

Alternative 3 would provide added protection of reefs in the Upper Keys. Some stakeholders have suggested adding more mooring buoys and creating a permit system to minimize the number of vessels using Key Largo Management Area. This large no-anchoring area would have considerable impacts to bottom fishing, diving, and boating stakeholders who anchor in this area. Some fishermen oppose the anchoring restriction in Key Largo Management Area as the proposal eliminates their ability to bottom fish while anchoring in a very large area. It has also been noted prohibition of anchoring in federal waters of the Key Largo Management Area may result in increased anchoring within John Pennekamp Coral Reef State Park, where anchoring is currently allowed.

Considerations

Alternative 3 aims to minimize anchor damage to corals and hardbottom habitat. Fishing would be allowed in areas where it is not already prohibited, but the proposed anchor prohibition would impact fishers, primarily those targeting bottom fish. However, fishers could drift fish or use a trolling motor instead.

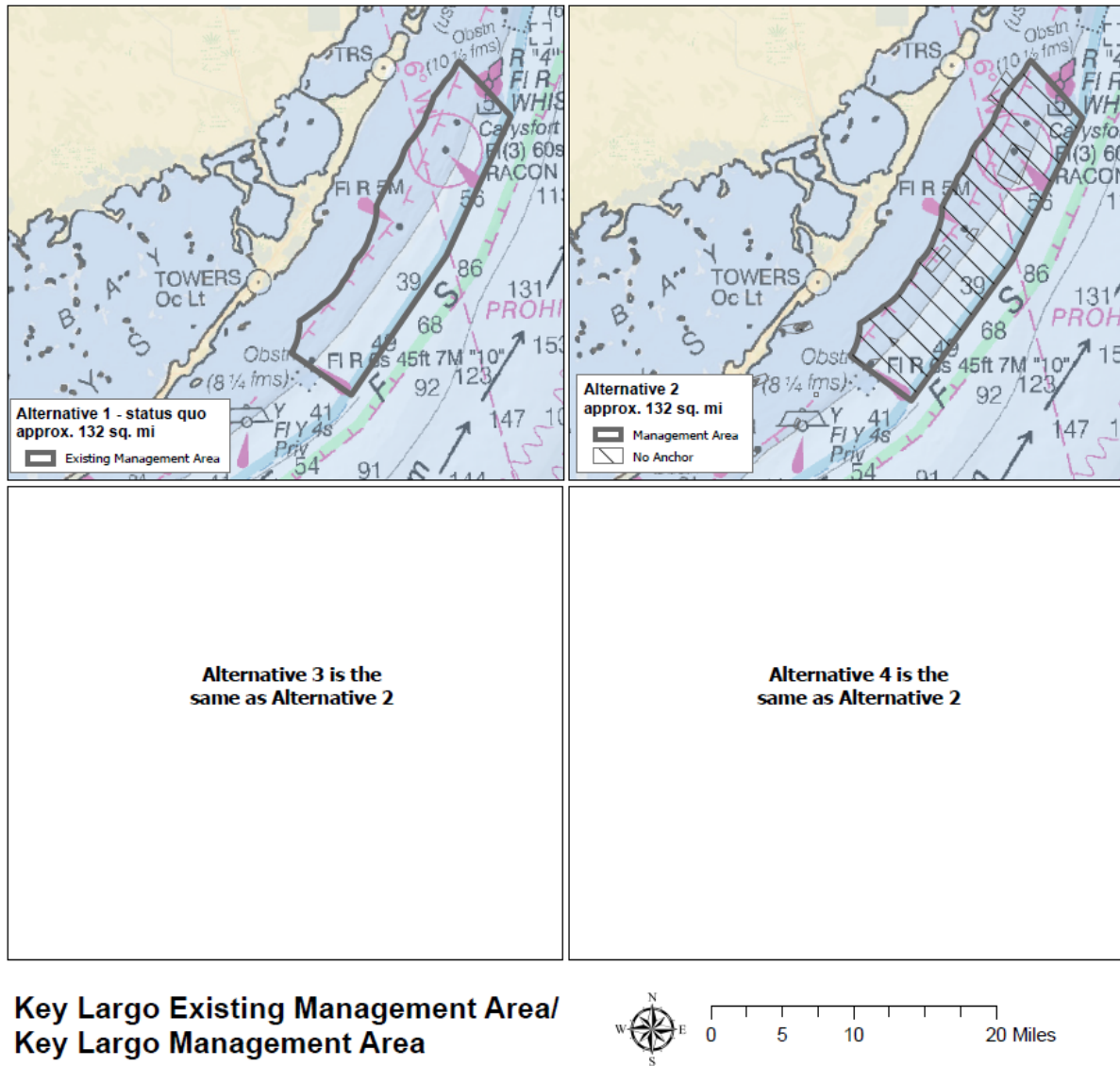


Figure 6. Alternatives for Key Largo Existing Area/Key Largo Management Area.

Topic 9: Tortugas Spawning Corridor Sanctuary Preservation Area

Proposed Management Action

Alternative 3 (as well as alternative 2) would create the Tortugas Corridor Sanctuary Preservation Area (SPA; 39.10 sq. miles) with existing SPA regulations, which prohibit discharge, touching or anchoring on coral, and fishing. In addition, idle speed would be required and all anchoring would be prohibited within the proposed Tortugas Corridor SPA. NOAA's most restrictive alternative (Alternative 4) proposes to make the Tortugas Corridor SPA a transit only zone. A portion of the proposed Tortugas Spawning Corridor SPA is in South Atlantic federal waters.

Rationale for the Action

Alternative 3 aims to provide direct beneficial impacts through protection of fish species that transit through the Tortugas Corridor and through protection of nearby spawning aggregations. NOAA alternatives 2, 3, and 4 aim to reduce damage to benthic habitats caused by anchors. Furthermore, Alternative 4 aims to apply consistent regulations for all of the FKNMS zones in the Tortugas region to provide the most protective measures.

Background Information

The Tortugas corridor in the Tortugas region is known to serve as a transit corridor between Tortugas Ecological Reserve South and Dry Tortugas National Park for spawning mutton snapper. Research performed by FWC has shown that Riley's Hump attracts additional multi-species aggregation sites for black grouper, scamp, ocean triggerfish, and cubera snapper. Spawning in the Dry Tortugas region is likely supplying recruits to reef fish populations throughout southern Florida, including the Dry Tortugas and Florida Keys reef tract, coastal bays along the West Florida Shelf, and along the east coast of Florida north of Miami.

Summary of Public Comments Received So Far

Some believe Alternative 3 is too restrictive as the area is important for recreational/commercial fishers. Fishers have commented that mutton snapper are not being overfished and overfishing is not occurring and, therefore, added protection is unnecessary. Additionally, in this and other proposed larger SPAs, public comment has noted that idle speed/no wake is too restrictive.

Considerations

Tortugas Corridor protects a known fish spawning corridor between Tortugas Ecological Reserve South and Dry Tortugas National Park that connects important spawning, nursery, juvenile, and adult fish habitat needed to sustain large populations of commercially and ecologically important fish and invertebrate species. The protection of this area supports the Sanctuary Advisory Council goal to protect large, contiguous, diverse habitat including natural spawning, nursery, and permanent residence areas needed for sustainable populations of fish and other marine life.

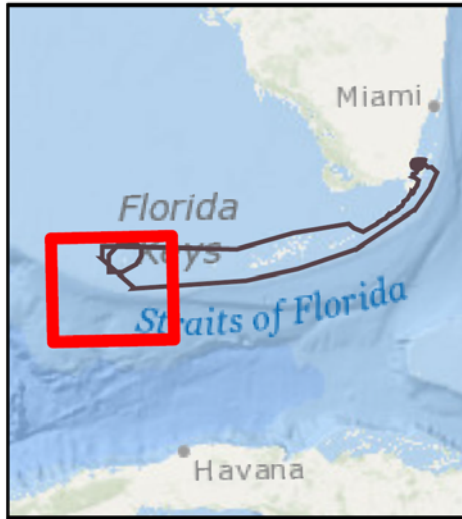


Figure 7. General Area of Proposed Tortugas Spawning Corridor SPA.

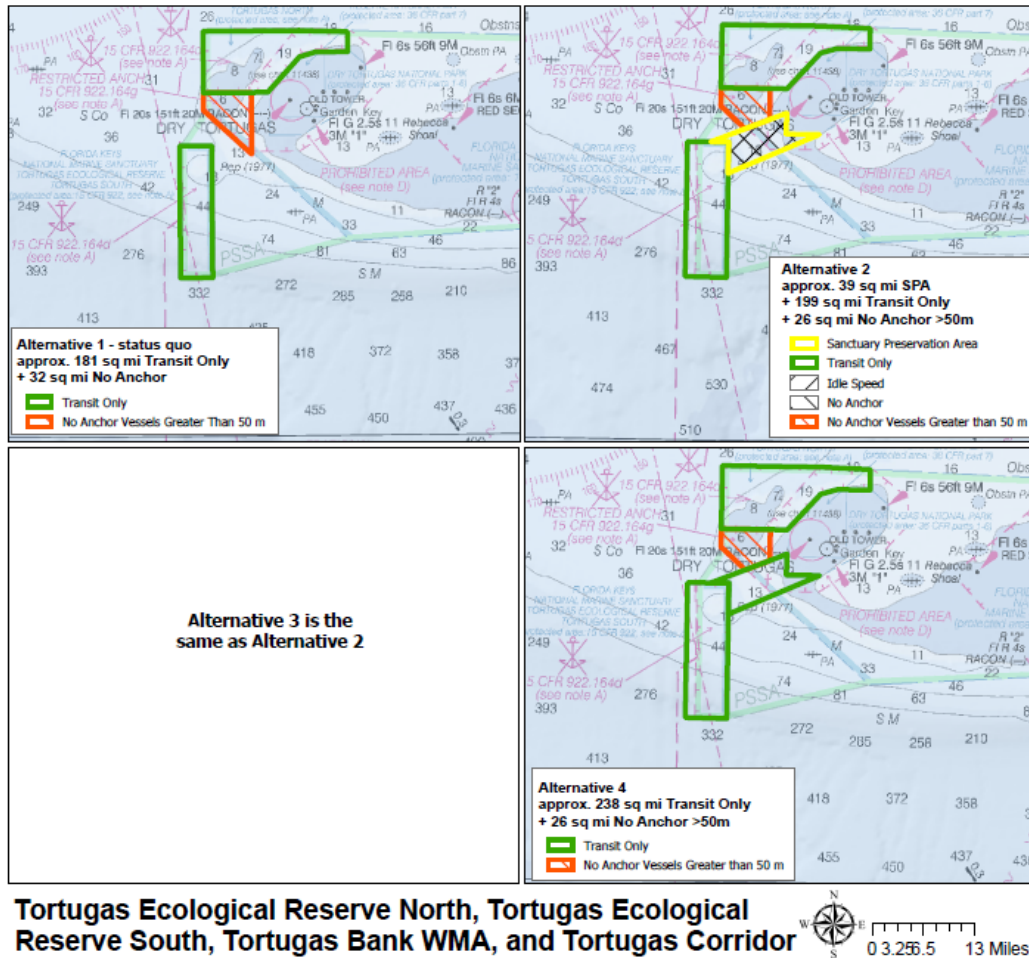


Figure 8. Alternatives for Tortugas Spawning Corridor SPA.

Topic 10: Marquesas Keys Turtle Wildlife Management Area

Proposed Management Action

Alternative 3 would create Marquesas Keys Turtle Wildlife Management Area (12.18 sq. miles) with regulations of idle speed within the protection area. NOAA's most restrictive alternative proposes to create the Marquesas Keys Turtle Conservation Area (12.18 sq. miles) with regulations of transit only at idle speed within the protection area. A little less than half of this area is within state waters.

Rationale for the Action

Alternative 3 aims to decrease disturbance to ESA-listed green sea turtles on an internationally important foraging ground and protect seagrass habitat.

Background Information

The Marquesas Keys are important foraging grounds for green, loggerhead, and hawksbill sea turtles due to availability of continuous seagrass beds at a range of water depths that provide a principle food source. Juveniles are primarily observed within the shallow waters of nearby Mooney Harbour within the Marquesas Keys, whereas sub-adult and adult green sea turtles represent most of the sea turtles observed in the proposed Marquesas Keys Turtle Wildlife Management. Sub-adult and adult green sea turtles form large foraging groups in this region, the only such location known in the world, and foraging occurs year-round.

Summary of Public Comments Received So Far

Alternative 3 would serve to protect an area essential for endangered species that use it as important foraging habitat but would not restrict fishing. However, the preferred alternative may inconvenience boaters transiting to and from the Marquesas Keys region. Some fishers may oppose NOAA's most restrictive alternative as fishing would be prohibited and some fishers seasonally target tarpon, bonefish, and other species in the area.

Considerations

The proposed new speed-restricted Marquesas Keys Turtle Wildlife Management Area would provide significant direct beneficial impacts to seagrass habitats that are recognized as internationally important foraging areas for ESA-listed green sea turtles. Enacting speed restrictions would reduce adverse impacts to seagrass habitats and foraging areas by decreasing the risk of propeller-related damage. Alternative 3 would allow for anchoring and fishing activities, whereas NOAA's most restrictive alternative would prohibit all activities except for transit through the region.

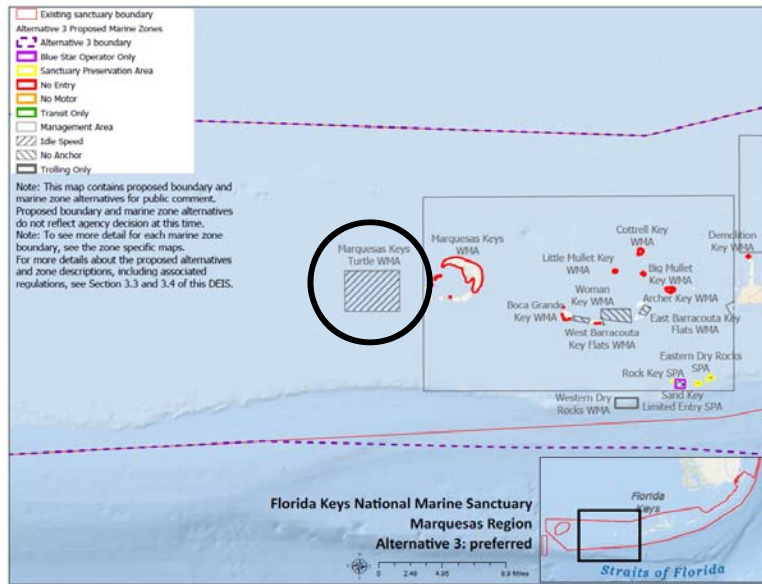


Figure 9. General location for Marquesas Keys Turtle Wildlife Management Area.

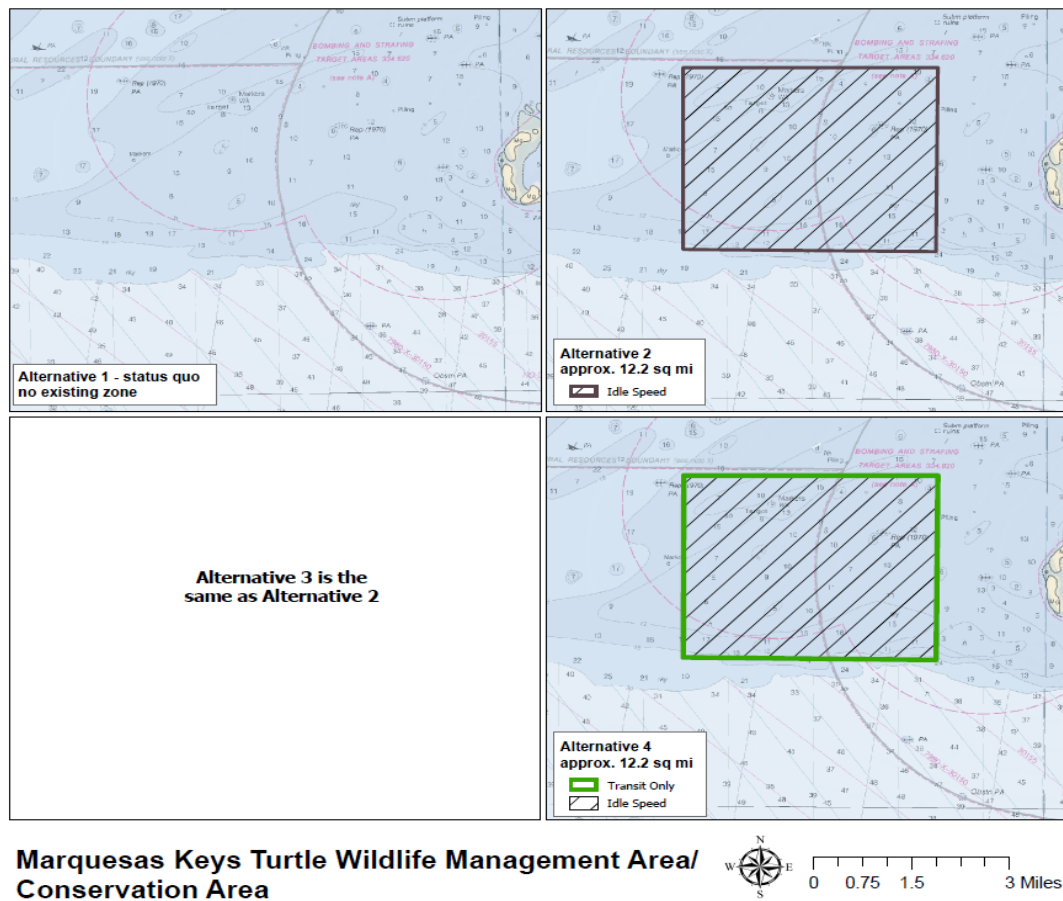


Figure 10. Alternatives for Marquesas Keys Turtle Wildlife Management Area.

Florida Keys National Marine Sanctuary Acronyms and Definitions

ATBA – Area To Be Avoided

Blue Star Program – The Blue Star program recognizes dive and snorkel operators and fishing guides who train staff and educate customers on ecologically-friendly practices.

CA – Conservation Area – proposed new zone type that would replace “Ecological Reserve” and “Special Use Research Only Area” zone types. Regulations for the proposed new area would be transit only, which is no change from existing “Ecological Reserves” and “Special Use Research Only Areas.”

DEIS – Draft Environmental Impact Statement

ER – Ecological Reserve – with certain exceptions, the following activities are currently prohibited in the ERs:

- Discharging any matter except cooling water or engine exhaust.
- Fishing by any means; removing, harvesting, or possessing any marine life.
- Touching or standing on living or dead coral.
- Anchoring on living or dead coral or any attached organism.
- Anchoring when a mooring buoy is available.

The proposed new marine zone for “ER” would reclassify them as “Conservation Areas,” which are the most protective zone type, and regulations would be transit only.

EMA – Existing Management Area – Current activities prohibited in the Key Largo and Looe Key Existing Management Areas:

- Removing, taking, spearing, or otherwise damaging any coral, marine invertebrate, plant, soil, rock, or other material. However, commercial taking of spiny lobster and stone crab by trap and recreational taking of spiny lobster by hand or hand gear consistent with applicable state and federal fishery regulations are allowed.
- Spearfishing.
- Possession of spearfishing equipment, except while passing through without interruption.

Current activities prohibited in the Great White Heron and Key West National Wildlife Refuge Management Areas:

- Operating a personal watercraft, operating an airboat, or water skiing.

Proposed to be replaced by the “Management Area” zone name, which includes a regulation of prohibition of anchoring within MAs.

FKNMS – Florida Keys National Marine Sanctuary

MA – Management Area – proposed to replace the current “Existing Management Area” zone type. National Wildlife Refuges would no longer be referred to as EMAs and would simply be referred to as “National Wildlife Refuges.” All regulations would be maintained, with the exception of a small area in

Key West National Wildlife Refuge where operation of personal watercraft would be permitted. New regulations in the proposed MAs (e.g. Key Largo and Looe Key MAs) would be a prohibition of anchoring.

PSSA – Particularly Sensitive Sea Area

Sanctuary Advisory Council – Community-based advisory groups established to provide advice and recommendations to the superintendents of the national marine sanctuaries. Sanctuary advisory councils provide advice about sanctuary operations and projects, including education and outreach, research and science, regulations and enforcement, and management planning. They are particularly critical in helping a sanctuary during its designation and management plan review process. Council members provide expertise on both the local community and sanctuary resources, strengthen connections with the community, and help build increased stewardship for sanctuary resources.

SPA – Sanctuary Preservation Area – with certain exceptions, the following activities are currently prohibited in the SPAs:

- Discharging any matter except cooling water or engine exhaust.
- Fishing by any means; removing, harvesting, or possessing any marine life. Catch and release fishing by trolling is allowed in Conch Reef, Alligator Reef, Sombrero Reef, and Sand Key SPAs only.
- Touching or standing on living or dead coral.
- Anchoring on living or dead coral or any attached organism.
- Anchoring when a mooring buoy is available.
- Bait fishing is allowed in SPAs by Florida Keys National Marine Sanctuary permit.

The proposed new regulations would eliminate issuing baitfish permits (all SPAs) and catch and release fishing by trolling in four SPAs (Conch Reef, Alligator Reef, Sombrero Reef, and Sand Key). Additional idle speed and no-anchor regulations would be implemented in all SPAs. Fishing by any means would continue to be prohibited in all SPAs.

SUA – Special Use Research Only Areas – the following activities are currently prohibited in SUAs:

- Entry or activity without a Florida Keys National Marine Sanctuary permit.
- Discharging any matter except cooling water or engine exhaust.
- Fishing by any means; removing, harvesting, or possessing any marine life.
- Touching or standing on living or dead coral.
- Anchoring on living or dead coral, or any attached organism.

The proposed new marine zone for “SUAs” would reclassify them as “Conservation Areas,” which are the most protective zone type, and regulations would be transit only.

WMA – Wildlife Management Area – regulations at each WMA proposed are specific to the resource protection goals for each WMA and include idle speed/no wake, no-motor, no-anchor, trolling only, and no access/no entry. Definitions for regulations are as follows:

- “idle speed only/no wake” zone: prohibited from operating a vessel at a speed greater than idle speed only/no wake.

- “no-motor” zone: prohibited from using internal combustion motors or engines for any purposes. A vessel with an internal combustion motor or engine may access a “no-motor” zone only through the use of a push pole, paddle, sail, electric motor or similar means of propulsion.
- “no-access” buffer zone: prohibited from entering the area by vessel.
- “no entry” zone: prohibited from entering or using the area.