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Amendment 11 to the Fishery Management Plan for Coral, Coral Reefs, and Live / Hard Bottom Habitats of the South Atlantic

Amendment 12 to the Fishery Management Plan for the Shrimp Fishery of the South Atlantic Region

Establish a Shrimp Fishery Access Area Along the Northern Extension of the Oculina Bank Habitat Area of Particular Concern

Environmental Assessment, Regulatory Flexibility Act Analysis, and Regulatory Impact Review

September 2025 DRAFT

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Table of Contents

List of Appendices

List of Figures

List of Tables

Summary

Amendment 11 to the Fishery Management Plan (FMP) for the Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP) and Amendment 12 of the FMP for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP) is a joint FMP Amendment that proposes to establish a shrimp fishery access area (SFAA) along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC) where trawling for rock shrimp is currently prohibited. Rock shrimp fishermen requested that the proposed area be reviewed to determine if this historic commercial trawling area could be reopened to rock shrimp fishing.

The Council established the OHAPC through the original Coral FMP in 1982 and prohibited fishing with bottom longline, bottom trawl, dredge, pot, or trap in the OHAPC (49 FR 29607; July 23, 1984). Anchoring within the area by all fishing vessels was prohibited in the OHAPC in 1996 (SAFMC 1995) and the area was later expanded to include newly discovered *Oculina* coral habitat. With the discovery of extensive deepwater coral ecosystems in 2011, the South Atlantic Fishery Management Council (Council) added the northern extension to the OHAPC through Amendment 8 to the Coral FMP in 2014 (SAFMC 2013a). Coral Amendment 8 also allowed transit through the OHAPC by fishing vessels with a valid commercial permit for rock shrimp and rock shrimp on board, and modified vessel monitoring system transmission requirements for such vessels.

While finalizing Coral Amendment 8, the Council received public comments that a discrete area of the proposed northern extension of the OHAPC (the area now proposed in Coral Amendment 11/ Shrimp 12 for SFAA designation) was economically important for the rock shrimp fishery. The rock shrimp industry provided coordinates delineating the area they wished to retain for fishing and further refined those coordinates in March 2014. During their June 2014 meeting, the Council discussed industry concerns and agreed to further discuss and review the issue of whether to allow rock shrimp fishing in an area within the northern extension of the OHAPC. In addition, it was clarified that the review would only focus on the newly closed area, from which rock shrimp industry representatives maintained they would be losing economic benefits.

The Council revisited the SFAA action in June 2020 and recommended moving forward with the action in response to the Presidential Executive Order (EO) 13921 on Seafood Competitiveness and Economic Growth. Coral Amendment 10 addressed the EO 13921 recommendation to "Consider Re-Opening Closed Areas" to commercial fishermen that have lost access to areas that have been traditionally fished. The South Atlantic Council began developing Amendment 10 to the Coral FMP after its September 2020 meeting with an action to establish an SFAA within the OHAPC.

The Council took final action to approve Coral Amendment 10 at its September 2021 meeting and submitted it in December 2021 to the Secretary of Commerce for review pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The Secretary of Commerce published a notice of availability to allow for public comment on Coral Amendment 10 (87 FR 25438; April 29, 2022), and on July 28, 2022, disapproved Coral Amendment 10, citing inconsistencies with the Magnuson-Stevens Act and deficiencies in the analyses and inconsistencies with the goals and objectives of the Coral FMP.

In this joint FMP amendment, the Council is reviewing the deficiencies noted in the disapproval letter for Coral Amendment 10 and evaluating whether to establish an SFAA that would allow access to historic fishing grounds for the rock shrimp fishery within the OHAPC.

What Actions are Being Proposed in This Amendment?

Amendment 11 to the Coral FMP and Amendment 12 to the Shrimp FMP proposes the following:

Action 1. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

Preferred Alternative 2. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Habitat Area of Particular Concern, that is approximately 16.61 NM[2][1]. Allow a shrimp vessel with a valid Commercial Vessel Permit for Rock Shrimp South Atlantic EEZ (Limited Access) to bottom trawl for rock shrimp within the established area bounded by the following coordinates.

Purpose for Action

The purpose of this amendment is to reinstate commercial access to this historically important fishing ground for the rock shrimp fishery by creating a Shrimp Fishery Access Area along the eastern boundary of the northern extension of the Oculina Habitat Area of Particular Concern in an area where the rock shrimp fishery operated historically while minimizing impacts to deepwater coral.

Need for Action

The need for this amendment is to allow the rock shrimp fishery to attain optimum yield while minimizing negative impacts to deepwater coral in the Council's jurisdiction.

[1] NM stands for Nautical Miles

Chapter 1. Introduction

What Actions are Being Proposed?

The proposed action in Amendment 11 to the Fishery Management Plan (FMP) for Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP) and Amendment 12 to the Fishery Management Plan for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP) would allow access to a discrete historic fishing area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC) through establishment of a shrimp fishery access area (SFAA). Fishing in this area was prohibited through regulations implementing Amendment 8 to the Coral FMP (SAFMC 2013a) (80 FR 42423, July 17, 2015; correcting final rule published October 7, 2015, at 80 FR 60565). However, before the finalization of Coral Amendment 8, rock shrimp fishermen requested that the proposed area be reviewed to determine if this specific historic trawling area could be reopened to fishing for rock shrimp.

Who is Proposing the Actions?

The South Atlantic Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) are responsible for managing fish stocks under fishery management plans (FMP) for the Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP), and for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP). The Council develops the amendment to an FMP and sends it to NMFS, who determines whether to approve the amendment and publish a rule to implement the amendment on behalf of the Secretary of Commerce. NMFS is an agency of the National Oceanic and Atmospheric Administration within the Department of Commerce. Guided by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the Council works with NMFS, other partners, and stakeholders to sustainably manage fishery resources in the South Atlantic.

South Atlantic Fishery Management Council

- Responsible for conservation and management of fish stocks in the South Atlantic Region.
- Consists of 13 voting members and 4 non-voting members; voting members include 1 representative from each of the 4 South Atlantic state fishery management agencies, 8 members appointed by the Secretary of Commerce, and the Southeast Regional Administrator of NMFS.
- Responsible for developing fishery management plans and amendments under the Magnuson-Stevens Act; recommends actions to NMFS for implementation.
- Management area is from 3 to 200 nautical miles off the coasts of North Carolina, South Carolina, Georgia, and east Florida through Key West, except for mackerel which is from New York to Florida, and dolphin and wahoo, which is from Maine to Florida.

The Council and NMFS are also responsible for making this amendment available for public comment. The draft environmental assessment (EA) is combined with the amendment and made available to the public during the scoping process, public hearings, and in Council meeting briefing books. In addition, the final EA and amendment will be made available for public comment during any the rulemaking process that would implement the amendment. The final EA and amendment may be found on the Council's website at http://www.safmc.net.

Where is the Project Located?

Management and conservation of coral, coral reefs, and live/hard bottom habitats in waters off the southeastern United States (South Atlantic) in the 3-200 nautical miles U.S. exclusive economic zone (EEZ) (Figure 1.1) is conducted under the Coral FMP (GMFMC & SAFMC 1982). The South Atlantic Council manages over 400 coral species and associated habitat under this FMP (SAFMC, 1982). The OHAPC, as modified through Coral Amendment 8 (SAFMC 2013a), is located in the EEZ off the east coast of Florida (Figure 1.2). The OHAPC protects the known distribution of *Oculina* coral in the region. Management and conservation of shrimp in waters of the South Atlantic EEZ is conducted under the Shrimp FMP. This FMP includes three penaeid shrimp species, brown, pink, and white shrimp as well as one deepwater shrimp species, rock shrimp.

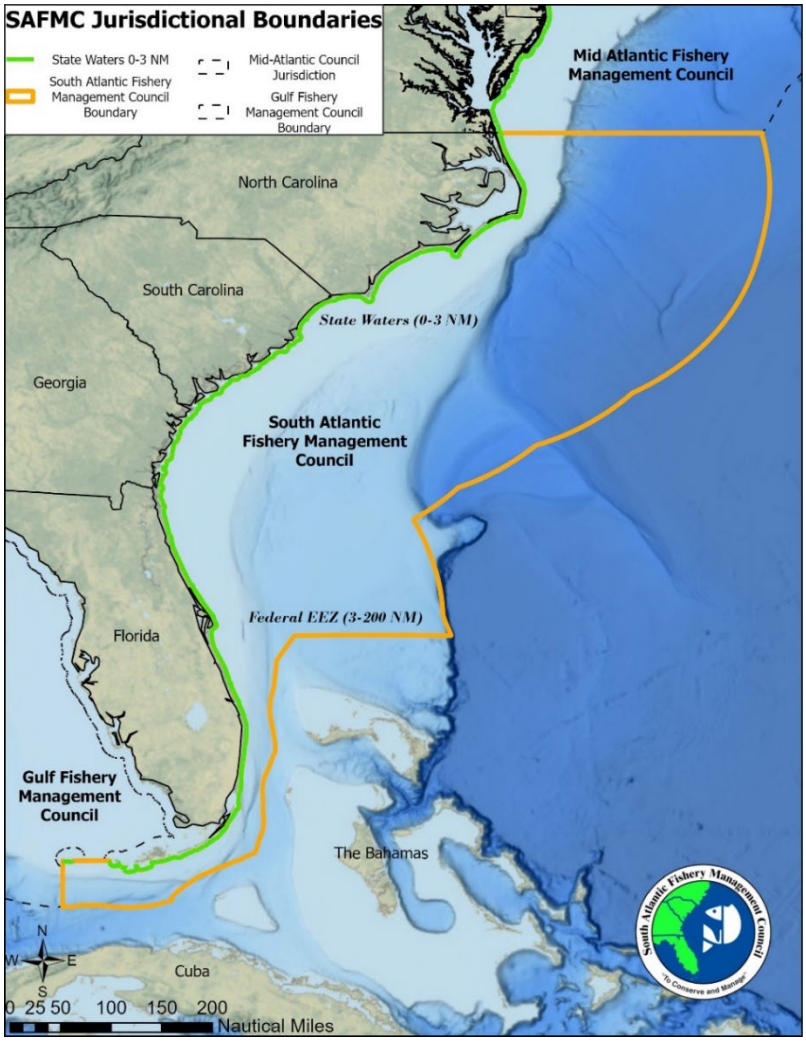


Figure 1.1. Jurisdictional boundaries of the South Atlantic Fishery Management Council.

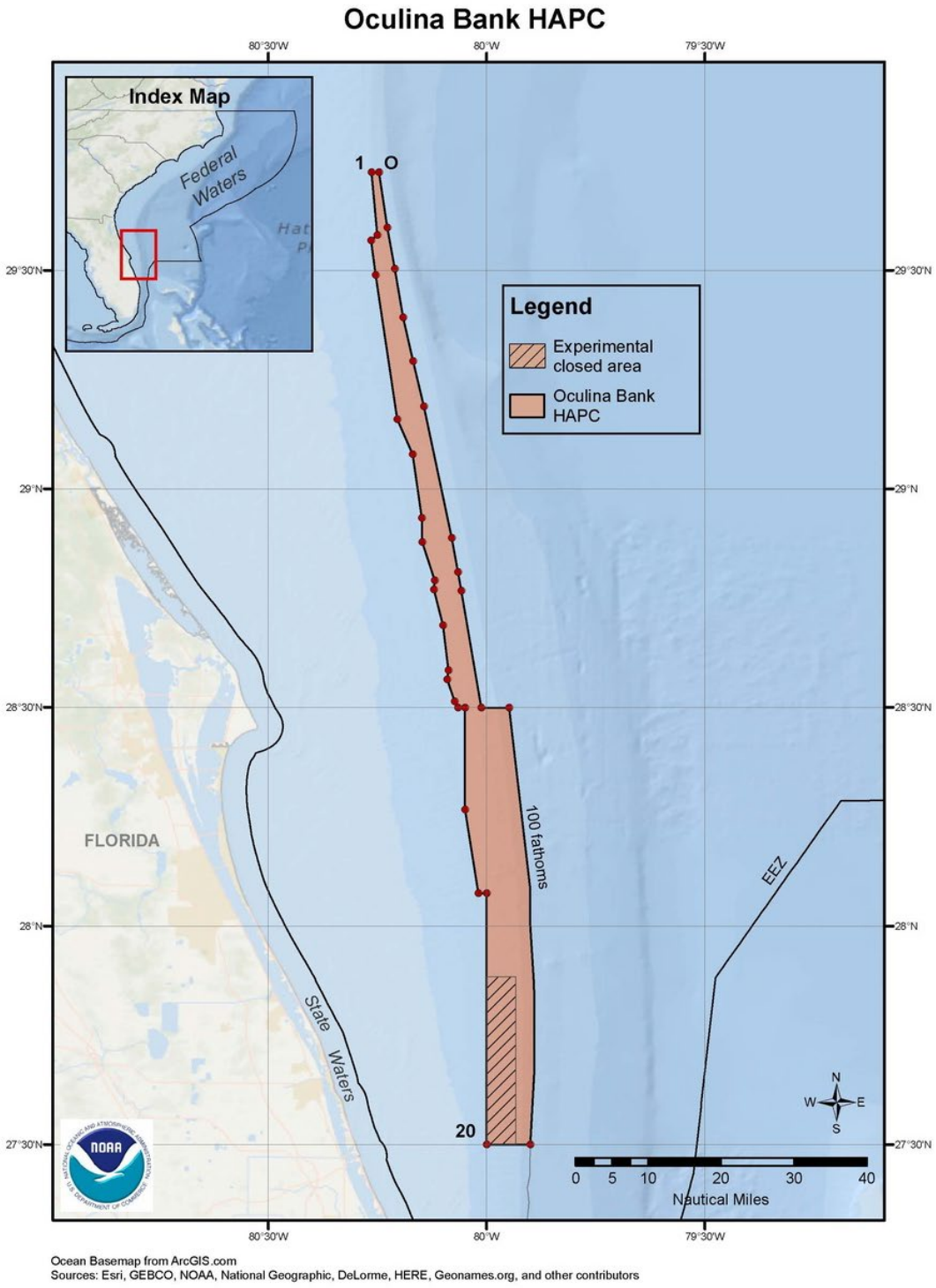


Figure 1.2. Map of the OHAPC. The OHAPC is the entire area in red. The experimental closed area, which is within the OHAPC, is applicable only for the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region.
Source: https://www.fisheries.noaa.gov/resource/map/oculina-bank-hapc-and-experimental-closed-area-fishery-management-area-map-gis-data.

Why are the Council and NMFS Considering Action?

Purpose for action

The purpose of this amendment is to reinstate commercial access to this historically important fishing ground for the rock shrimp fishery by creating a Shrimp Fishery Access Area along the eastern boundary of the northern extension of the Oculina Habitat Area of Particular Concern in an area where the rock shrimp fishery operated historically while minimizing impacts to deepwater coral.

Need for Action

The need for this amendment is to allow the rock shrimp fishery to attain optimum yield while minimizing negative impacts to deepwater coral in the Council's jurisdiction.

Discussion

The Council approved Amendment 8 to the Coral FMP (Coral Amendment 8) to expand the boundaries of the OHAPC at its September 2013 meeting. The National Marine Fisheries Service (NMFS), on behalf of the Secretary of Commerce, approved the amendment on August 18, 2014, and the final rule to implement Coral Amendment 8 became effective on August 17, 2015 (80 FR 42423; July 17, 2015; correcting final rule published October 7, 2015, at 80 FR 60565).

The Council received public comment when it was finalizing Coral Amendment 8 that a discrete area along the eastern boundary of the northern extension of the OHAPC, was an important fishing ground for rock shrimp. The commercial rock shrimp industry provided the location coordinates for the historic fishing area during the development of Amendment 8. During the May 2013 Deepwater Shrimp Advisory Panel (AP) meeting, AP members indicated vessel monitoring system (VMS) data verified past rock shrimp fishing in the proposed area. The AP Chair also noted that the rock shrimp portion of the shrimp fishery is transitory as fishing effort changes based on upwelling conditions and shifting catch composition.

During their June 2014 meeting, the South Atlantic Council discussed industry concerns and agreed to further discuss and review the issue of whether to allow rock shrimp fishing in an area within the northern extension of the OHAPC. In addition, the Council clarified that the review would only focus on the newly expanded closed area in the OHAPC, as this was the closed area from which rock shrimp industry representatives maintained they would be losing economic benefits. South Atlantic Council members considered what information would be needed for the review, passed a motion requesting the NMFS Southeast Fisheries Science Center provide: VMS data up to 2014; South Atlantic rock shrimp bycatch results from observer trips; detailed mapping and percent of area mapped of the OHAPC northern extension; observations on algae in the southern area of the rock shrimp fishery; updated landings through 2014; updated trip costs and value; and electronic logbook data from Gulf of Mexico shrimp vessels operating in the South Atlantic by September 1, 2014. In June 2015, the South Atlantic Council decided to develop an amendment to consider establishing an SFAA for rock shrimp fishing along the eastern boundary of the northern extension of the OHAPC.

Development of Amendment 10 to the Coral FMP (Coral Amendment 10) began following the South Atlantic Council's direction at its September 2020 meeting. Coral Amendment 10 would have established a shrimp fishery access area (SFAA) along the eastern boundary of the northern

extension of the OHAPC, where trawling for rock shrimp is currently prohibited. The South Atlantic Council took final action to approve Coral Amendment 10 at its September 2021 meeting, and then submitted it to the NMFS, on behalf of the Secretary of Commerce, for review in December 2021.

During the development of Coral Amendment 10, NMFS published a notice of availability pursuant to section 304(a)(1) of the Magnuson-Stevens Act and accepted public comments on the amendment. NMFS received 353 comment submissions during the public comment period on the notice of availability for Coral Amendment 10. Several of the submissions consisted of a list of individual signatures on form letters in opposition to the action. Inclusion of those individuals brings the public comment count to over 32,200 individuals. Comment submissions were from commercial and recreational fishermen, fishing organizations, environmental groups, and the general public, with most comments in opposition to establishing the proposed SFAA. The comments in support of the amendment (approximately 30) were made by commercial rock shrimp fishermen, seafood dealers, restaurateurs, the Southern Shrimp Alliance, and the Florida Fish and Wildlife Conservation Commission.

Comments opposing the action emphasized the following main points:

- The proposed action does not minimize adverse fishing impacts to essential fish habitat (EFH).
- The proposed action is inconsistent with the goals and objectives of the Coral FMP, specifically in regards to protection of EFH.
- The proposed action is not based on best scientific information available because the Council disregarded their Coral and Habitat and Ecosystem APs recommendations to select the no action alternative. Also, the Council concluded that the degree and likelihood of adverse impacts were unknown, and thus not based on the best scientific information available.
- The proposed action does not provide an adequate buffer to minimize adverse impacts to coral from bottom trawling. The Coral AP recommended a minimum buffer of 1,000 meters (m) to reduce potential impacts from direct trawling and sedimentation.
- The proposed action of opening a previously closed area counters the Biden Administration's goal of conserving at least 30% of U.S. lands by 2030.
- The proposed action poses a high potential for adverse effects to the ecosystem for very small economic gains to the industry.

The NMFS, on behalf of the Secretary of Commerce, disapproved Coral Amendment 10 and stated Amendment 10 and its supporting analyses did not adequately demonstrate how the amendment was consistent with:

- Section 303(a)(7) of the Magnuson-Stevens Act, which requires FMPs to minimize to the extent practicable the adverse effects of fishing on essential fish habitat;
- Section 301(a)(9) of the Magnuson-Stevens Act, which requires fishery conservation and management measures to minimize bycatch to the extent practicable and, to the extent bycatch cannot be avoided, minimize the mortality of such bycatch; and
- Goals and objectives of the Coral FMP, specifically in regards to protection of essential fish habitat**.**

Under Section 304(a)(4) of the Magnuson-Stevens Act, the Council has the opportunity to remedy the deficiencies in Coral Amendment 10 as listed above and then resubmit a revised amendment to NMFS. Additionally, upon further review, the Council determined that the establishment of the SFAA should be done through a joint amendment to the Shrimp FMP and the Coral FMP. In developing the joint amendment, the Council is reviewing the reasons Coral Amendment 10 was disapproved and evaluating whether to establish an SFAA in the OHAPC.

1.1 What is the History of Management for Coral?

Management of coral resources was originally established in the FMP for Coral and Coral Reefs of the Gulf of Mexico and South Atlantic (Coral FMP) by the Gulf (previously Gulf of Mexico) Fishery Management Council (Gulf Council) and the South Atlantic Council in 1982 (GMFMC & SAFMC 1982). The South Atlantic Council subsequently established a separate FMP for Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP, SAFMC 1982). Below are amendments to the Coral FMP addressing gear and harvest restrictions within the South Atlantic EEZ.

Coral FMP

The Councils' intent in the Coral FMP was to optimize the benefits generated from the coral resource while conserving the coral and coral reefs. Specific management objectives addressed through the Coral FMP were to: (1) develop scientific information necessary to determine feasibility and advisability of harvest of coral; (2) minimize, as appropriate, adverse human impacts on coral and coral reefs; (3) provide, where appropriate, special management for Coral Habitat Areas of Particular Concern (HAPC); (4) increase public awareness of the importance and sensitivity of coral and coral reefs; and (5) provide a coordinated management regime for the conservation of coral and coral reefs.

The Coral FMP implemented the following management measures for coral and coral reefs: (1) disallowed any level of foreign fishing and established the domestic annual harvest to equal the optimum yield; (2) prohibited the taking of stony corals and sea fans or the destruction of these corals and coral reefs anywhere in the EEZ of the Gulf and South Atlantic Councils' (Councils) area of jurisdiction; (3) established that stony corals and sea fans taken incidentally in other fisheries must be returned to the water in the general area of capture as soon as possible (with the exception of the groundfish, scallop, or other similar fisheries where the entire unsorted catch is landed, in which case stony corals and sea fans may be landed but not sold); (4) established that the Councils may notify the Secretary of the threat of widespread or localized depletion from overharvest of one or more species of octocorals and recommend specific actions; (5) established a permit system for the use of chemicals for the taking of fish or other organisms that inhabit coral reefs; (6) established a permit system for taking prohibited corals for scientific and educational purposes; and (7) identified and established HAPCs and established time and area restrictions in HAPCs. The Oculina Bank HAPC (OHAPC) was established in the Coral FMP, and fishing with bottom longlines, traps, pots, dredges and bottom trawls was prohibited.

Coral FMP Amendment 1

Amendment 1 was a joint amendment with the Gulf Council. It implemented a combined octocoral quota for Gulf and South Atlantic EEZ.

Coral FMP Amendment 2

Amendment 2 was a joint amendment with the Gulf Council. It provided definitions of live rock and allowable octocoral, established various prohibitions, and required a permit for aquaculture operations.

Coral FMP Amendment 3

Amendment 3 established a separate FMP for the South Atlantic, and it implemented the following: (1) established a live rock aquaculture permit system for the South Atlantic EEZ; (2) prohibited octocoral harvest north of Cape Canaveral to prevent expansion of the shrimp fishery to areas where octocorals constitute a more significant portion of the live/hard bottom habitat; and (3) prohibited anchoring of all fishing vessels in the OHAPC.

Coral FMP Amendment 4

Amendment 4, included in the Comprehensive Essential Fish Habitat Amendment, expanded the OHAPC to an area bounded to the west by 80°W., to the north by 28°30' N., to the south by 27°30' N., and to the east by the 100 fa (600 ft) depth contour. Amendment 4 expanded the OHAPC to include the area closed to rock shrimp harvest. The expanded OHAPC is 60 nm long by about 5 nm wide although the width tracks the 100 fa (600 ft) depth contour rather than a longitude line. Within the expanded OHAPC area, no person may:

1. Use a bottom longline, bottom trawl, dredge, pot, or trap.
2. If aboard a fishing vessel, anchor, use an anchor and chain, or use a grapple and chain.
3. Fish for rock shrimp or possess rock shrimp in or from the area on board a fishing vessel.

Coral FMP Amendment 5 included in the Comprehensive Sustainable Fisheries Act Amendment

The amendment addressed definitions and other required provisions in Fishery Management Plans of the South Atlantic Region. It also modifies the framework procedures in the South Atlantic Fishery Management Council's FMPs to allow the addition of biomass levels and age-structured analyses to these FMPs.

Coral FMP Amendment 6 included in Comprehensive Ecosystem-Based Amendment 1

The amendment established deepwater coral HAPCs (CHAPC) and prohibited the use of bottom tending gear in these areas, established "Shrimp Fishery Access Areas" within the Stetson-Miami Terrace CHAPC and established "Allowable Golden Crab Fishing Areas" within the Stetson-Miami Terrace and Pourtalés Terrace CHAPCs.

Coral FMP Amendment 7

Amendment 7 modified management of octocorals in the South Atlantic, special management zones off South Carolina, and sea turtle release gear requirements for the snapper grouper fishery. It also designated essential fish habitat (EFH) and EFH-HAPC for multiple fishery management plans.

Coral FMP Amendment 8

With the discovery of extensive deepwater coral ecosystems, the South Atlantic Council added the northern extension of the OHAPC through Coral Amendment 8 in 2013. Coral Amendment 8 also allowed transit through the OHAPC by fishing vessels with rock shrimp on board, and modified vessel monitoring system requirements for rock shrimp fishermen transiting through the OHAPC with rock shrimp on board.

Coral FMP Amendment 9

Amendment 9 was included in the Comprehensive Dealer Reporting Amendment. It modified permitting and reporting requirements for seafood dealers receiving federally managed species under eight fishery management plans.

Coral FMP Amendment 10

The goal of Amendment 10 was to establish a Shrimp Fishery Access area along the western boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC) where fishing for rock shrimp would be allowed. The area under consideration was once utilized by the fishery but access to it was restricted with the implementation of Coral Amendment 8 in 2014. This amendment was disapproved by the Secretary of Commerce in 2022.

1.2 What is the History of Management for Shrimp?

Below are amendments to the FMP for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP) addressing rock shrimp within the South Atlantic EEZ.

Shrimp FMP

The fishery management plan established the goals and objectives for the federal management of white shrimp, later adding brown, pink, and rock shrimp. This action also provided South Atlantic states with the ability to request concurrent closure of the white shrimp in the EEZ adjacent to their closed state waters following severe winter cold weather; established a buffer zone extending seaward from shore 25 nm, inside which no trawling is allowed with a net having less than 4 inches stretch mesh during an EEZ closure. The plan also provided for transit through the EEZ during closure of white shrimp. The plan provided an exemption for rock shrimp to allow harvest of rock shrimp to be prosecuted with minimal disruption during a closure of federal waters for protection of white shrimp.

Shrimp FMP Amendment 1

This action added rock shrimp to the management unit and limited the impact of the rock shrimp portion of the shrimp fishery on essential bottom habitat by prohibiting trawling for rock shrimp east of 80° W longitude between 27°30' N. latitude and 28°30' N. latitude in depths less than 100 fathoms; and implemented measures to ensure adequate reporting and monitoring.

Shrimp FMP Amendment 2

Amendment 2 added pink shrimp to the management unit, defined overfishing for brown and pink shrimp; defined optimum yield for brown and pink shrimp, required the use of certified bycatch reduction devices (BRDs) on all penaeid shrimp trawls in the EEZ, and established a framework for certification of BRD devices.

Shrimp FMP Amendment 3

Amendment 3, which was included in the Comprehensive EFH Amendment, identified EFH and established EFH- HAPC for penaeid shrimp in the South Atlantic. This amendment also implemented a voluntary vessel monitoring system (VMS) within the rock shrimp fishery.

Shrimp FMP Amendment 5

This action addressed requirements for rock shrimp including the establishment of a limited access program requiring limited access endorsements for owners of vessels who qualified; required operator permits; established a minimum mesh size for the cod end of a rock shrimp trawl in the EEZ off Florida and Georgia of 1 7/8 inches to allow the escapement of juvenile shrimp; and required the use of VMS for vessels operating in the South Atlantic to protect increase enforcement capability and protect habitat, especially the OHAPC off the East Coast of Florida that is closed to trawling.

Shrimp FMP Amendment 6

Amendment 6 established a federal permit for the penaeid (pink, white, and brown) shrimp, required certified BRDs in the rock shrimp portion of the shrimp fishery, amended the BRD testing protocol and criteria for certification, established a method to monitor and assess bycatch in the shrimp fishery, and addressed stock status determination criteria.

Shrimp FMP Amendment 7

Shrimp Amendment 7 addressed the landing requirements for rock shrimp limited access endorsements, reinstated endorsements lost due to either to not meeting the landing requirement in one of four consecutive calendar years or not renewing the endorsement on time; renamed the permit/endorsement system to minimize confusion; required verification of a VMS to renew, reinstate or transfer a limited access endorsement; and required provision of economic data by federal shrimp permit holders.

Shrimp FMP Amendment 8

Shrimp Amendment 8, part of the Comprehensive Ecosystem- Based Amendment 1, addressed mapping requirements for EFH and established SFAAs in the Stetson Miami Terrace CHAPC.

Shrimp FMP Amendment 9

This action addressed the criteria process for a state to request a concurrent closure of South Atlantic penaeid shrimp in the adjacent EEZ during severe winter weather and revise the overfished status determination criteria for pink shrimp.

Shrimp FMP Amendment 10

Shrimp Amendment 10 included in the Comprehensive Dealer Reporting Amendment. Modified permitting and reporting requirements for seafood dealers receiving federally managed species under eight fishery management plans.

Shrimp FMP Amendment 11

Shrimp Amendment 11 modified transit provisions for cold weather closed areas for the penaeid (brown, pink, and white) shrimp fishery.

1.3 Coral FMP Goals and Objectives

- Optimize the benefits generated from the coral resource while conserving the coral and coral reefs
- Minimize adverse human impacts on coral, coral reefs and live hard bottom habitat
- Designate Coral Habitat Areas of Particular Concern (C-HAPCs) to protect coral and live bottom habitat
- Increase public awareness of the importance and sensitivity of coral and coral reefs
- Provide a coordinated management regime for the conservation of coral and coral reefs.

1.4 Shrimp FMP Goals and Objectives

- Eliminate fishing mortality on over-wintering white shrimp following severe winter cold kills.
- Reduce the bycatch of non-target finfish, invertebrates and threatened, protected and endangered species.
- Coordinate development of measures reducing bycatch with South Atlantic states to enhance enforceability of both state and federal regulations.
- Enhance compliance of trawl fishermen participating in a transboundary penaeid shrimp fishery through standardization of bycatch reduction strategies.
- Encourage states with mariculture facilities to carefully monitor these operations and require safeguards to prevent exotic species from escaping and/or diseases from entering the environment.

- Reduce or eliminate loss and/or alteration of the habitat on which shrimp depend or degradation of water quality through pollution that would reduce shrimp production.
- Provide a mechanism to manage rock shrimp under the fishery management plan for the shrimp fishery in the South Atlantic region.
- Minimize impacts of the rock shrimp fishery on coral, coral reefs and live/hard bottom habitat in the South Atlantic region.
- Implement permit and reporting requirements needed to ensure necessary data are provided by the rock shrimp industry.
- Manage the resource to provide for higher sustainable net benefits by taking the first step in reducing the current overcapacity in the rock shrimp fishery.
- Remove latent permits from the rock shrimp fishery and restrict future entrants so as not to exacerbate the overcapacity problem in the future.
- Protect the interest of traditional user groups in the rock shrimp fishery. Traditional users also tend to be more familiar with management regulations pertaining to their fishery as opposed to new entrants who enter a fishery and participate infrequently.
- Decrease fishing mortality on unmarketable small/juvenile rock shrimp with the goal of increasing future yield in the rock shrimp industry from reduced discards of small shrimp.
- Improve enforcement of current fishery management regulations, particularly with regard to illegal fishing in the Oculina Bank HAPC, by requiring vessel monitoring systems on rock shrimp vessels.
- Protect the interests of vessel owners who are not operators and increase compliance with management regulations by the requirement for operator permits for rock shrimp vessels.
- Ensure that sufficient effort remains active to sustain rock shrimp fishery and infrastructure.

Chapter 2. Proposed Actions

2.1. Action 1. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

2.1.1. Alternatives

Alternative 1 (No Action). No person may use a bottom longline, bottom trawl, dredge, pot, or trap in the Oculina Bank Habitat Area of Particular Concern. If aboard a fishing vessel, no person may anchor, use an anchor and chain, or use a grapple and chain. There are no shrimp fishery access areas within the Oculina Bank Habitat Area of Particular Concern.

Preferred Alternative 2. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern, that is approximately 16.61 NM[22]. Allow a shrimp vessel with a valid Commercial Vessel Permit for Rock Shrimp South Atlantic EEZ (Limited Access) to bottom trawl for rock shrimp within the established area bounded by the following coordinates.

Table 2.1.1.1 Latitude and Longitude for Preferred Alternative 2.

Point	Latitude	Longitude
Origin	29°17′31.98″	80°10′22.02″
1	29°10′58.98″	80°08′39.00″
2	29°03′34.98″	80°07′28.98″
3	28°54′25.02″	80°05′22.98″
4	28°48′36.00″	80°04′22.02″
5	28°30′00.00″	80°01′01.02″
6	28°30′00.00″	80°00′46.02″
7	28°46′00.84″	80°03′28.50″
8	28°48′37.14″	80°03′56.76″
9	28°53′18.36″	80°04′48.84″
10	29°11′19.62″	80°08′36.90″
11	29°17′33.96″	80°10′06.90″
Origin	29°17′31.98″	80°10′22.02″

Alternative 3. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern that is approximately 24.16 NM[2]. Allow a shrimp vessel with a valid Commercial Vessel Permit for Rock Shrimp South Atlantic EEZ (Limited Access) to bottom trawl for rock shrimp within the established area bounded by the following coordinates.

[2] NM stands for Nautical Miles

Table 2.1.1.2 Latitude and longitude for Alternative 3.

Point	Latitude	Longitude
Origin	29°17′31.98″	80°10′22.02″
1	29°11′19.98″	80°8′54.00″
2	28°53′15.00″	80°5′27.00″
3	28°48′36.00″	80°4′33.00″
4	28°45′57.00″	80°4′4.98″
5	28°30′00.00″	80°01′01.02″
6	28°30′00.00″	80°00′46.02″
7	28°46′00.84″	80°03′28.50″
8	28°48′37.14″	80°03′56.76″
9	28°53′18.36″	80°04′48.84″
10	29°11′19.62″	80°08′36.90″
11	29°17′33.96″	80°10′06.90″
Origin	29°17′31.98″	80°10′22.02″

2.1.2. Discussion

Alternative 1 (No Action) would keep all the current regulations in place protecting *Oculina* coral and would not establish a shrimp fishery access area (SFAA) along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC).

Preferred Alternative 2 and **Alternative 3** would establish an SFAA to reopen historic shrimp fishing grounds to the rock shrimp fishery along the northern extension of the OHAPC that were closed in Coral Amendment 8 and became effective August 17, 2015 (80 FR 42423; July 17, 2015; correcting final rule published October 7, 2015, at 80 FR 60565).. During the South Atlantic Council's final discussions to approve Coral Amendment 8, the Council agreed to further discuss in the future whether to allow rock shrimp fishing in an area within the northern extension of the OHAPC. This joint amendment contains the current Council's review, evaluation, and analysis of reopening this area to commercial rock shrimp fishers.

Preferred Alternative 2 would establish an SFAA that encompasses approximately 16.61 NM^2 and is based on coordinates presented by rock shrimp fishermen as part of the December 2013 Council meeting (Figure 2.1.1). This set of coordinates was reaffirmed during the November 2020 meeting of the Deepwater Shrimp Advisory Panel. The distance of the western boundary of the SFAA in **Preferred Alternative 2** ranges from .049 to .051 NM. On the eastern boundary of the SFAA, along the edge of the existing OHAPC, the average distance is .052 NM.

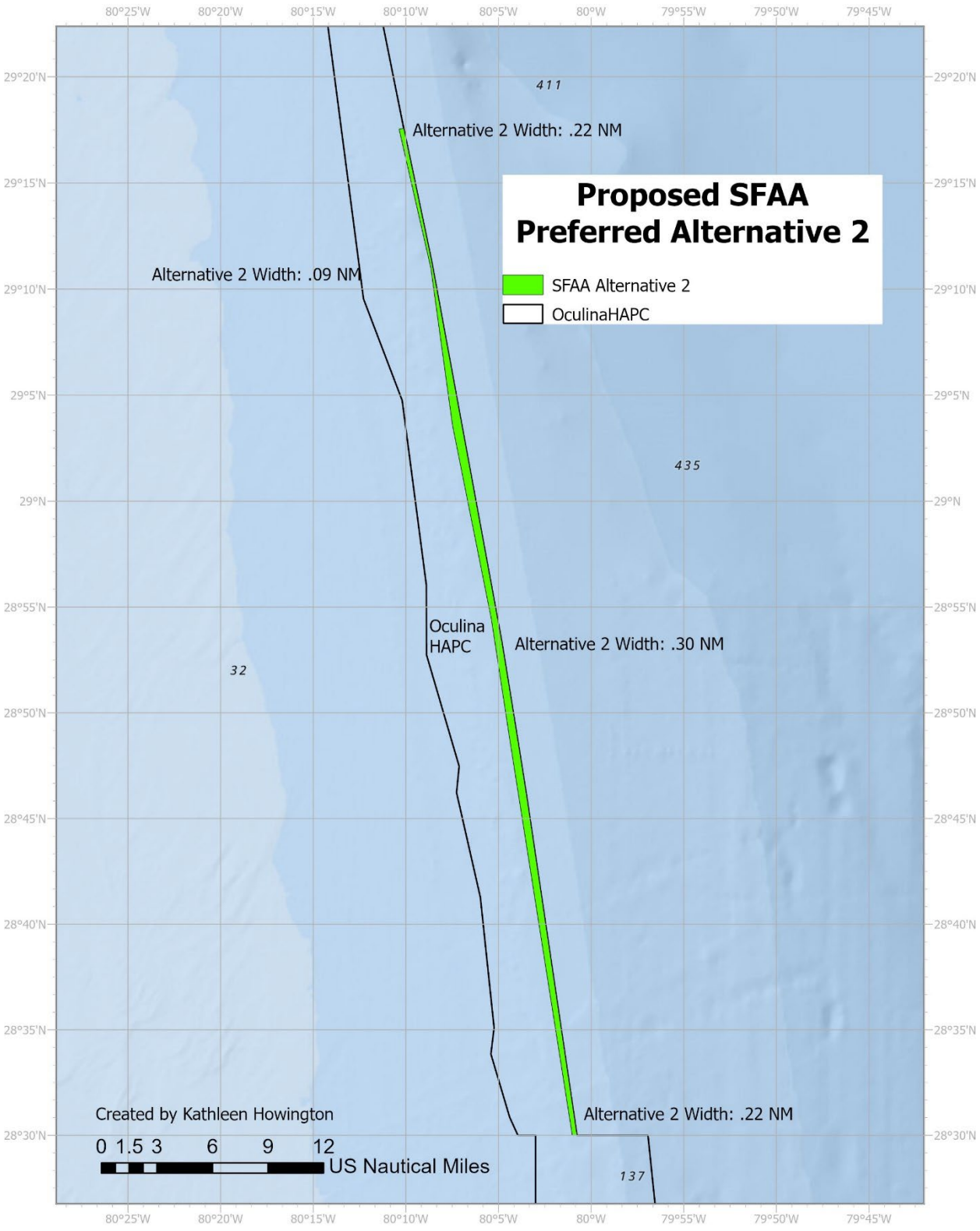


Figure 2.1.1. Shape and approximate widths for the proposed SFAA (**Preferred Alternative 2**; based on 2014 fishermen input). Note: OHAPC Northern Extension width range (3.62 -.8 Nautical Miles).

Alternative 3 would establish an SFAA that encompasses approximately 24.16 NM^2 and is based on coordinates presented by rock shrimp fishermen as part of their March 2013 public comment for Coral Amendment 8 (Figure 2.1.2). The depths of the western boundary of the SFAA in **Alternative 3** range from .047 to .048 NM. On the eastern boundary of the SFAA, along the edge of the existing OHAPC, the average depth is .052 NM.

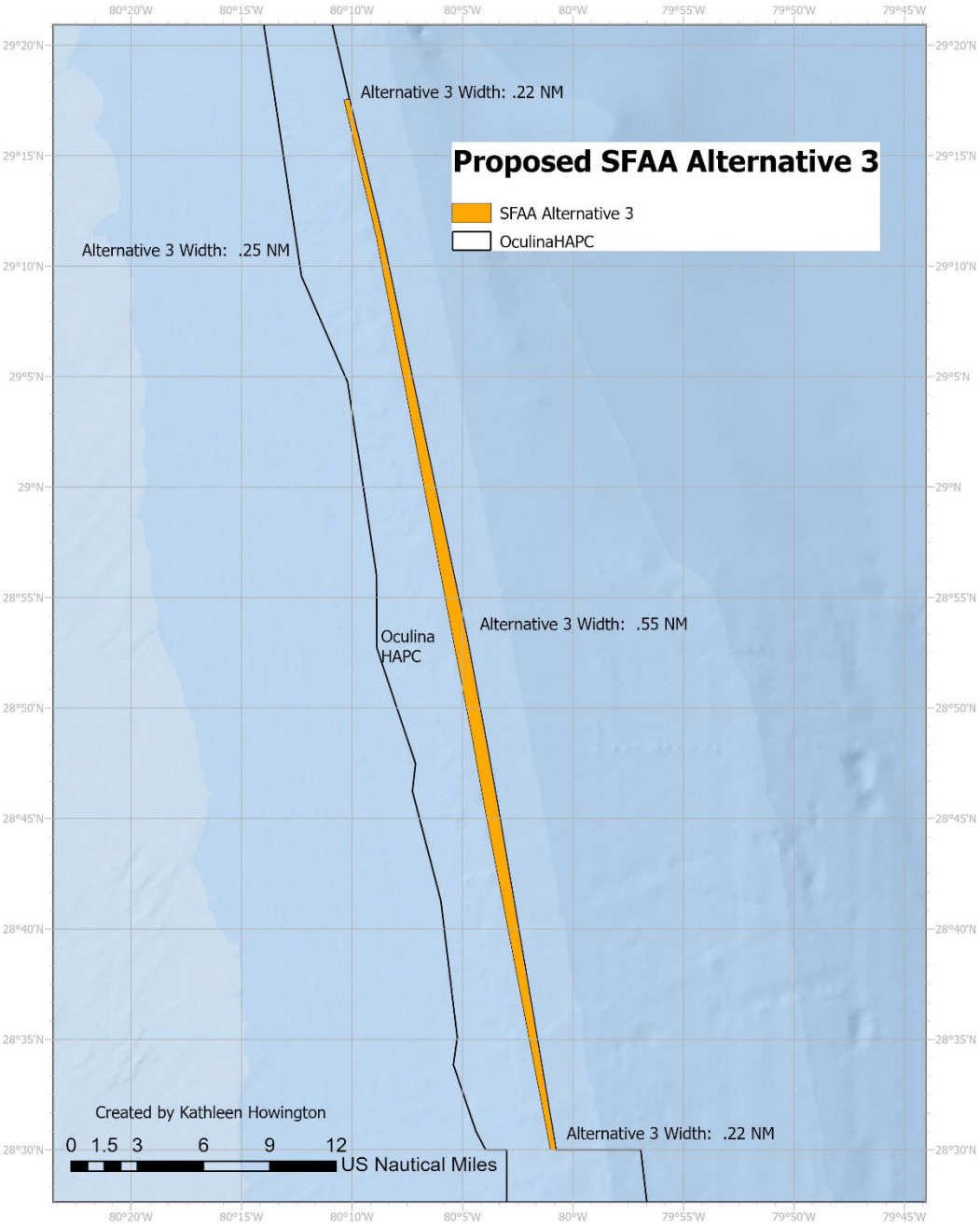


Figure 2.1.2. Shape and approximate widths for the proposed SFAA (Alternative 3; based on 2013 fishermen input). Note: OHAPC Northern Extension width range (3.62 -.8 Nautical Miles).

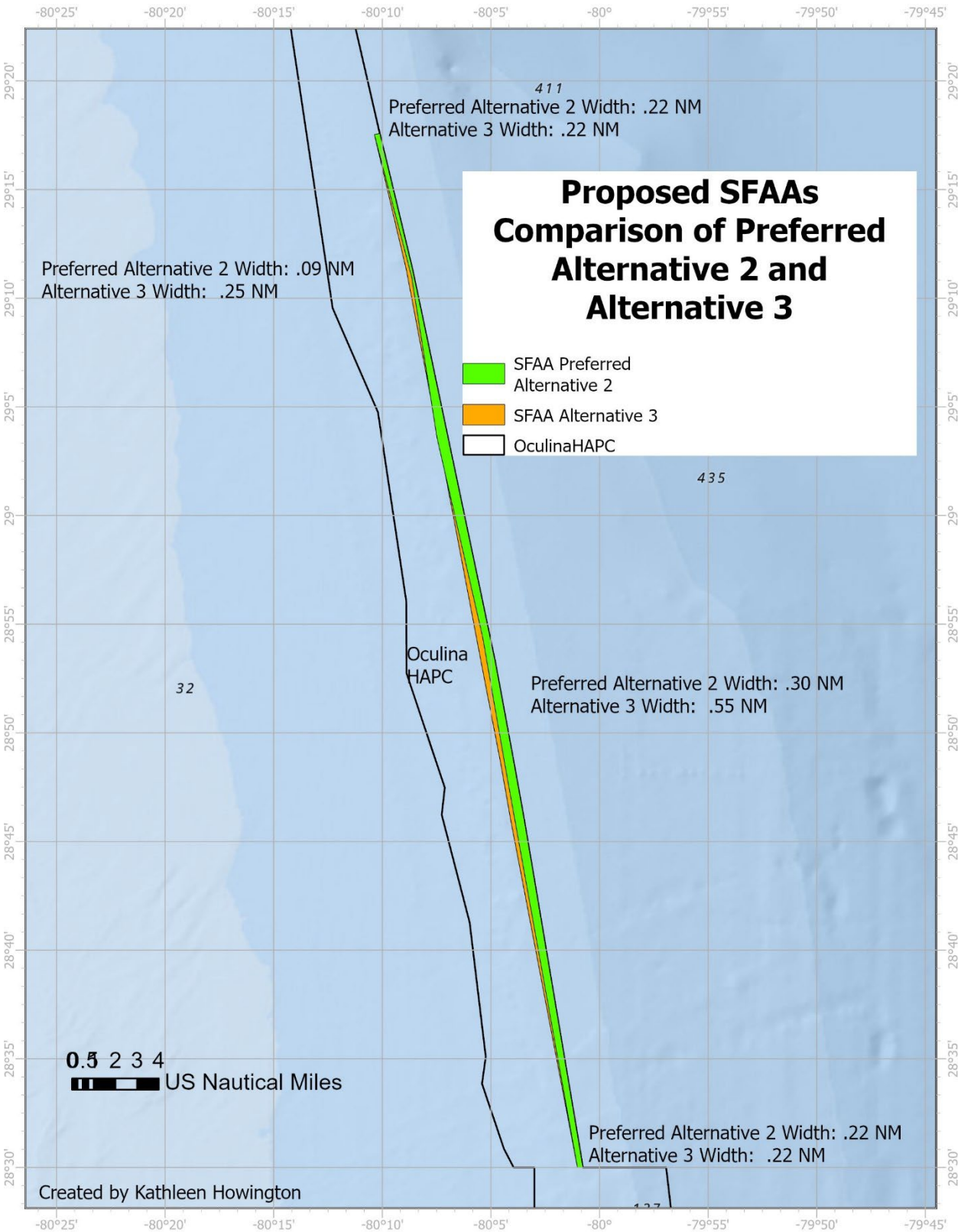


Figure 2.1.3. Comparison of SFAA Preferred Alternative 2 and Alternative 3 layouts and widths.

2.2 Comparison of Alternatives

TO BE UPDATED PRIOR TO THE DECEMBER 2025 COUNCIL MEETING

Alternative 1 (No Action) would keep all the current regulations in place, protecting Oculina coral and would not establish an SFAA. **Preferred Alternative 2** and **Alternative 3** would establish SFAAs of approximately 16.61 NM2 and 24.16 NM2, respectively. Establishing SFAAs as proposed under **Preferred Alternative 2** and **Alternative 3** could result in negative biological impacts to the deepwater coral habitat around the SFAAs as they would allow bottom trawling for rock shrimp within the OHAPC. Fishing effort within the proposed SFAA was historically low, and the impact on coral is expected to be minimal. Multiple studies have been conducted that have found no coral or have predicted low chances of coral being present within the proposed SFAA. There is the potential for coral to be impacted by sediment caused by trawling in the SFAA. However, there is very little information on the behavior of sediment related to water currents and trawling impacts in this region. It is expected that the distance between the coral pinnacles and the boundary of the SFAA in **Preferred Alternative 2** would provide a larger buffer than **Alternative 3**, relative to sedimentation impacts.

Alternative 1 (No Action) would result in foregone landings of rock shrimp and thus foregone economic benefits associated with these landings compared to **Preferred Alternative 2** and **Alternative 3**. **Preferred Alternative 2** and **Alternative 3** would result in net economic benefits by allowing vessels fishing for rock shrimp with bottom trawl gear to potentially increase landings of rock shrimp through access to an additional 16.61 NM^2 or 24.16 NM^2 areas, respectively. Given the likely variability in usage of the area as well as exhibited variability in overall participation in the limited access component of the rock shrimp portion of the shrimp fishery, the economic effects of **Alternative 3** would likely be similar to those described for **Preferred Alternative 2**, but economic benefits under **Alternative 3** would be comparatively higher since this alternative would allow access to 10 more square miles within the OHAPC than **Preferred Alternative 2**. Additionally, if landings of rock shrimp increase, these landings are a relatively small component of the overall market for shrimp, given the magnitude of shrimp imports. Thus, higher landings of rock shrimp would not be expected to change ex-vessel or consumer prices and therefore, there is no anticipated change in consumer surplus.

Alternative 1 (No Action) would likely result in minimal social effects because the fleet is already harvesting in open areas and is prohibited from working in the current closed areas within the OHAPC. **Preferred Alternative 2** and **Alternative 3** address stakeholder concerns regarding access to a discrete and historically important fishing area and may improve stakeholder perceptions of the management process. As such, **Preferred Alternative 2** represents the most recent recommendation by rock shrimp fishermen and is therefore expected to have the greatest social benefit, followed by **Alternative 3**, and **Alternative 1 (No Action)**. **Preferred Alternative 2** includes coordinates provided by industry, which shifted the proposed boundary even further offshore from known or suspected high relief habitat than presented in **Alternative 3**.

The proposed SFAA comprises an area of historical fishing grounds, where the rock shrimp industry was previously able to access the rock shrimp and increase the profitability of their trips prior to the effective date of Coral Amendment 8 in August 2015. Reopening these historic fishing grounds supports the recent Executive Order (EO) 14276, Restoring American Seafood Competitiveness[3] (See Appendix A). Both **Preferred Alternative 2** and **Alternative 3** would, as required by the EO, reduce regulatory burden on the rock shrimp industry, improve access to the rock shrimp resource, and help to enhance economic profitability for the rock shrimp industry.

The establishment of an SFAA (**Preferred Alternative 2** and **Alternative 3**) would have minimal administrative impacts. This amendment would not modify the transit provision for the OHAPC, and vessels will need to continue to maintain a Vessel Monitoring System (VMS) transmission rate of 1 position per 5 minutes, **when transiting through the OHAPC**. However, for effective monitoring of fishing activity within any established SFAA, vessels with a valid commercial permit for rock shrimp located in a SFAA must ensure that the required VMS unit transmits a signal indicating the vessel's accurate position every five minutes. Both proposed SFAAs are narrow and still within the OHAPC. A VMS transmission rate of five-minute intervals will aid in effective monitoring of fishing activity within and near the OHAPC. The administrative impacts would also be minimal since there would not be a need to alter VMS technical specifications, in regards to transmission rates or fishing activity vs transit. Type approved VMS units are currently configured for five minute transmission rates through a NOAA contractor. Any additional costs would involve modifications to specific vendors recognizing vessel positions vs a NOAA contractor. **This section will be updated after the September Council meeting to incorporate the Council's feedback.**

[3] https://www.whitehouse.gov/presidential-actions/2025/04/restoring-american-seafood-competitiveness/

Chapter 3. Affected Environment

TO BE UPDATED PRIOR TO THE DECEMBER 2025 COUNCIL MEETING

This section describes the affected environment in the proposed project area. The affected environment is divided into five major components:

- **Habitat Environment** (Section 3.1)
- **Biological and Ecological Environment** (Section 3.2)
- **Economic Environment** (Sections 3.3)
- **Social Environment** (Section 3.4)
- **Administrative Environment** (Section 3.5)

Habitat Environment

Information on the habitat utilized by coral and shrimp species managed under the Fishery Management Plan (FMP) for the Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP) and the FMP for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP), respectively, is included in Volume II of the Fishery Ecosystem Plan (FEP; SAFMC 2009c), incorporated here by reference. The South Atlantic Fishery Management Council (Council) designated essential fish habitat (EFH), EFH-Habitat Areas of Particular Concern (HAPC, and EFH Coral Habitat Areas of Particular Concern (CHAPC) are presented in the SAFMC User Guide and spatial representations of these and other habitat related layers are in within the Council' SAFMC Mapper.

The following are the EFH, CHAPCs, and HAPCs for the Coral FMP, Snapper-Grouper Fishery of the South Atlantic Region FMP (Snapper Grouper FMP), and Shrimp FMP. The Coral FMP and Shrimp FMP are included because they are the associated FMPs that this amendment will amend. The Snapper Grouper FMP is included because the coral present in Oculina Bank and the hard bottom found within the OHAPC are EFH for many snapper grouper species, as identified by the life history of coral in section 3.2. In addition, Amendment 4 to the Coral FMP established the entire OHAPC as EFH-HAPC for snapper-grouper species.

3.1.1. Essential Fish Habitat

For current EFH designations for species managed under the Coral FMP, Snapper Grouper FMP, or Shrimp FMP; refer to Appendix E.

3.1.2. Habitat Areas of Particular Concern

For current EFH-HAPC for species managed under the Coral, Coral Reef, and Live/Hard bottom Habitats of the South Atlantic Region FMP, Snapper Grouper FMP, or Shrimp FMP; refer to Appendix E.

3.2. Biological and Ecological Environment

The two species directly affected by the action proposed in these amendments are *Oculina varicosa* coral and rock shrimp. *Oculina* is considered a EFH for snapper grouper, so the proposed action could affect those species indirectly. Environmental effects of the action are discussed in Chapter 4.

3.2.1. Oculina Coral

Life History

Oculina coral is a genus of colonial stony coral in the family Oculinidae. In deepwater (>60 meters [m]), *Oculina varicosa* (*Oculina*) forms spherical, dendroid, bushy colonies that are 10 cm to 1.5 m in diameter and height (Figure. 3.2.1.1). The branches average 6 mm in diameter near the tips and frequently grow apart and fuse together to form a large, interconnected structure. Individual corals may coalesce, forming linear colonies 3-4 m in length or massive thickets of contiguous colonies on the slopes and tops of the banks (Reed 1980). The deepwater form lacks symbiotic algae, or zooxanthellae, whereas in shallow water, *Oculina* is usually golden brown with the algal symbiont, and colonies average <30 cm in diameter with thicker branches. The average growth rate for *Oculina*. at a depth of 80 m was estimated to be very slow, at 16 mm/yr (Reed 1981). Bullis and Rathjen (1959) identified rugged coral formations in depths from 27 to 180 m between St. Augustine and Cape Canaveral, Florida. The highest growth rate for *Oculina* is on the top or on the current-facing side of the coral mound. In addition, *Oculina* reefs are periodically exposed to nutrient-rich, cold water upwelling temperatures of 7.4 to 10 °C.

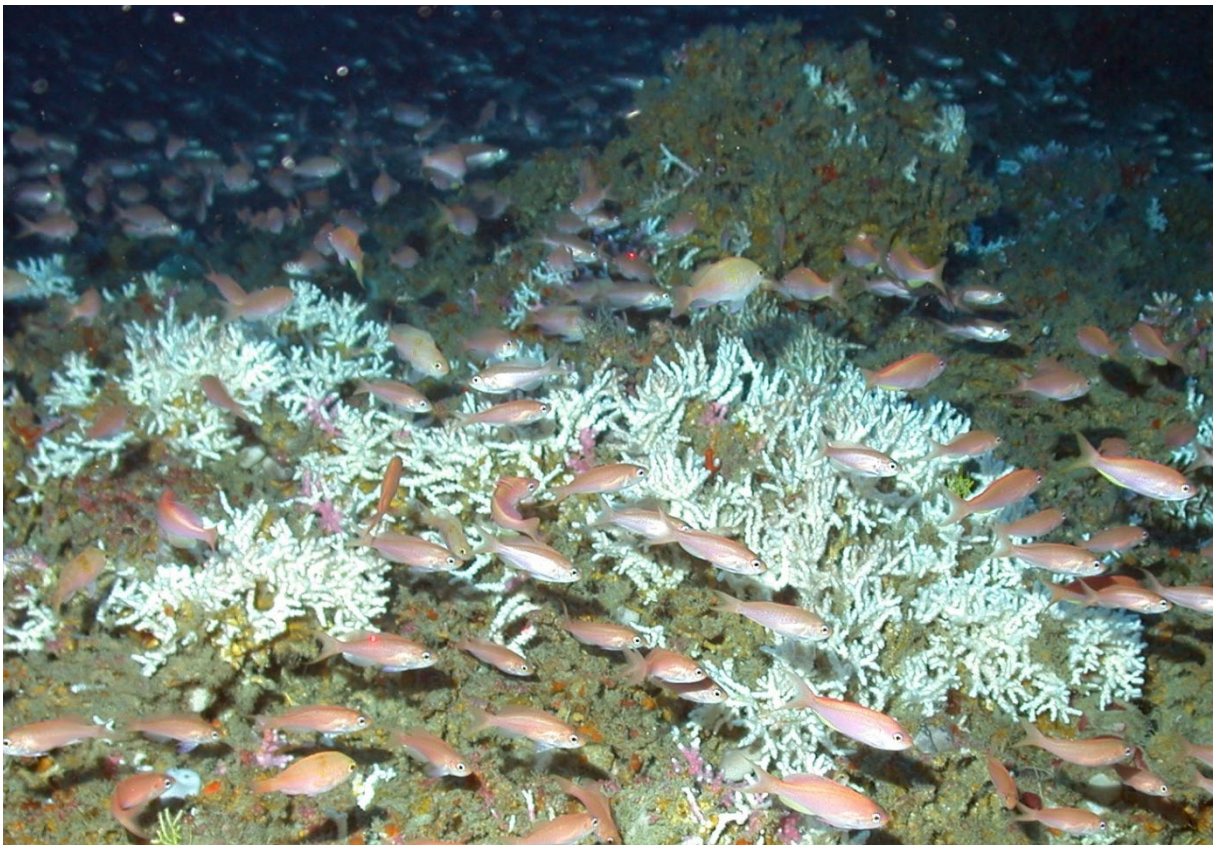


Figure 3.2.1.1 Oculina Coral with fish swimming (Reed, 2006).

Oculina bank ecosystems are unique in that they are monospecific, comprised of one species of delicate branching coral covering hundreds of feet of hills and pinnacles with 25 m relief. *Oculina* banks thrive in areas of strong currents (up to 60 cm/ s), which are thought to contribute to growth (Reed, 1992).

Oculina coral can range from the Caribbean to Bermuda and the Gulf of Mexico, at depths of 5-152 m. The majority of the *Oculina* coral reefs are found in depths of 60 to 100 meters (m) in a zone 2 to 6 km wide along the eastern Florida shelf of the U.S. (Avent et al. 1977; Reed 1980). Much of the habitat mapped and characterized is within or adjacent to the Oculina Bank Habitat Area of Particular Concern (OHAPC), located 15 nautical miles off Fort Pierce and extending northward towards Cape Canaveral, Florida. According to Reed (1981) the majority of massive *Oculina* growth occurs between 27° 30' N. latitude and 28° 30' N. latitude, which encompasses the Oculina CHAPC.

Oculina constitutes essential fish habitat to a complex of species, including those managed under the Snapper Grouper Fishery Management Plan (Snapper Grouper FMP; SAFMC 1983). Biodiversity on *Oculina* reefs is high, and similar to that of shallow tropical coral reefs (Koenig 2001). The deep shelf-edge *Oculina* reefs form natural spawning grounds for species managed under the Snapper Grouper FMP, including commercially important populations of gag and scamp. They also serve as nursery grounds for snowy grouper (*Hyporthodus niveatus*), and feeding grounds for these and many other commercial fish species including black sea bass (*Centropristis striata*), red grouper (*E. morio*), speckled hind (*E. drummondhayi*), Warsaw

grouper (*E. nigritus*), amberjack (*Seriola* spp.), red porgy (*Pagrus pagrus*), and red snapper (*Lutjanus campechanus*) (Gilmore and Jones 1992). Biodiversity, grouper densities, and percentage of intact coral have been documented to be higher inside the Oculina Bank HAPC compared to outside (Harter et al. 2009). At least 73 species of fish are known from the *Oculina* reefs (GMFMC and SAFMC 1982; Koenig et al. 2005; Reed et al. 2006), and like the invertebrate community, this is a sub-tropically derived fauna.

The Florida *Oculina* reefs support a diverse invertebrate fauna with mostly subtropical affinities. Over 20,000 individual invertebrates were found living among the branches of 42 small *Oculina* colonies, yielding 230 species of mollusks; 50 species of decapods, 47 species of amphipods, 21 species of echinoderms and numerous other phyla and: species (Reed et al., 1982; Reed and Hoskin, 1987; Reed and Mikkelsen, 1987). Densities of associated invertebrates rival those of shallow coral reef systems (see review in Reed 2002). Avent et al. (1977) presented a preliminary list of benthic invertebrates dredged from some *Oculina* mounds. Analysis of 42 small *Oculina* colonies yielded about 350 invertebrate species, including 262 mollusk species (Reed and Mikkelson 1987), 50 decapod crustacean species (Reed et al. 1982), 47 amphipod species, 21 echinoderm species, 15 pycnogonid species, and 23 families of polychaetes (Reed 2002b). Although *Oculina* habitats appear to have more associated mobile macroinvertebrates than deeper coral areas, large sponges and soft/horny corals are less abundant (Reed et al. 2006).

3.2.2. Rock Shrimp

Life History

Rock shrimp, *Sicyonia brevirostris*, are very different in appearance from the three penaeid species (Figure 3.2.2.1). Rock shrimp can be easily separated from penaeid species by their thick, rigid, stony exoskeleton. The body of the rock shrimp is covered with short hair, and the abdomen has deep transverse grooves and numerous tubercles.

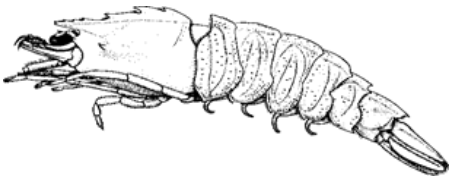


Figure 3.2.2.1. Rock shrimp, *Sicyonia brevirostris*.

Rock shrimp are found in the Gulf of America (Gulf, formerly Gulf of Mexico), Cuba, the Bahamas, and in the U.S. South Atlantic northward to Virginia (SAFMC 1993). The center of abundance for rock shrimp in the South Atlantic region occurs off northeast Florida south to Jupiter Inlet. Rock shrimp live mainly on sand bottom from a few meters to 183 m (600 ft), and occasionally deeper (SAFMC 1993). The largest concentrations are found between 25 and 65 m (82 and 213 ft). Small quantities of rock shrimp are also found off North Carolina, South Carolina, and Georgia (SAFMC 1993).

Rates of growth in rock shrimp are variable and depend on factors such as season, water temperature, shrimp density, size, and sex. Rock shrimp grow between 0.08- and 0.12-inches carapace length (CL) per month (2 to 3 millimeters) as juveniles and 0.02 inches CL per month

as adults (0.5 - 0.6 millimeters). Rock shrimp are bottom feeders, most active at night, with a diet primarily of mollusks, crustaceans, and polychaete worms.

While the foundational research by Kennedy et al. (1977) remains a significant source of information on rock shrimp, comprehensive research has continued since that time. This section presents some of the more significant findings from that study regarding the biology of rock shrimp on the east coast of Florida. For example, recruitment to the area offshore of Cape Canaveral, Florida, occurs between April and August with two or more influxes of recruits entering within one season (Kennedy et al. 1977). Other early studies, such as Keiser (1976), described the distribution of rock shrimp in coastal waters of the southeastern U.S., and Whitaker (1983) presented a summary of information on rock shrimp off South Carolina. Additional life history information on rock shrimp can be found in Volume II (PDF page 601) of the Fishery Ecosystem Plan[4] and Coral Amendment 8 (SAFMC 2013a) and are incorporated here by reference.

Landings

The center of abundance and the concentrated commercial fishery for rock shrimp in the South Atlantic region occurs off northeast Florida south to Jupiter Inlet (SAFMC 1996). Although rock shrimp occasionally are landed from federal waters off North Carolina, South Carolina, and Georgia, they are not landed in quantities capable of supporting a sustainable commercial fishery comparable to the fishery prosecuted in federal waters off Florida. Landings information is presented in Section 3.3.1.

Rock shrimp vessels are required to carry a vessel monitoring system (VMS) to fish for rock shrimp. Therefore, VMS data are a source of vessel operating information, and VMS positions that correspond to a vessel moving at speeds between 2 and 4 knots are used as a proxy for fishing activity. VMS data from 2009 to 2024 are being analyzed in the areas proposed as SFAA in this amendment. Currently, the analysis is focusing on separating out VMS positions pre-closure (February 2009 - September 2015) and post-closure (October 2025 – December 2024) and is only focusing on shrimpers who are actively trawling. Visualization of these positions are currently unavailable due to confidentiality issues but may be available in the future.

Fishing Techniques

Typical rock shrimp gear configuration consists of two outriggers, each dragging, via a main cable, a two net setup, with some vessels employing a third try net closer to the vessel. Each net has two doors and is required to be equipped with both a turtle excluder device (TED)[5] and one of five approved bycatch reduction devices (BRD)[6]. If a boat is 80 ft in length, a single outrigger is approximately 30 ft in length. A boat pulling 4 nets will have the outside drag outside the rigger, as the door trails directly behind the tip of the outrigger connected to the main cable. If the nets have a head rope length of 55 ft and a door height of 4 ft, then approximately 38.5 ft

[4] https://safmc.net/documents/combined-fep_toc-pdf/
[5] https://www.fisheries.noaa.gov/southeast/bycatch/turtle-excluder-devices
[6] https://www.fisheries.noaa.gov/southeast/bycatch/bycatch-reduction-devices-gulf-america-and-south-atlantic

(70% of the headrope length) and 4 ft (door height, roughly 10% of the headrope extension) door would extend beyond the outrigger due to gear configuration (Figure 3.2.2.2).

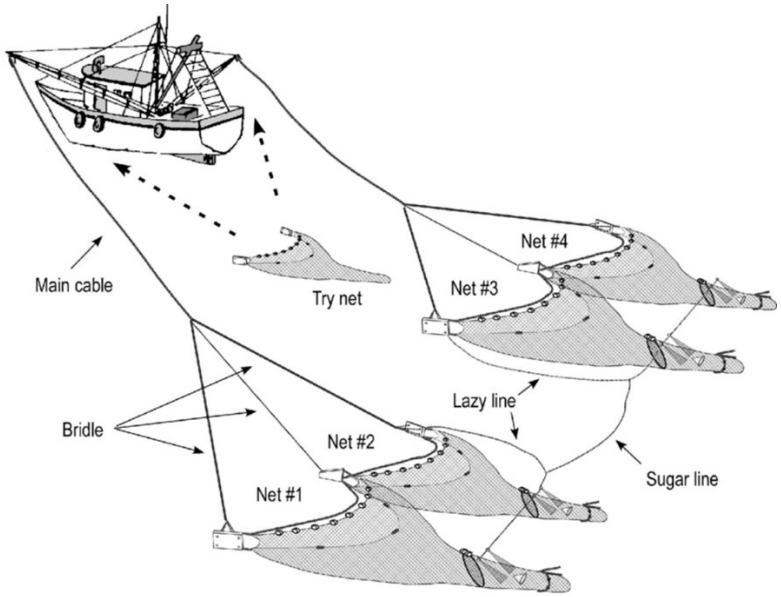


Figure 3.2.2.2. Typical gear configuration for the U.S. southeastern shrimp vessels equipped with four nets. Source : Scott Denton et al. 2012.

3.2.3. Protected Species

The National Marine Fisheries Service (NMFS) manages marine protected species in the Southeast region under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). There are 29 ESA-listed species or Distinct Population Segments (DPS) of marine mammals, sea turtles, fish, and corals managed by NMFS that may occur in the exclusive economic zone (EEZ) of the South Atlantic or Gulf. There are 91 stocks of marine mammals managed within the Southeast region plus the addition of the stocks such as North Atlantic right whales (NARW), and humpback, sei, fin, minke, and blue whales that regularly or sometimes occur in Southeast region managed waters for a portion of the year (Hayes et al. 2017). All marine mammals in U.S. waters are protected under the MMPA. The MMPA requires that each commercial fishery be classified by the number of marine mammals they seriously injure or kill. NMFS's List of Fisheries (LOF) classifies U.S. commercial fisheries into three categories based on the number of incidental mortality or serious injury they cause to marine mammals.

Five of the marine mammal species (sperm, sei, fin, blue, and NARW) protected by the MMPA, are also listed as endangered under the ESA. In addition to those five marine mammals, six species or DPSs of sea turtles [green (the North Atlantic DPS and the South Atlantic DPS), hawksbill, Kemp's ridley, leatherback, and the Northwest Atlantic DPS of loggerhead]; nine species or DPSs of fish (the smalltooth sawfish; five DPSs of Atlantic sturgeon; Nassau grouper; oceanic whitetip shark, and giant manta ray); and seven species of coral (elkhorn coral, staghorn coral, rough cactus coral, pillar coral, lobed star coral, mountainous star coral, and boulder coral) are also protected under the ESA and occur within the action area of the shrimp fishery. Portions

of designated critical habitat for NARW, the Northwest Atlantic DPS of loggerhead sea turtles, and Acropora corals occur within the Council's jurisdiction.

On April 26, 2021, NMFS completed its reinitiation of ESA section 7 consultation and issued a new biological opinion on the implementation of the sea turtle conservation regulations under the ESA (applicable to shrimp trawling) and the authorization of the southeast U.S. shrimp fisheries in federal waters under the Magnuson-Stevens Act, which analyzed the effects on threatened and endangered species and designated critical habitat. The opinion anticipates the southeast U.S. shrimp fisheries to interact, capture, and potentially result in mortalities of sea turtles, Atlantic and Gulf sturgeon, giant manta ray, and smalltooth sawfish. NMFS concluded that the activities addressed in the consultation are not likely to jeopardize the continued existence of any threatened or endangered species.

In June 2023, the NMFS Southeast Regional Office (SERO) and Sustainable Fisheries Division (SFD) requested the SERO Protected Resources Division (PRD) reinitiate ESA Section 7 consultation on southeast U.S. shrimp fisheries for giant manta rays and smalltooth sawfish. The reinitiation was required to address unanticipated observed lethal incidental take of giant manta rays and new information revealing effects of southeast shrimp fisheries on smalltooth sawfish and giant manta rays not considered in the 2021 biological opinion. At that time, no other reinitiation triggers were met and reinitiation scope was limited to addressing only those two species. Since identifying the need to reinitiate, SERO, in collaboration with the NMFS Southeast Fisheries Science Center, has been working to develop the information needed to adequately evaluate the potential effects of southeast U.S. shrimp fisheries on giant manta ray and smalltooth sawfish. SERO PRD is revising bycatch estimates based on recent observer data, evaluating the best available data on both species, completing smalltooth sawfish and giant manta rays' population viability analyses for understanding the impact of Southeastern shrimp fisheries on these species, and examining the nature and the extent of the lethal trawl interactions. SERO PRD is also updating the smalltooth sawfish and giant manta ray recovery plans, monitoring observer data for new takes. More information regarding the updated biological opinion is expected in September 2025.

3.3 Economic Environment

TO BE COMPLETED PRIOR TO THE DECMEMBER 2025 COUNCIL MEETING

3.4 Social Environment

TO BE COMPLETED PRIOR TO THE DECEMBER 2025 COUNCIL MEETING

3.5Administrative Environment

3.5.1Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management

authority over most fishery resources within the EEZ, an area extending 200 nm from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the U.S. EEZ.

To assist the Secretary of Commerce (Secretary) in fishery management, the Magnuson-Stevens Act established eight regional fishery management councils that represent the expertise and interests of constituent states. Each council has a scientific and statistical committee (SSC) that provides ongoing scientific advice to that council for fishery management decisions, as well as advisory panels (AP) to assist the council in carrying out its functions under the Magnuson-Stevens Act. Councils, SSCs and APs conduct their business in public meetings, pursuant to procedures prescribed by the Magnuson-Stevens Act and written procedures established by each council. NMFS, with the advice of the regional councils, manages fisheries needing conservation and management within each council's jurisdiction. Regional councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for collecting and providing the data necessary for the councils to prepare fishery management plans and for promulgating regulations to implement approved plans and amendments after ensuring that management measures are consistent with the Magnuson-Stevens Act and with other applicable laws. In most cases, the Secretary has delegated this authority to NMFS.

The South Atlantic Council is responsible for conservation and management of fishery resources in federal waters of the U.S. South Atlantic. These waters extend from 3 to 200 mi offshore from the seaward boundary of North Carolina, South Carolina, Georgia, and east coast of Florida to Key West. The South Atlantic Council has thirteen voting members: one from NMFS; one each from the state fishery agencies of North Carolina, South Carolina, Georgia, and Florida; and eight public members appointed by the Secretary. On the South Atlantic Council, there are two public members from each of the four South Atlantic States. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard (USCG), State Department, and Atlantic States Marine Fisheries Commission (ASMFC). The South Atlantic Council has adopted procedures whereby the non-voting members serving on the Council Committees have full voting rights at the Committee level but not at the full Council level. Council members serve three-year terms and are recommended by state governors and appointed by the Secretary from lists of nominees submitted by state governors. Appointed members may serve a maximum of three consecutive terms.

Public interests also are involved in the fishery management process through participation on Advisory Panels and through council meetings, which, with few exceptions for discussing personnel and legal matters, are open to the public. The South Atlantic Council uses its Scientific and Statistical Committee (SSC) to review the data and science being used in assessments and fishery management plans/amendments. In addition, the regulatory process is in accordance with the Administrative Procedure Act, in the form of "notice and comment" rulemaking.

3.5.2State Fishery Management

The state governments of North Carolina, South Carolina, Georgia, and Florida have the authority to manage fisheries that occur in waters extending three nautical miles from their

respective shorelines. North Carolina's marine fisheries are managed by the Marine Fisheries Division of the North Carolina Department of Environmental Quality. The Marine Resources Division of the South Carolina Department of Natural Resources manages South Carolina's marine fisheries. Georgia's marine fisheries are managed by the Coastal Resources Division of the Department of Natural Resources. The Division of Marine Fisheries Management of the Florida Fish and Wildlife Conservation Commission is responsible for managing Florida's marine fisheries. Each state fishery management agency has a designated seat on the South Atlantic Council. The purpose of state representation at the Council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters.

The South Atlantic states are also involved through Atlantic States Marine Fisheries Commission (ASMFC) in management of marine fisheries. This commission was created to coordinate state regulations and develop management plans for interstate fisheries. It has significant authority, through the Atlantic Striped Bass Conservation Act and the Atlantic Coastal Fisheries Cooperative Management Act, to compel adoption of complementary state regulations to conserve coastal species. The ASFMC is also represented at the South Atlantic Council but does not have voting authority at the Council level.

NMFS's State-Federal Fisheries Division is responsible for building cooperative partnerships to strengthen marine fisheries management and conservation at the state, inter-regional, and national levels. This division implements and oversees the distribution of grants for two national (Inter-jurisdictional Fisheries Act and Anadromous Fish Conservation Act) and two regional (Atlantic Coastal Fisheries Cooperative Management Act and Atlantic Striped Bass Conservation Act) programs. Additionally, it works with the ASMFC to develop and implement cooperative State-Federal fisheries regulations.

3.5.3 Enforcement

Both the NMFS Office for Law Enforcement (NOAA/OLE) and the US Coast Guard (USCG) have the authority and the responsibility to enforce Council regulations. NOAA/OLE agents, who specialize in living marine resource violations, provide fisheries expertise and investigative support for the overall fisheries mission. The USCG is a multi-mission agency, which provides at sea patrol services for the fisheries mission.

Neither NOAA/OLE nor the USCG can provide a continuous law enforcement presence in all areas due to the limited resources of NOAA/OLE and the priority tasking of the USCG. To supplement at sea and dockside inspections of fishing vessels, NOAA entered into Cooperative Enforcement Agreements with all but one of the states in the Southeast Region (North Carolina), which granted authority to state officers to enforce the laws for which NOAA/OLE has jurisdiction. In recent years, the level of involvement by the states has increased through Joint Enforcement Agreements, whereby states conduct patrols that focus on federal priorities and, in some circumstances, prosecute resultant violators through the state when a state violation has occurred.

The NOAA Office of General Counsel Penalty Policy and Penalty Schedule is available online at https://www.noaa.gov/general-counsel/gc-enforcement-section/penalty-policy-and-schedules

Chapter 4. Environmental Effects and Comparison of Alternatives

Action 1. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

Alternatives

1. (No Action). Do not establish a shrimp fishery access area.

2. **Establish a shrimp fishery access area that is 16.61 NM^2 along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.**

3. Establish a shrimp fishery access area that is 24.16 NM^2 along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

*See Chapter 2 for detailed language of alternatives. **Preferred indicated in bold.**

4.1.1. Biological Effects

Alternative 1 (No Action) would not establish a shrimp fishery access area (SFAA) along the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC) and would retain the existing closure through the entire northern extension of the OHAPC. **Alternative 1 (No Action)** would be expected to have the most positive biological benefits to the rock shrimp populations and any coral that exists in the area.

Preferred Alternative 2 and **Alternative 3** would establish SFAAs of approximately 16.61 NM^2 and 24.16 NM^2, respectively, and would allow rock shrimp fishermen with a commercial limited access vessel permit for Rock Shrimp South Atlantic EEZ to fish in the area where they previously fished until August 2015. The proposed SFAA is a discrete area in which the fishery had previously operated. However, use of all other bottom tending gear and anchoring would continue to remain prohibited within the SFAA.

Although shrimp fishermen affirm that they avoid hard bottom habitat when trawling to avoid snags and gear loss, and rock shrimp prefer sand bottom, there is still a chance for gear interactions with coral mounds near the eastern edge of SFAA (Reed et al. 2007). The potential for impacts with Deepwater coral ecosystems is a concern due to the potential for direct and indirect effects of trawling, primarily from the potential for physical damage from the nets and doors.

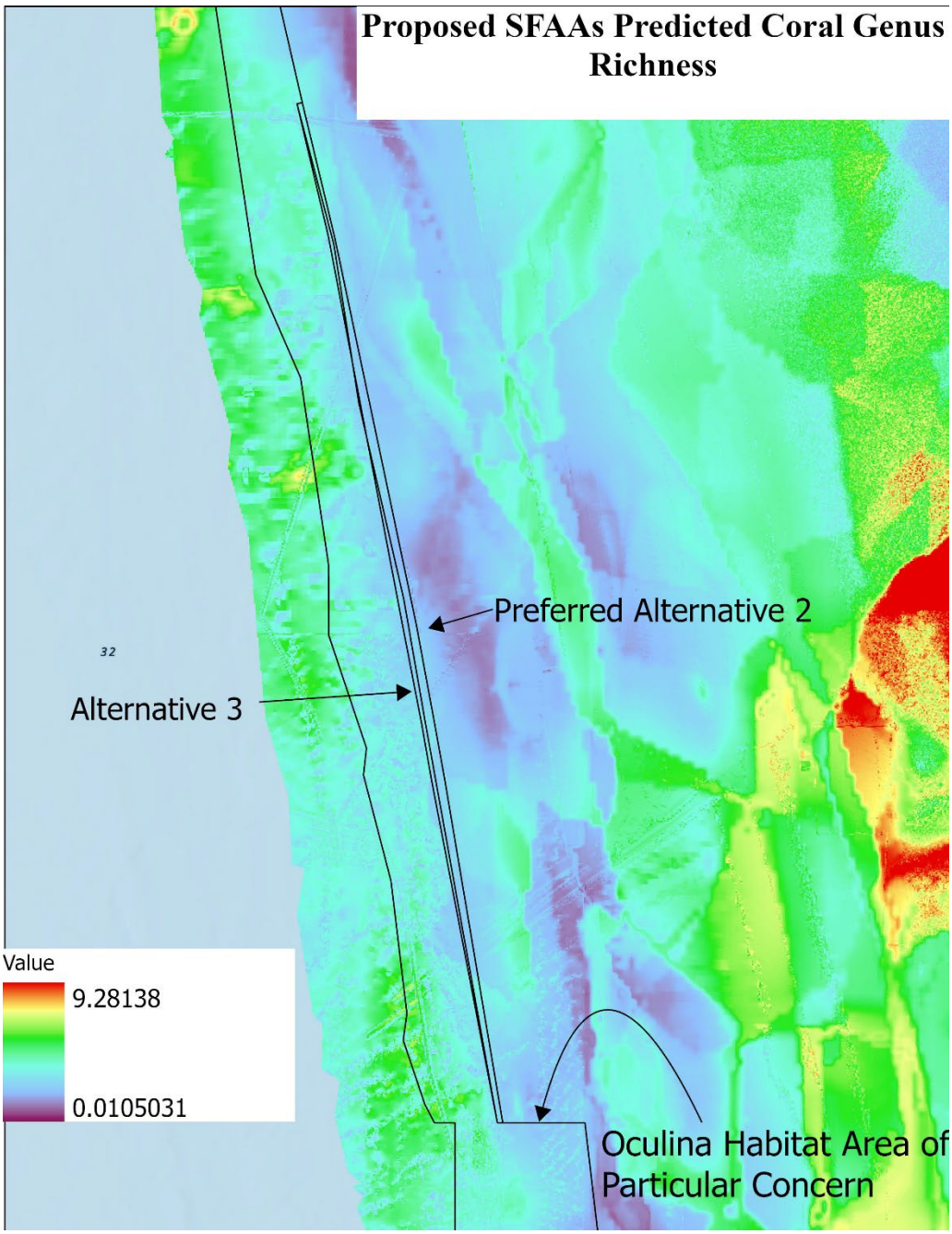
Changes in benthic community abundance and composition can result from this damage, in addition to degraded species diversity and the loss of corals and sponges, which play a keystone role in providing habitat for a large number of other organisms (Fosså et al. 2002; Gage et al. 2005). During the 1980s and 1990s, bottom trawling within the *Oculina* ecosystem, primarily for rock shrimp and brown shrimp, was the primary cause of major habitat destruction (Reed et al. 2007).

Cobb et al. (1973) found the inshore distribution of rock shrimp to be associated with terrigenous and biogenic sand and only sporadically on mud. Rock shrimp may also utilize hard bottom and coral habitat areas (SAFMC 1996). This habitat was confirmed by scientific sampling which

captured large amounts of rock shrimp in and around the OHAPC prior to its designation and prior to significant exploitation and development of the directed fishery (Cobb et al. 1973).

In 2022, the Southeast Fisheries Science Center (SEFSC) conducted a visual survey of the preferred alternative SFAA. They aimed to classify the bottom type as either live (standing), dead (standing), rubble, or sand. To collect information on bottom type, the crew aboard the R/V *Weatherbird* utilized a towed camera system. The crew executed 14 dives, however only two of those dives were able to classify bottom type. From their conclusions, they noted that all live colonies of *Oculina* coral have previously been found on medium and high relief habitat, with rubble often found at the perimeter of the relief and that they have never observed standing live or dead colonies on low relief areas. Based on the successful tows from this survey, no live, standing dead or rubble was observed in or immediately adjacent to the proposed SFAA. The team did note however that they could not state definitively that no live *Oculina* colonies existed within the proposed SFAA, but based on existing multibeam bathymetry of the entire proposed SFAA, which shows only low or no relief, they predicted that the likelihood of live *Oculina* is very low (Appendix G).

In June 2022 the National Centers for Coastal Ocean Science (NCCOS) published a report describing a model predicting distributions of deep-sea corals off the southeastern US. The study area included waters 150-3500 meters in depth off the east coast of Florida. The predictive model synthesized observations of coral presence-absence from still images and video transects from 20 field studies and measures of seafloor topography and physical oceanography to develop a model predicting the presence and relative genus richness for 23 genera of corals. The model predicted low relative genus richness for the proposed SFAAs (Poti, 2022, Figure 4.1.1.1). This was presented to the SAFMC's SSC and determined to be the best available scientific information in September 2023.



Predictability analysis of Coral genus richness within the proposed SFAA. Red and Yellows are areas of higher predicted genus richness for corals. Purples and blues are areas of lower predicted genus richness for coral. (Poti, 2022)

In addition to the 2022 visual survey, in April 2025, the National Oceanic and Atmospheric Administration (NOAA) Ship *Nancy Foster* performed a mapping trip in the proposed preferred alternative SFAA. This mapping trip collected bathymetry and backscatter data at 2-meter (m) resolution across the 16.61 NM^2 proposed SFAA. Mapping showed that mound features formed by *Oculina* corals were not evident in the proposed SFAA (Appendix F). Neither the 2022

visual survey nor the 2025 acoustic survey reported live or dead Oculina coral within the proposed SFAAs. (Figure 4.1.1.1).

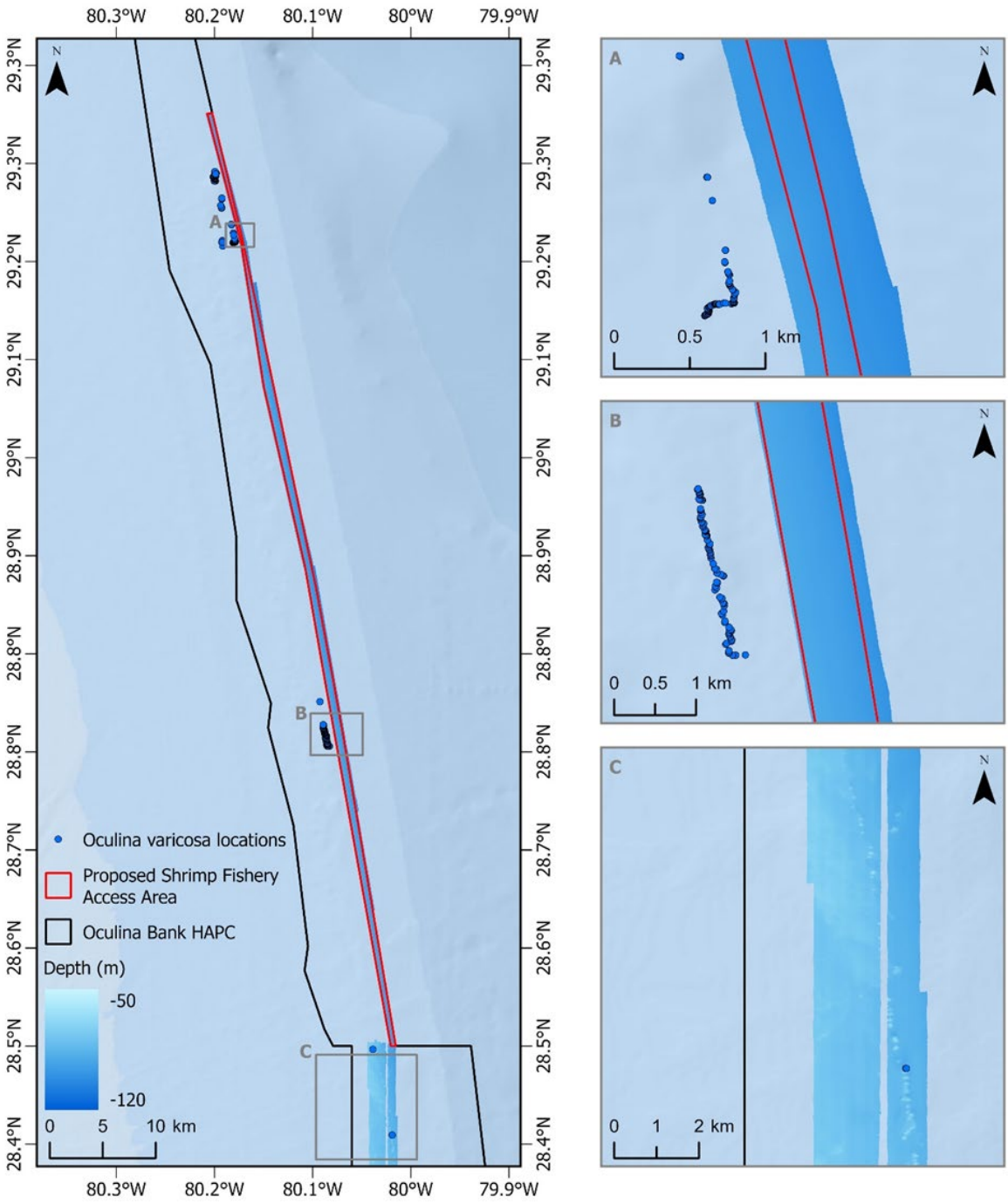


Figure 4.1.1.1 *Oculina varicosa* colonies have been observed 360-1580 m west of the proposed SFAA. *Oculina* mounds are not evident in multibeam bathymetry collected by NOAA Ship *Nancy Foster* in April 2025 inside the proposed SFAA (e.g., panels A and B). In contrast, coral mounds are visible as lighter colored circles in the multibeam bathymetry collected by NOAA Southeast Fisheries Science Center in 2005 to the south of the proposed SFAA (panel C).

The degree and likelihood of potential direct biological impacts from bottom tending fishing gear on deepwater coral as a result of **Preferred Alternative 2** and **Alternative 3** are low based on the current habitat mapping, predictive modeling, and habitat characterization. While no high relief mounds are present, low-relief hard bottoms and coral rubble could be providing substrate available for coral recruitment and recovery from previous trawling events.

Rock shrimp vessels that would be allowed to fish in the proposed SFAAs are required to carry a vessel monitoring system (VMS) to fish for rock shrimp. Therefore, VMS data are a source of vessel operating information, and VMS positions that correspond to a vessel moving at speeds between 2 and 4 knots are used as a proxy for fishing activity. Before the implementation of Coral Amendment 8 in 20158, rock shrimping predominantly occurred east of the northern boundary of the OHAPC implemented in Coral Amendment 8. Rock shrimp fishing inside the edge of the boundary accounted for 1.76% of all fishing points from VMS from 2003 through 2014, 2.20% of positions during 2013, and 8.50% of positions during 2014, based on historic trawling operations as represented by VMS data. The amount of fishing effort that occurred along the eastern boundary of the northern extension of the OHAPC, as measured by VMS fishing positions, was essentially the same for 2013 and 2014. However, the percentage of the total fishing effort that occurred within that area increased in 2014 (8.5%). No information on fishing activity from VMS data exists from within the OHAPC from 2015 to present since trawling within the area was prohibited through the implementation of Coral Amendment 8 (final rule effective August 17, 2015, SAFMC 2013a). The final rule for Coral Amendment 8 required rock shrimp vessels transiting through the OHAPC to maintain a minimum speed of no less than 5 knots as determined by a VMS, which transmits vessel location at a positioning rate acceptable to law enforcement to identify transit. Currently, when a rock shrimp vessel with rock shrimp on board transits the OHAPC, the VMS on that vessel must transmit at a minimum ping rate of 1 ping per 5 minutes. This amendment will not modify the transit provision for the OHAPC and rock shrimp vessels will need to continue to maintain a transmission rate of 1 ping per 5 minutes whether transiting through the OHAPC or fishing within a proposed SFAA. Vessels fishing within any established SFAA will need to maintain the established VMS transmission rate of 1 ping per 5 minutes while fishing within the boundaries of the OHAPC.

While targeted fishing would likely occur in the SFAA under both **Preferred Alternative 2** and **Alternative 3**, any potential negative biological impacts to the rock shrimp population are prevented by the fishery's annual catch limits and accountability measures, which are designed to prevent overfishing. The presence of rock shrimp in the proposed areas is highly variable due to the species' migratory nature and changes in water conditions, however, access to these areas is very important in years when rock shrimp are present. Historical fishing effort in the northern extension of the OHAPC and the proposed SFAA was low, averaging less than 1.8% of the total number of VMS fishing points, a proxy for fishing activity. Additionally, the rock shrimp fishery has not achieved its optimum yield (OY) target since 2004.

Both **Preferred Alternative 2** and **Alternative 3** may have an impact on snapper grouper species caught as bycatch in the rock shrimp fishery. However, the impacts on snapper grouper are expected to be very low. The BPA also highlights that only one managed snapper-grouper species, black sea bass, was in the top 15 bycatch species from 2018-2022 and at a very low

amount. Additionally, historical fishing effort in the proposed area was low, and the impacts on snapper grouper are expected to be minimal.

Effects to coral could result through an influx of suspended benthic sediments created while trawling the bottom for rock shrimp. Increased sedimentation can cause smothering and burial of coral polyps, shading, tissue necrosis, population explosions of bacteria in coral mucus, and generally reduces recruitment, survival, and settlement of coral larvae (Erftemeijer et al. 2012). Coral recruits are particularly susceptible to sedimentation and an increase in fine sediment can significantly reduce coral recruit survival (Fourney and Figueiredo 2017).

The sediments on shelf-edge *Oculina* reefs are relatively fine and have a higher composition of muds (14.4% mud) compared to sediments in shallow coral reef counterparts (Hoskin et al. 1987). In addition, areas east of the high relief *Oculina* mounds have a higher (29%) average percentage of muds (Hoskin et al. 1987). Fine sediments tend to have greater negative effects on corals than coarse sediments. Coral experts and members of the South Atlantic Fishery Management Council's (South Atlantic Council) Coral Advisory Panel (AP) and Habitat and Ecosystem AP indicated that establishing a protective buffer between known coral habitat and fishing grounds would be prudent to prevent adverse impacts to coral colonies. However, research has not established what the optimal buffer distance should be.

Little is known about the effects of sedimentation on *Oculina* and other sensitive species in the OHAPC ecosystem from trawling. From a study examining the size, duration, and composition of sediment plumes from multiple trawl types in the Mediterranean Sea, lateral plume spreading depends strongly on current variability. This study observed plumes spreading for hundreds of meters laterally in the hours after trawling (Durrieu de Madrona, et al. 2005). Therefore, more information on the seafloor current direction, strength, and particle size/weight would aid prediction of a sediment plume swath created by trawling activities, and ultimately inform decisions regarding trawl distance from known corals. Based on similar research done in Scotland, an initial trawling plume can be around 10 meters high and 42 meters wide, resulting in elevated turbidity. While the plume disperses and its turbidity decays within hours, the fine particles can linger and contribute to elevated background turbidity levels. A study using a multibeam echosounder demonstrated that sediment plumes behind a trawl door and a roller clump decrease in concentration with distance, but the plumes themselves can be detected at distances greater than 100 meters (O'Neill et al 2013).

Depending on the direction and magnitude of water currents in the affected area, shrimp trawls could create sediment plumes during fishing operations that could be transported to coral habitats. However, given the consistently strong north-to-south current that exists within the OHAPC, sediment would be expected to move parallel to known coral pinnacles and have a minimal impact on the coral itself.

Reed (2006) describes the current flow for the area as: "… the northerly flowing Florida Current in the region of the Oculina reefs typically only extends down to a depth of 50-60 meters. The reefs are often inundated with a turbid, bottom nepheloid layer, and bottom currents average 8.6 cm s^{-1} but may exceed 50 cm s^{-1} (1 knot), with currents of 50-100 cm s^{-1} also occurring."

At this point, no definitive studies on the impacts of trawling and sedimentation in this area have been conducted. Based on mapping data from 2025, the western boundaries of the SFAA are approximately 360-1580 m from known Oculina pinnacles(Appendix F).

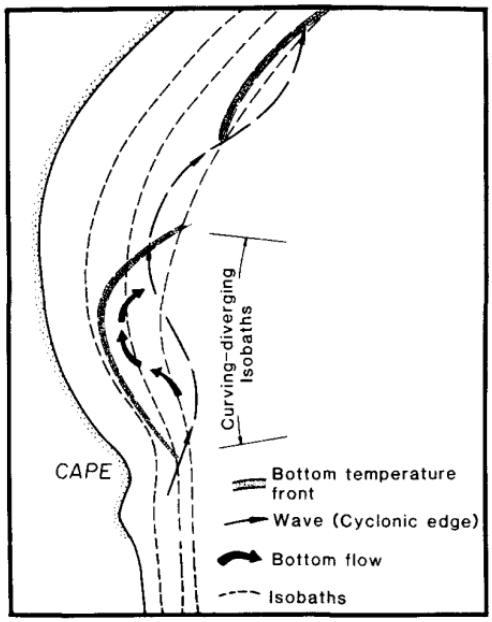


Fig. 10. Schematic representation of a summer intrusion of oceanic water onto the continental shelf. The wave along the cyclonic edge of the boundary current propagates poleward. Oceanic water is pulled upward through the wave trough and spreads shoreward along the shelf bottom into regions where flow on the shelf diverges. A bottom water temperature front marks the extent of the intrusion.

Figure 4.1.1.3 Deepwater currents off the east coast of Cape Canaveral, Florida typically move north to south and only move westward North of the Cape**.**

Potential negative biological impacts to the affected coral habitat relative to **Alternative 1 (No Action)** would be greatest under **Alternative 3** which offers less buffer (up to .25 nautical miles less in the widest area) between the coral pinnacles and the SFAA than **Preferred Alternative 2**.

Expected Effects to Protected Species

The action in this plan amendment would not significantly modify the way in which the rock shrimp portion of the shrimp fishery is prosecuted in terms of gear types. Historical fishing effort in the proposed areas was variable and future fishing effort is anticipated to be similar to historical effort. Therefore, there are no additional impacts on ESA-listed species or designated critical habitats anticipated as a result of this action (see Section 3.2.3 for a more detailed description of ESA-listed species and critical habitat in the action area).

4.1.2. Economic Effects

Alternative 1 (No Action) would continue to disallow access to rock shrimp vessels within the northern extension of the OHAPC; however, since this area is currently closed to bottom trawl gear, there would not be a change in economic benefits. **Alternative 1 (No Action)** would result in foregone landings of rock shrimp and thus foregone economic benefits associated with these landings compared to **Preferred Alternative 2** and **Alternative 3.**

Preferred Alternative 2 would result in net economic benefits by allowing vessels fishing for rock shrimp with bottom trawl gear to potentially increase landings of rock shrimp through access to an approximate 16.61 NM^2 area in which rock shrimp harvest was allowed prior to implementation of Coral Amendment 8 in 2015. Based on historical VMS data, the use of this area would likely vary from year to year. However, participants in the rock shrimp portion of the shrimp fishery have reported, and historical VMS data indicate that rock shrimp were historically caught in the proposed access area. Increases in catches of rock shrimp would be expected to increase gross revenue and producer surplus[7], thus resulting in net economic benefits. Given the likely variability in usage of the area, as well as the exhibited variability in overall participation in the regional rock shrimp portion of the shrimp fishery, these economic effects cannot be quantified. Additionally, if landings of rock shrimp increase, these landings are a relatively small component of the overall market for shrimp given the magnitude of shrimp imports. Thus, higher landings of rock shrimp would not be expected to change ex-vessel or consumer prices and therefore there is no anticipated change in consumer surplus. The economic effects of **Alternative 3** would likely be similar to those described for **Preferred Alternative 2**, but economic benefits under **Alternative 3** would be comparatively higher since this alternative would allow access to an additional 10 mi^2 of fishing grounds.

The economic effects on individual vessel owners from **Preferred Alternative 2** and **Alternative 3** would depend on each vessel owner's profit maximization strategy, their dependence on rock shrimp, their seasonal fishing behavior, and their propensity to fish for rock shrimp in the new area compared to existing open areas. Some vessel owners may benefit from additional rock shrimp landings, while others may not. These types of individual vessel level effects cannot be determined with available models. Additionally, while fishing in the SFFA, vessels accessing the area under **Preferred Alternative 2** or **Alternative 3** would be required to have vessel monitoring system (VMS) ping rates that are higher than what is required in areas outside of the OHAPC. Specifically, VMS onboard vessels fishing the areas in **Preferred Alternative 2** or **Alternative 3** would require a ping rate of 12 pings per hour rather than 1 ping per hour that is required when outside of the OHAPC. The exact cost to the vessel would vary, depending on how much time was spent fishing within the SFFA and the cost of the VMS service that the vessel employs. The potential increase in cost associated with VMS ping rates is

[7] Producer surplus (PS) is the difference between the amount a producer is paid for a unit of a good and the minimum amount the producer would accept to supply that unit (i.e., marginal cost). Total PS in a market or industry is measured by the difference between total gross revenue and total variable costs. PS is a measure of net economic benefits to producers.

expected to be negligible since the overall cost of a temporary increased ping rate is expected to be very low, particularly when compared to other operating costs. Also, the vessel would be fishing in an area previously closed to bottom trawling gear and thus would be incurring a potential net economic benefit from access to this area.

Net economic benefits for commercial rock shrimp vessels would be highest under **Alternative 3**, followed by **Preferred Alternative 2**, and **Alternative 1 (No Action)**. In general, rock shrimp dealers are indirectly affected whenever gross revenues to commercial fishing vessels are expected to change as a result of a change in landings (e.g., increases in gross revenues from increased landings are expected to indirectly benefit dealers and vice versa). This would occur due to increased sales and associated increased producer surplus for dealers. Thus, the ranking of net economic benefits to dealers would be the same as for commercial fishing vessels.

4.1.3. Social Effects

In general, closed areas can have negative social effects on fishermen if important fishing grounds are no longer open to harvest. Fishermen would need to fish other areas to maintain operations, which may result in user conflicts or overcrowding issues. Additionally, increased economic costs associated with travel to other fishing grounds could affect crew employment opportunities on vessels. Long-term social benefits may be associated with the long-term biological benefits of closed areas if the closures are appropriately selected and include a periodic evaluation of effectiveness. Closing some areas may have broad social benefits by protecting more coral areas and may contribute to improved fishery resources.

Alternative 1 (No Action) would likely result in minimal social effects because the fleet is already harvesting in open areas and prohibited from working in the closed area. The social benefit of establishing an SFAA to the rock shrimp fleet would not occur under **Alternative 1 (No Action)** and changes in fishing behavior or fishing opportunities would not be expected. Maintaining closed areas where substantial deepwater coral exists may prevent any future impacts from fishing activities that could have negative biological effects on the habitat. However, as discussed in **Section 4.1.1** and **Appendix G** the SFAAs proposed in **Preferred Alternative 2** and **Alternative 3** are low relief areas and the likelihood of live Oculina within the proposed areas is very low. As such, **Preferred Alternative 2** and **Alternative 3** are not expected to result in negative biological impacts to the deepwater coral habitat from increased trawling in the area. Regardless, if shrimping is allowed the proposed SFAAs the current transit provisions (i.e., ping rate) would remain in place. Retaining current transit provisions would provide more data resolution for law enforcement ensuring any possible effects on EFH are minimized to the extent practicable.

Preferred Alternative 2 and **Alternative 3** would impact the rock shrimp fleet by opening some historic fishing grounds. The size and the location of the SFAA are the two most significant factors that would be expected to positively impact fishermen. The larger area proposed under **Alternative 3** could have more benefits than the smaller proposed area under **Preferred Alternative 2** if the location is in an area that would provide needed access to rock shrimp while simultaneously avoiding any deepwater coral. **Preferred Alternative 2** and **Alternative 3** are based on coordinates presented by rock shrimp fishermen during public comment in March 2013 and March 2014, respectively. The Shrimp and Deepwater Shrimp Advisory Panels have

expressed the importance of establishing a SFAA. AP members noted that regular use of the area is variable due to the nature of the fishery, but access is very important in years when rock shrimp are present. **Preferred Alternative 2** was supported by the South Atlantic Council's Deepwater Shrimp Advisory Panel.

Preferred Alternative 2 and **Alternative 3** directly address stakeholder concerns regarding access to historically important fishing grounds. Additionally, **Preferred Alternative 2** and **Alternative 3** would directly address Executive Order 14276: Restoring American Seafood Competitiveness, which requested that the regional fisheries management councils identify actions what would improve access to fishing opportunities and enhance economic profitability. Responding to stakeholder concerns and taking action that would promote domestic seafood may improve stakeholder perceptions of the management process and result in positive social effects associated with increased participation in the management process and more local ecological knowledge available to aid in decision-making **Preferred Alternative 2** and **Alternative 3** are expected to have greater social benefit than **Alternative 1 (No Action)**. The social effects of **Preferred Alternative 2** and **Alternative 3** are expected to be similar, though **Preferred Alternative 2** may have slightly higher social benefit because it represents what was previously recommended by rock shrimp fishermen.

4.1.4. Administrative Effects

Alternative 1 (No Action) would not change the administrative environment from its current condition. The establishment of an SFAA **(Preferred Alternative 2** and **Alternative 3**) would have minimal administrative impacts. The existing requirement of VMS in the rock shrimp portion of the shrimp fishery enhances enforcement of the regulations and helps to ensure protection of the sensitive *Oculina* coral habitat within the OHAPC. In Coral Amendment 8, a higher vessel location reporting rate (ping rate) when transiting the OHAPC was implemented (80 FR 42423, July 17, 2015). Administrative impacts would be incurred through the rulemaking process, outreach, and enforcement. The administrative impacts could differ between the alternatives relative to the amount of area they cover.

However, because the proposed SFAAs are small and are not substantially different in size, expected enforcement costs would increase initially as costs associated with increased VMS reporting will have to be accounted for and administrative burden would be reduced afterwards. Associated costs to reconfigure VMS reporting may be incurred by NOAA and industry, depending on vendor capabilities. The administrative impacts associated with these alternatives relate to at-sea enforcement, increased VMS staff monitoring and ensuring VMS vendor units are configured to report as required when in the SFAAs.

Chapter 5. Council's Rationale for the Preferred Alternatives

Action 1. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

5.1.1. Coral Advisory Panel Comments and Recommendations

In March 2025 the Council chose not to convene its advisory panels since the council had already received feedback from the Coral AP on establishing a SFAA within the OHAPC. All AP members have been kept abreast of opportunities for public comment via email.

5.1.2. Shrimp Advisory Panel Comments and Recommendations

In March 2025 the Council chose not to convene its advisory panels since the council had already received feedback from the Shrimp and Deepwater shrimp APs on establishing a SFAA within the OHAPC. The Shrimp and DW Shrimp APs received an update on this amendment during their meeting in 2024, and all AP members have been kept abreast of opportunities for public comment.

5.1.3. Public Comments and Recommendations

TO BE UPDATED

A public comment summary has been made available for the September 2025 briefing book. This document summarizes verbal and written public comments submitted on the Coral 11 and Shrimp 12 amendment from July 22, 2025, to August 12, 2025.

5.1.4. Council's Rationale

TO BE COMPLETED

Chapter 6. Cumulative Effects

This environmental assessment (EA) is being prepared according to NOAA NEPA procedures 216-6 A and accompanying companion manual. The cumulative effects discussed in this section meet the two-part standard for "reasonable foreseeability" and "reasonably close causal connection" required by the new definition of effects or impacts. Below is the five-step cumulative effects analysis that identifies criteria that should be considered in an EA.

6.1 Affected Area

The immediate impact area would be the federal 200-mile limit of the Atlantic off the coast of northern Florida, which is within the South Atlantic Fishery Management Council's (South Atlantic Council) area of jurisdiction. The ranges of affected species are described in Chapter 3 of this amendment. For the proposed action found in Amendment 11 to the Fishery Management Plan (FMP) for Coral, Coral Reefs, and Live/Hard Bottom Habitat of the South Atlantic Region (Coral FMP), and Amendment 12 to the FMP for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP), the effects analyses include data from 2015 through 2023. Additionally, these cumulative effects analysis includes an analysis of actions and events dating back to 1982 when the original Coral FMP was implemented, and through what is expected to take place in the reasonably foreseeable future.

6.2 Past, Present, and Reasonably Foreseeable Actions Impacting the Affected Area

Fishery managers implemented the first significant regulations pertaining to coral species in 1982 through the Coral FMP (GMFMC and SAFMC 1982), including prohibiting trawling within the Oculina Bank Habitat Area of Particular Concern (OHAPC). The implementation of the Shrimp FMP in 1993 has resulted in regulations associated with penaeid and rock shrimp. Listed below are other past, present, and reasonably foreseeable actions occurring in the South Atlantic Region. These actions, when added to the proposed management measures, may result in cumulative effects on the biophysical and socio-economic environment. The complete history of management of the *Oculina* coral habitat and the rock shrimp portion of the shrimp fishery can be found in Chapter 2.

Past Actions

Coral FMP (SAFMC 1982) established the OHAPC. Within the OHAPC area, no person may: 1) use a bottom longline, bottom trawl, dredge, pot, or trap; 2) if aboard a fishing vessel, anchor, use an anchor and chain, or use a grapple and chain; or 3) fish for rock shrimp or possess rock shrimp in or from the area on board a fishing vessel.

Amendment 4 to the Coral FMP and Amendment 3 to the Shrimp FMP, included in the Comprehensive Essential Fish Habitat (EFH) Amendment (SAFMC 1998b), expanded the OHAPC and incorporated two adjacent areas within the OHAPC.

Amendment 5 to the Shrimp FMP established a limited access system for portions of the rock shrimp fishery and required the use of a vessel monitoring system (VMS) by vessels with a limited access endorsement fishing for rock shrimp on a trip in the South Atlantic.

Amendment 6 to the Coral FMP and Amendment 8 to the Shrimp FMP, included in the Comprehensive Ecosystem-Based Amendment 1 (CE-BA 1; SAFMC 2009a and 2009 b), established Deepwater Coral HAPCs (CHAPC), prohibited the use of bottom tending gear in the Deepwater CHAPCs, and established shrimp fishery access areas within the Stetson-Miami Terrace Deepwater CHAPC.

Amendment 8 to the Coral FMP (SAFMC 2013a) expanded the Stetson-Miami Terrace Deepwater CHAPC, the Cape Lookout Deepwater CHAPC, and the OHAPC; and implemented a transit provision for rock shrimp fishermen through the OHAPC.

Coral Amendment 10 to the Coral FMP (SAFMC 2021) would have established a Shrimp Fishery Access Area (SFAA) along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC). The area was a historically important fishing ground for rock shrimpers, but access was restricted with the implementation of Coral Amendment 8 in 2014. However, in July 2022, Coral Amendment 10 was disapproved by the Secretary of Commerce because it was inconsistent with the Magnuson-Stevens Act, as discussed in Chapter 1. In this joint FMP amendment (Coral Amendment 11 and Shrimp Amendment 12), the Council is reviewing the reasons for the disapproval and evaluating whether to establish an SFAA in the OHAPC.

Present Actions
Effects from the action in this plan amendment are discussed in Chapter 4.

Reasonably Foreseeable Future Actions
There are no reasonably foreseeable future actions that would amend the Coral or Shrimp FMP.

Expected Impacts from Past, Present, and Future Actions
The intent of the Council in Coral Amendment 11 and Shrimp Amendment 12 is to create a shrimp fishery access area within the OHAPC, which contains the historic fishing grounds of rock shrimp fishermen that were lost when the OHAPC was expanded in 2015. When combined with the impacts of past, present, and future actions affecting the rock shrimp resource, minor cumulative impacts are likely to accrue. The action is not expected to result in significant cumulative adverse biological or socio-economic effects to the rock shrimp portion of the shrimp fishery when combined with the impacts of past, present, and future actions (see Chapter 4). The degree and likelihood of potential direct biological impacts from bottom-tending fishing gear on deepwater coral habitat are considered low based on current habitat mapping and characterization.

6.3 Consideration of Other Changes and Other Non-Fishery Related Issues

The Environmental Protection Agency's climate change webpage (https://www.epa.gov/climate-indicators/marine-species-distribution), and NOAA's Office of Science and Technology climate

webpage (https://www.fisheries.noaa.gov/topic/climate), provides background information on climate change, including indicators which measure or anticipate effects on oceans, weather and climate, ecosystems, health and society, and greenhouse gases. The United Nations Intergovernmental Panel on Climate Change's Sixth Assessment Report also provides a compilation of scientific information on climate change (IPCC 2023) provides an updated compilation of scientific information on the impacts of climate change on the marine environment. It highlights that widespread and rapid changes have occurred in the ocean and biosphere due to human influence, with a notable increase in the frequency and intensity of weather and climate extremes globally.

The report notes that human-caused climate change has exposed ocean and coastal ecosystems to conditions unprecedented for millennia, with ongoing ocean warming, sea-level rise, acidification, and deoxygenation. These changes are affecting organism metabolism and altering ecological processes, such as productivity, species interactions, migration, range, and distribution. Marine heatwaves have become more frequent and are projected to continue to increase in frequency, placing pressure on marine species and ecosystems, including leading to more frequent coral bleaching events.

The document also emphasizes that marine ecosystems are increasingly vulnerable to the combined effects of climate change and other human pressures like overfishing and pollution. As these ecosystems, such as coral reefs and mangroves, disappear, so do the fish and other organisms that depend on them. This degradation affects not only marine life but also human societies that rely on these ecosystems for food and livelihoods. The report is unequivocal that without a drastic reduction in greenhouse gas emissions, the risks of species extirpation and ecosystem collapse will escalate rapidly.

These changes may impact coral and shrimp, but the level of impacts cannot be quantified at this time, nor is the time frame known in which these impacts will occur. In the near term, it is unlikely that the management measures contained in this amendment would compound or exacerbate the ongoing effects of these changes.

Weather Variables

The annual hurricane season is from June 1 to November 30, and accounts for 97% of all tropical activity affecting the Atlantic basin. These storms, although unpredictable in their annual occurrence, can devastate areas when they occur. Although these effects may be temporary, those fishing-related businesses whose profitability is marginal may go out of business if a hurricane strikes.

Space Industry Impacts

The proposed SFAA is located off the coast of Cape Canaveral which is the home of space industry development. Currently there is a Draft Environmental Impact Statement[8] that estimates that SpaceX alone could begin launching and landing rockets upwards of 244 days per year (DAF, 2025). Each launch and landing will have an associated hazard zone that will close

[8] https://spaceforcestarshipeis.com/

off fishing grounds for all types of fishermen, including rock shrimp fishermen. These closures could make fishing off the east coast of Cape Canaveral and maintaining an economically viable fishery impossible, making the eastern boundary of the OHAPC an even more important fishing ground. The effect will not be predictable until the new development is finished and launches begin.

6.4 Overall Impacts Expected from Past, Present, and Future Actions

The proposed action would establish a shrimp fishery access area (SFAA) in the northern extension of the OHAPC. Past impacts to the overall OHAPC ecosystem occurred from fishing gear interactions and resulted in 100% loss of live coral at multiple sites (Reed et al. 2007). In the 1970s, *Oculina* reefs hosted large spawning aggregations of grouper and snapper. By the early 1990s, commercial and recreational fishing caused a dramatic decline in fish populations while bottom trawling for rock shrimp fishing had destroyed large portions of *Oculina* habitat. Comparisons of photographic transects of *Oculina* habitat from 1975-1977 dives and 2001 dives show that severe or complete loss of standing coral habitat on several reefs occurred during this time due to trawling activity (Reed et al. 2007).

The action is expected to result in minimal biological impacts to the deepwater coral habitat in the SFAA as it would allow bottom trawling for rock shrimp in areas that were historically fished by the rock shrimp fishermen. Fishermen are most likely to fish in areas where they historically fished. However, these areas could also be exhibiting signs of recovery as trawled low relief hard bottom or standing dead coral rubble provides habitat for coral recruitment and coral growth subsequent to trawling events.

In 2022, the Southeast Fisheries Science Center (SEFSC) conducted a visual survey of the proposed SFAA. They aimed to classify the bottom type as either live (standing), dead (standing), rubble, or sand. To collect information on bottom type, the crew aboard the *R/V Weatherbird* utilized a towed camera system. The crew executed 14 dives, however only 2 of those dives were able to classify bottom type. From their conclusions, they noted that all live colonies of *Oculina* coral have previously been found on medium and high relief habitat, with rubble often found at the perimeter of the relief and that there have never been standing live or dead colonies on low relief areas. Based on the successful tows from this trip, no live, standing dead or rubble was observed in or immediately adjacent to the SFAA. The team did note however that they could not state definitively that no live *Oculina* colonies exist within the SFAA, but based on existing multibeam bathymetry of the entire SFAA, which shows only low or no relief, they predicted that the likelihood of live *Oculina* is very low (Appendix G). Additionally, in 2025 there was a mapping effort conducted by the NOAA ship *Nancy Foster* that did not find any evidence of coral in the area (Appendix F).

This action would result in net economic and social benefits by allowing vessels fishing for rock shrimp with bottom trawl gear to potentially increase landings of rock shrimp through access to the SFAA. The proposed management action is summarized in Chapter 2 of this document. Detailed discussions of the magnitude and significance of the impacts of the alternatives on the human environment appear in Chapter 4 of this document. None of the impacts of the action in

this amendment, in combination with past, present, and future actions have been determined to be significant.

The proposed actions would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places as these are not in the South Atlantic exclusive economic zone (EEZ). These actions are not likely to result in direct, indirect, or cumulative effects to unique areas, such as significant scientific, cultural, or historical resources, park land, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas as the proposed action is not expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort within the South Atlantic region. The Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries are within the boundaries of the South Atlantic EEZ. The proposed action would not cause loss or destruction of these national marine sanctuaries (NMS) because the action is not expected to result in appreciable changes to current fishing practices and the action area is outside of NMS. Additionally, the proposed action is not likely to change the way in which the rock shrimp portion of the shrimp fishery is prosecuted; therefore, the action is not expected to result in adverse impacts on health or human safety beyond the status quo.

6.5 Monitoring and Mitigation

The effects of the proposed action are and would continue to be monitored through collection of data by the National Marine Fisheries Service (NMFS), economic and social analyses, and other scientific observations. Vessels that participate in the limited access rock shrimp portion of the shrimp fishery are monitored through vessel monitoring systems (VMS). Currently, rock shrimp vessels transiting through the OHAPC must increase the VMS transmission rates, store equipment and maintain a direct and non-stop continuous course. Additionally, VMS would be required on rock shrimp vessels while fishing in the proposed SFAAs at the higher transmission rates that are currently in place while transiting the OHAPC. While VMS cannot replace at-sea enforcement by aircraft, vessels, and boarding teams, the technology complements existing capability and allows enforcement to target violators, thereby increasing enforcement efficiency. A vessel for which a federal Commercial South Atlantic Rock Shrimp Permit has been issued must carry a NMFS-approved observer, if selected for observer coverage. The Southeast Fisheries Science Center allocates 20% of the total general shrimp observer funds distributed annually for at-sea observers on shrimp vessels to the South Atlantic. Approximately 1% of penaeid shrimp and <1% of rock shrimp trips (698 days from 2011-2016; Scott-Denton et al. 2020) have observer coverage.

The proposed action relates to the harvest of indigenous species in the Atlantic, and the activities/regulations being altered do not introduce non-indigenous species and are not reasonably expected to facilitate the spread of such species through depressing the populations of native species. Additionally, these alternatives do not propose any activity, such as increased ballast water discharge from foreign vessels, which is associated with the introduction or spread of non-indigenous species.

Chapter 7. List of Preparers

Name	Agency/Division	Title
Allie Iberle	SAFMC	Fishery Scientist/IPT Lead
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Monica Smit-Brunello	NOAA GC	General Counsel
Matthew Walia	SERO/OLE	Compliance Liaison Analyst
Christopher Liese	SEFSC	SEFSC Economist
Jennifer Lee	SERO/PR	Fishery Biologist, Protected Resources Division

IPT = Interdisciplinary Planning Team, SAFMC = South Atlantic Fishery Management Council, SERO = Southeast Regional Office, SF = Sustainable Fisheries Division, PR = Protected Resources Division, HC = Habitat Conservation Division, NOAA=National Oceanic and Atmospheric Administration, GC = General Counsel, OLE = Office of Law Enforcement, SEFSC = Southeast Fisheries Science Center.

Chapter 8. Agencies and Persons Consulted

8.1 Responsible Agencies

South Atlantic Fishery Management Council (Administrative Lead)
4055 Faber Place Drive, Suite 201
N. Charleston, South Carolina 29405
843-571-4366/ 866-SAFMC-10 (TEL)
843-769-4520 (FAX)
www.safmc.net

NMFS, Southeast Region
263 13th Avenue South
St. Petersburg, Florida 33701
727- 824-5301 (TEL)
727-824-5320 (FAX)

8.2 List of Agencies, Organizations, and Persons Consulted

SAFMC Law Enforcement Advisory Panel
SAFMC Snapper Grouper Advisory Panel
SAFMC Scientific and Statistical Committee
North Carolina Coastal Zone Management Program
South Carolina Coastal Zone Management Program
Georgia Coastal Zone Management Program
Florida Coastal Zone Management Program
Florida Fish and Wildlife Conservation Commission
Georgia Department of Natural Resources
South Carolina Department of Natural Resources
North Carolina Division of Marine Fisheries
North Carolina Sea Grant
South Carolina Sea Grant
Georgia Sea Grant
Florida Sea Grant
Atlantic States Marine Fisheries Commission
National Marine Fisheries Service
- -Washington Office
- -Office of Ecology and Conservation
- -Southeast Regional Office
- -Southeast Fisheries Science Center

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Appendix A. Other Applicable Law

1.1 Administrative Procedure Act (APA)

All federal rulemaking is governed under the provisions of the APA (5 U.S.C. Subchapter II), which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Among other things under the APA, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day waiting period from the time a final rule is published until it takes effect, with some exceptions. This amendment complies with the provisions of the APA through the South Atlantic Fishery Management Council's (South Atlantic Council) extensive use of public meetings, requests for comments, and consideration of comments. The notice of availability and the proposed rule associated with this amendment will each have public comment periods, which complies with the APA, and upon publication of the final rule, unless the rule falls within an APA exception, there will be a 30-day waiting period before the regulations are effective.

1.2 Information Quality Act (IQA)

The IQA (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-443)) which took effect October 1, 2002, directed the Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidelines to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies." OMB directed each federal agency to issue its own guidelines, establish administrative mechanisms allowing affected persons to seek and obtain correction of information that does not comply with OMB guidelines, and report periodically to OMB on the number and nature of complaints. The NOAA Section 515 Information Quality Guidelines require a series of actions for each new information product subject to the IQA. This amendment uses the best available information and made a broad presentation thereof. The information contained in this document was developed using the best available scientific information. Therefore, this document is in compliance with the IQA.

1.3 Coastal Zone Management Act (CZMA)

Section 307(c)(1) of the federal CZMA of 1972 requires that all federal activities that directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. While it is the goal of the South Atlantic Council to have management measures that complement those of the states, federal and state administrative procedures vary, and regulatory changes are unlikely to be fully instituted at the same time. The Council believes the actions in this amendment are consistent to the maximum extent practicable with the Coastal Zone Management Plans of Florida, Georgia, South Carolina, and North Carolina. Pursuant to Section 307 of the CZMA, this determination will be submitted to the responsible state agencies who administer the approved Coastal Zone Management Programs in the States of Florida, South Carolina, Georgia, and North Carolina.

1.4 Executive Order 12612: Federalism

E.O. 12612 requires agencies to be guided by the fundamental federalism principles when formulating and implementing policies that have federalism implications. The purpose of the Order is to guarantee the division of governmental responsibilities between the federal government and the states, as intended by the framers of the Constitution. No federalism issues have been identified relative to the actions proposed in this document and associated regulations. Therefore, preparation of a Federalism assessment under E.O. 12612 is not necessary.

1.5 Executive Order 13089: Coral Reef Protection

E.O. 13089, signed by President William Clinton on June 11, 1998, recognizes the ecological, social, and economic values provided by the Nation's coral reefs and ensures that federal agencies are protecting these ecosystems. More specifically, the Order requires federal agencies to identify actions that may harm U.S. coral reef ecosystems, to utilize their program and authorities to protect and enhance the conditions of such ecosystems, and to ensure that their actions do not degrade the condition of the coral reef ecosystem.

The alternatives considered in this document are consistent with the directives of E.O. 13089.

1.6 Executive Order 13158: Marine Protected Areas (MPA)

E.O. 13158 was signed on May 26, 2000, to strengthen the protection of U.S. Ocean and coastal resources through the use of Marine Protected Areas. The E.O. defined MPAs as "any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." It directs federal agencies to work closely with state, local and non-governmental partners to create a comprehensive network of MPAs "representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources."

The alternatives considered in this document are consistent with the directives of E.O. 13158.

1.7 National Marine Sanctuaries Act (NMSA)

Under the NMSA (also known as Title III of the Marine Protection, Research and Sanctuaries Act of 1972), as amended, the U.S. Secretary of Commerce is authorized to designate National Marine Sanctuaries to protect distinctive natural and cultural resources whose protection and beneficial use requires comprehensive planning and management. The National Marine Sanctuary Program is administered by the Sanctuaries and Reserves Division of NOAA. The NMSA provides authority for comprehensive and coordinated conservation and management of these marine areas. The National Marine Sanctuary Program currently comprises 13 sanctuaries around the country, including sites in American Samoa and Hawaii. These sites include significant coral reefs and kelp forest habitats, and breeding and feeding grounds of whales, sea lions, sharks, and sea turtles. The three sanctuaries in the South Atlantic exclusive economic zone are the Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries.

The alternatives considered in this document are not expected to have any adverse impact on the resources managed by the National Marine Sanctuaries.

1.8 Paperwork Reduction Act (PRA)

The purpose of the PRA is to minimize the burden on the public. The PRA is intended to ensure that the information collected under the proposed action is needed and is collected in an efficient manner (44 U.S.C. 3501 (1)). The authority to manage information collection and record keeping requirements is vested with the Director of the Office of Management and Budget (OMB). This authority encompasses the establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications. The PRA requires NMFS to obtain approval from the OMB before requesting most types of fishery information from the public. Actions in this document are not expected to affect PRA.

1.9 Small Business Act (SBA)

Enacted in 1953, the SBA requires that agencies assist and protect small-business interests to the extent possible to preserve free competitive enterprise. The objectives of the SBA are to foster business ownership by individuals who are both socially and economically disadvantaged; and to promote the competitive viability of such firms by providing business development assistance including, but not limited to, management and technical assistance, access to capital and other forms of financial assistance, business training, and counseling, and access to sole source and limited competition federal contract opportunities, to help firms achieve competitive viability. Because most businesses associated with fishing are considered small businesses, NMFS, in implementing regulations, must make an assessment of how those regulations will affect small businesses.

1.10 Public Law 99-659: Vessel Safety

Public Law 99-659 amended the Magnuson-Stevens Fishery Conservation and Management Act to require that a FMP or FMP amendment must consider, and may provide for, temporary adjustments (after consultation with the U.S. Coast Guard and persons utilizing the fishery) regarding access to a fishery for vessels that would be otherwise prevented from participating in the fishery because of safety concerns related to weather or to other ocean conditions. No vessel would be forced to participate in South Atlantic fisheries under adverse weather or ocean conditions as a result of the imposition of management regulations proposed in this amendment. No concerns have been raised by South Atlantic fishermen or by the U.S. Coast Guard that the proposed management measures directly or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions.

1.11 Executive Order 14276: Restoring American Seafood Competitiveness

Executive Order (EO) 14276 was signed on April 17th, 2025, to reduce burdens on domestic fishing and increase production. The EO requires the Secretary of Commerce, with each Regional Fishery Management Council, to identify actions that will stabilize domestic seafood markets, improve access to domestic fishing resources, enhance profitability for American fishermen, and prevent closures.

The alternatives considered in this document are consistent with the directives of EO 14276.

Appendix B. Regulatory Impact Review

TO BE COMPLETED

B.1. Introduction

Body text

B.2. Problems and Objectives

Body text

B.3. Description of Fisheries

Body text

B.4. Effects of Management Measures

Body text

B.5. Public Costs of Regulations

Body text

B.6. Net Benefits of Regulatory Action

Body text

B.7. Determination of Significant Regulatory Action

Body text

Appendix C. Regulatory Flexibility Act Analysis

TO BE COMPLETED

C.1. Introduction.

Body text

C.2. Statement of the Need for, Objective of, and Legal Basis for the Proposed Action

Body text

C.3. Description and Estimate of the Number of Small Entities to Which the Proposed Action Would Apply

Body text

C.4. Description of the Projected Reporting, Record-Keeping and Other Compliance Requirements of the Proposed Action, Including an Estimate of the Classes of Small Entities Which Will Be Subject to the Requirement and the Type of Professional Skills Necessary for the Preparation of the Report or Records

Body text

C.5. Identification of All Relevant Federal Rules, Which May Duplicate, Overlap, or Conflict with the Proposed Action

Body text

C.6. Significance of Economic Impacts on a Substantial Number of Small Entities

Body text

C.7. Description of the Significant Alternatives to the Proposed Action and Discussion of How the Alternatives Attempt to Minimize Economic Impacts on Small Entities

Body text

Appendix D. Bycatch Practicability Analysis

This bycatch practicability analysis evaluates the potential impacts of the proposed action in Amendment 11 to the Fishery Management Plan (FMP) for Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP) and Amendment 12 to the Fishery Management Plan for the Shrimp Fishery of the South Atlantic Region (Shrimp FMP) on bycatch and bycatch mortality.

The proposed action in Amendment 11 to the Coral FMP (Coral Amendment 11) and Amendment 12 to the Shrimp FMP (Shrimp Amendment 12) would establish a shrimp fishery access area (SFAA) along the eastern boundary of the Oculina Habitat Area of Particular Concern (OHAPC).

D.1. Population Effects for the Bycatch Species

Background

The OHAPC was established in 1982 (49 FR 29607, August 22, 1984) with anchoring prohibited within the OHAPC in 1996 (60 FR 66926, December 27, 1995) and expanded area in 2014 through Coral Amendment 8 (80 FR 42423, July 17, 2015). The northern extension of the OHAPC was closed to rock shrimp trawling with the implementation of Coral Amendment 8. Under the regulations in 50 C.F.R. § 622.224(b)(1)(i), no person in the OHAPC is permitted to use bottom longlines, bottom trawls, dredges, pots, or traps. Additionally, while aboard a fishing vessel, a person may not anchor, or use an anchor and chain, or a grapple and chain. Fishing for or possessing rock shrimp in or from the OHAPC is also prohibited, except for a shrimp vessel with a valid commercial vessel permit for rock shrimp that can transit through the area if its gear is appropriately stowed. "Transit" is defined as a direct, continuous, and non-stop course through the area, maintaining a minimum speed of five knots as determined by an operating vessel monitoring system (VMS) with a minimum ping rate of 1 ping per 5 minutes. Appropriately stowed gear means that the doors and nets are out of the water.

Coral Amendment 11 and Shrimp Amendment 12 propose to establish a Shrimp Fishery Access Area (SFAA) within the OHAPC in a discrete location where fishermen historically fished. This analysis evaluates the potential impacts the SFAA action may have on deepwater coral, particularly the potential for incidental capture, or "bycatch," of coral. As discussed in Section D.4, scientific surveys have indicated a very low likelihood of live *Oculina* coral within the proposed SFAA due to the low-relief, sandy bottom in the area. As such, the bycatch of coral during the operation of this fishery is not expected to occur.

The bycatch practicability analysis therefore focuses on the rock shrimp fishery and its potential indirect impacts on other species caught incidentally, noting that historical fishing effort in the area was low and impacts on commercially important species are expected to be minimal.

The proposed action could result in negative direct impacts to the rock shrimp species within the SFAA as targeted fishing would likely occur. However, the presence of rock shrimp in the proposed areas is highly variable due to the migratory nature of the species and the variations in

the water currents. Access to the area can be important to the rock shrimp fishermen in years when rock shrimp are present in the area. Past fishing effort in the northern extension of the OHAPC and proposed SFAAs has been historically low, averaging less than 1.8% of the total number of vessel monitoring system (VMS) fishing points, which are used as a proxy for fishing activity. Additionally, the rock shrimp fishery has not been fished at or exceeded the optimum yield (OY) target since 2004.

There may also be a negative impact on snapper grouper species that may be caught as bycatch in the rock shrimp fishery. Fish taken in shrimp trawls are generally small and young. Juveniles are more expendable in one respect because they occur in high numbers, and relatively few actually survive to adulthood. The reproductive potential of a stock can be compromised if fish are not provided sufficient opportunities to reproduce before they are exposed to fishing or bycatch mortality. However, as mentioned above, the historical fishing effort in this area was low and the impacts on managed snapper grouper species is expected to be low.

Some commercially valuable deepwater species congregate around deepwater coral habitat**.** Various crabs, are abundant on the deep reefs. Other invertebrates, particularly ophiuroids (brittle stars), populate the deepwater coral matrix in high numbers. There could be potential for bycatch of these species, however more research on abundance and type is needed to quantify potential impacts.

Bycatch Data for South Atlantic Rock Shrimp Fishery

A mandatory observer program for the commercial shrimp fishery in the U.S. Gulf of America (formally Gulf of Mexico) was implemented in 2007 and expanded to include the South Atlantic penaeid and rock shrimp fisheries through Amendment 6 to the Shrimp Fishery Management Plan (70 FR 73383, December 12, 2005).

Annually, between July and November, the South Atlantic Rock Shrimp Observer Program randomly selects 10 vessels with active permits and reported rock shrimp landings in the prior three years. There are 158 unique South Atlantic Rock Shrimp permits, with an average of 90-100 active in any given year.

The South Atlantic rock shrimp observer data was provided from the National Marine Fisheries Service (NMFS) Southeast Fishery Science Center (SEFSC) in April of 2025. There was no observer data in the South Atlantic rock shrimp fishery in 2023 because the 10 vessels selected either did not fish in 2023 or failed to respond to the selection letter. The 2024 South Atlantic rock shrimp observer bycatch estimates are not available in the format necessary for publication. As of 2023, only four-net configurations were sampled in this fishery, with observers generally sampling two nets per vessel. Formal bycatch estimates expanded to the entire fleet are not currently available; however, the bycatch is summarized by numbers of individuals and by weight. (Table D.1.2.1)

Table D.1.2.1. Species documented from bycatch characterization samples, based on observer coverage of the South Atlantic rock shrimp fishery from 2018 through 2022. The bycatch is summarized by numbers of individuals and by weight (kilograms).

Species	Numbers	Species	Weight (kg)
Longspine Swimming Crab	668,181	Inshore Lizard Fish	5,518
Brown Shrimp	85,404	Longspine Swimming Crab	5,420
Iridescent Swimming Crab	60,354	Dusky Flounder	2,676
Dusky Flounder	48,531	Brown Shrimp	2,421
Inshore Lizard Fish	41,241	Iridescent Swimming Crab	1,276
Rock Sea Bass	20,830	Spot	903
Bank Sea Bass	9,184	Rock Sea Bass	721
Spot	7,041	Atlantic Croaker	521
Atlantic Croaker	3,576	Bank Sea Bass	317
Pink Shrimp	3,222	Summer Flounder	286
Summer Flounder	1,081	Pink Shrimp	197
Southern Flounder	183	Atlantic Sharpnose Shark	161
Seatrout	90	Southern Flounder	48
Atlantic Sharpnose Shark	81	Black Sea Bass	5
Florida Pompano	69	Red Lionfish	5

The data from observer coverage reveals the dominant bycatch species in the fishery. Longspine swimming crab was the most common bycatch by number and the second most common by weight. Inshore lizardfish was the most common species by weight and was also in the top five by numbers. Other significant bycatch species, appearing in the top five by both numbers and weight, included brown shrimp, dusky flounder, and iridescent swimming crab.

Of the species listed in the bycatch table, brown shrimp, pink shrimp, and black sea bass are managed by the SAFMC, which operates under the Shrimp and Snapper Grouper Fishery Management Plans. However, most of the listed finfish and invertebrate species are not targeted in Southeast commercial or recreational fisheries and have not undergone formal stock assessments. Although bycatch reduction devices are mandated and are believed to be sufficient for stock protection , data are inadequate for a formal, coast-wide assessment of these species. The continued prohibition on the use of bottom longline, dredge, pot, or trap gear within the proposed SFAA is expected to provide ongoing biological benefits to bottom-dwelling species.

D.2. Practicability of Management Measures in Directed Fisheries Relative to their Impact on Bycatch and Bycatch Mortality

The proposed action in this amendment aims to allow access to a historic rock shrimp fishing area that was closed with the implementation of Coral Amendment 8 in 2014. Preferred Alternative 2 and Alternative 3 would establish SFAAs of approximately 16.61 square nautical miles (NM^2) or 24 NM^2, respectively, allowing commercial rock shrimp vessels to bottom trawl within these areas. Other bottom-tending gear and anchoring would remain prohibited.

The establishment of these SFAAs could result in negative biological impacts to deepwater coral. Negative direct impacts on rock shrimp within the SFAA are also possible due to targeted fishing, though their presence is highly variable. Both Preferred Alternative 2 and Alternative 3 may have negative impacts on finfish species caught as bycatch. However, historical fishing effort in the area was low, and impacts on commercially or recreationally important species are expected to be low.

D.3. Ecological Effects Due to Changes in Bycatch

The ecological effects of bycatch mortality are similar to those of fishing mortality from directed efforts; if not properly managed, they can reduce stock biomass to unsustainable levels. Currently, bycatch within the proposed SFAA is likely to be based on historic fishing activity in this area. The SFAA is intended to be in a location where coral presence is not indicated. The implementation of VMS requirements, with ping rates for transiting and fishing (1 ping per 5 minutes) aims to enhance enforcement and protect the *Oculina* coral habitat. These measures help ensure that trawling occurs only within the designated SFAA and not in other areas within the OHAPC.

D.4. Changes in Bycatch of Other Fish Species and Resulting Population and Ecosystem Effects

The proposed action to establish an SFAA is intended to restore access to historically fished grounds while minimizing impacts to deepwater coral. While this reopens an area in the OHAPC, the historical fishing effort in these specific areas was low. The action is not expected to significantly increase overall fishing effort or change the spatial/temporal distribution of current fishing effort within the South Atlantic region.

There is some concern that the establishment of these SFAAs could result in negative biological impacts to deepwater coral habitat due to intermittent bottom trawling. However, trawling is expected to occur in areas of low relief and predominately sand bottom, which have already been impacted by past fishing activities. Historical fishing effort in the proposed areas was low, averaging less than 1.8% of total VMS fishing points, suggesting the impact is expected to be minimal. Fishermen tend to avoid hard bottom habitat to prevent snags and gear loss.

In 2022, the SEFSC conducted a visual survey of the proposed SFAAs, utilizing a towed camera system to classify bottom types as live (standing), dead (standing), rubble, or sand. Out of 14 dives, only two successfully classified bottom type. The survey concluded that all live *Oculina* coral colonies have historically been found on medium and high-relief habitat, with rubble at the perimeter, and no standing live or dead colonies have been observed in low-relief areas. Based on the successful tows, no live, standing dead, or rubble was observed in or immediately adjacent to the SFAA. While the SEFSC could not definitively state the absence of live *Oculina* within the SFAA, they predicted a very low likelihood based on existing multibeam bathymetry showing only low or no relief.

In addition to the 2022 visual survey, in April 2025, the National Oceanic and Atmospheric Administration (NOAA) Ship *Nancy Foster* performed a mapping trip in the proposed SFAA. This mapping trip collected bathymetry and backscatter data at 2-meter (m) resolution across the proposed SFAA. Mapping showed that mound features formed by *Oculina* corals were not evident in the proposed SFAA. Both studies indicate that there is no live or dead *Oculina* coral within the proposed SFAA and that since the area was closed to rock shrimp fishing in 2014 there has been no coral growth within the area.

Therefore, the degree and likelihood of potential direct biological impacts from bottom-tending fishing gear on coral habitat as a result of **Preferred Alternative 2** and **Alternative 3** are low based on current habitat mapping and characterization. While no high relief mounds are present, low-relief hard bottoms and coral rubble could be providing substrate for coral recruitment and recovery from previous trawling events. Sedimentation from trawling could also negatively affect corals by smothering polyps, shading, and reducing recruitment and survival of larvae. Fine sediments, which are present in higher concentrations near *Oculina* reefs, tend to have greater negative effects. Sediment plumes from trawling can spread for hundreds of meters laterally. The western boundaries of the proposed SFAA are approximately 360-1580 m west from known Oculina pinnacles (Appendix F). **Preferred Alternative 2** provides a larger buffer from known coral pinnacles compared to **Alternative 3**.

D.5. Effects on Marine Mammals and Birds

Under Section 118 of the Marine Mammal Protection Act (MMPA), NMFS must publish, at least annually, a List of Fisheries (LOF) that places all U.S. commercial fisheries into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishery.

The Southeastern U.S. Atlantic and Gulf of Mexico shrimp trawl fishery, which includes the rock shrimp fishery, continues to be listed as a Category II fishery under the Marine Mammal Protection Act (MMPA) proposed List of Fisheries (LOF) for 2025 (September 24, 2024, 89 FR 77789. The categorization as Category II is supported by ongoing reviews of information, including Marine Mammal Stock Assessment Reports (SARs), injury determination reports, observer data, logbook data, stranding data, disentanglement network data, fishermen self-reports, and anecdotal reports. While specific recent take numbers for rock shrimp trawls exclusively in the South Atlantic are not always disaggregated from the other shrimp fishing in the area, the overall shrimp trawl fishery in the region (South Atlantic and Gulf) has documented marine mammal interactions.

The Bermuda petrel and roseate tern occur within the action area. Bermuda petrels are occasionally seen in the waters of the Gulf Stream off the coasts of North and South Carolina during the summer. Sightings are considered rare and only occurring in low numbers (Also 2001). Roseate terns occur widely along the Atlantic coast during the summer but in the southeast region they are found mainly off the Florida Keys (unpublished U.S. Fish data). Interaction with South Atlantic fisheries has not been reported as a concern for either of these species.

D.6. Changes in Fishing, Processing, Disposal, and Marketing Costs

Detailed descriptions of any expected changes associated with fishing, processing, disposal, and marketing costs are contained in **Section 4.0**. The action contained within this amendment is expected to result in net economic benefits by allowing vessels to potentially increase rock shrimp landings. The economic effects are difficult to quantify due to variability in area usage and overall participation in the fishery. However, Alternative 3, being larger, would likely offer comparatively higher economic benefits than Preferred Alternative 2. Increased landings would be expected to increase gross revenue and producer surplus for vessels and indirectly benefit dealers.

D.7. Changes in Fishing Practices and Behavior of Fishermen

Detailed descriptions of any expected changes associated with fishing practices and the behavior of fishermen are contained in **Section 4.0.** Alternatives 2 and Alternative 3 would impact the rock shrimp fleet by reopening some historic fishing grounds. The size and location of the SFAA are the most significant factors that would positively impact fishermen. Access to these areas is particularly important in years when rock shrimp are present, despite variable regular use. Preferred Alternative 2 represents the most recent recommendation by rock shrimp fishermen and is supported by the Deepwater Shrimp Advisory Panel.

The establishment of a transit provision through the Oculina HAPC in Coral Amendment 8 had a positive effect on shrimp operations by reducing travel distance and enhancing safety in poor weather conditions. This current amendment does not modify that transit provision. This amendment would also ensure that the VMS ping rate of once per five minutes is maintained in the SFAA which will aid law enforcement in monitoring the area to protect coral.

D.8. Changes in Research, Administration, and Enforcement Costs and Management Effectiveness

The establishment of an SFAA would have minimal administrative impacts. Existing VMS requirements in the rock shrimp fishery enhance enforcement and help protect the *Oculina* coral habitat within the OHAPC. Administrative impacts would be incurred through the rulemaking process, outreach, and enforcement, with potential initial costs for VMS reconfiguration for NOAA and industry. However, these are expected to be minimal given the small size of the proposed SFFAs and their similar sizes.

Research is ongoing to discover additional deepwater coral areas, and the South Atlantic Council actively provides protection for these areas. Collaborative efforts between the South Atlantic, Mid-Atlantic, and New England Fishery Management Councils are in place to coordinate deep-sea coral conservation.

Monitoring of the rock shrimp fishery occurs through VMS and a mandatory observer program, though observer coverage for rock shrimp trips has been less than 1%.

Cooperative research projects (CRP) between science and industry are being used to a limited extent to collect bycatch information from fisheries in the Gulf and South Atlantic. Research funds for observer programs, as well as gear testing and testing of electronic devices are also available each year in the form of grants from the Marine Fisheries Initiative, Saltonstall-Kennedy program, and the CRP. Efforts are made to emphasize the need for observer and

logbook data in requests for proposals issued by granting agencies. A condition of funding for these projects is that data are made available to the Councils and NMFS upon completion of a study.

Stranding networks have been established in the Southeast Region. The NMFS SEFSC is the base for the Southeast United States Marine Mammal Stranding Program (http://sero.nmfs.noaa.gov/pr/strandings.htm). NMFS authorizes organizations and volunteers under the MMPA to respond to marine mammal strandings throughout the United States. These organizations form the stranding network whose participants are trained to respond to, and collect samples from live and dead marine mammals that strand along southeastern United States beaches. The SEFSC is responsible for: coordinating stranding events; monitoring stranding rates; monitoring human caused mortalities; maintaining a stranding database for the southeast region; and conducting investigations to determine the cause of unusual stranding events including mass strandings and mass mortalities (http://www.sefsc.noaa.gov/species/mammals/strandings.htm).

The NMFS Southeast Regional Office and the SEFSC participate in a wide range of training and outreach activities to communicate bycatch related issues. The NMFS Southeast Regional Office issues public announcements, Southeast Fishery Bulletins, or News Releases on different topics, including use of turtle exclusion devices, bycatch reduction devices, use of methods and devices to minimize harm to turtles and sawfish, information intended to reduce harm and interactions with marine mammals, and other methods to reduce bycatch for the convenience of constituents in the southern United States. These are mailed out to various organizations, government entities, commercial interests and recreational groups. This information is also included in newsletters and publications that are produced by NMFS and the various regional fishery management councils. Announcements and news released are also available on the internet and broadcasted over NOAA weather radio.

Additional administrative and enforcement efforts would help to implement and enforce fishery regulations. NMFS established the South East Fishery-Independent Survey in 2010 to strengthen fishery-independent sampling efforts in southeast U.S. waters, addressing both immediate and long-term fishery-independent data needs, with an overarching goal of improving fishery-independent data utility for stock assessments. Meeting these data needs is critical to improving scientific advice to the management process, ensuring overfishing does not occur, and successfully rebuilding overfished stocks on schedule.

D.9. Changes in the Economic, Social, or Cultural Value of Fishing Activities and Non-Consumptive Uses of Fishery Resources

The proposed action is expected to result in net economic and social benefits by allowing increased rock shrimp landings through access to the SFAA. These benefits address stakeholder concerns regarding access to historically important fishing grounds and may improve perceptions of the management process. Discussion associated effects, costs, and benefits associated with various alternatives are described in **Section 4.0**.

D.10.Changes in the Distribution of Benefits and Costs

D.10.1. Social Effects

The proposed actions are expected to provide greater opportunities for rock shrimp fishermen in the SFAA. The transit provision through the OHAPC, established through Coral Amendment 8, is expected to continue providing socio-economic benefits and enhance safety for rock shrimp fishermen. Additionally, any fishing in the SFAA will be documented with VMS. The social effects of all the proposed management measures are described in **Section 4.0**.

D.11 Conclusion

This analysis evaluates the practicability of minimizing bycatch and bycatch mortality under the proposed action. The core action of establishing an SFAA along the eastern boundary of the northern extension of the OHAPC aims to restore historic fishing grounds for the rock shrimp fishery. While bottom trawling inherently carries a risk of bycatch and habitat impact, current information suggests that the proposed SFAA areas have low or no relief and a very low likelihood of live *Oculina* coral. Historical fishing effort in these specific areas was also low. The management measures, including VMS requirements, are intended to mitigate potential negative biological impacts by ensuring fishing occurs within designated areas and that transit provisions are followed. Ongoing research and monitoring efforts aim to improve data collection for bycatch and ecosystem health.

Overall, the proposed action is anticipated to have minimal biological impacts on deepwater coral and protected species in the SFAA, given the current understanding of the habitat. They are expected to result in net economic and social benefits by improving access to the rock shrimp fishery in historically utilized areas. Therefore, the proposed actions are deemed, to the extent practicable, to minimize bycatch and bycatch mortality while achieving the purpose and need of the amendment.

Appendix E. Essential Fish Habitat and Ecosystem-Based Management

E.1. EFH and EFH-HAPC Designations and Cooperative Habitat Policy Development

Summary
The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires federal fishery management councils and the National Marine Fisheries Service (NMFS) to designate essential fish habitat (EFH) for species managed under federal fishery management plans (FMP). Federal regulations that implement the EFH program encourage fishery management councils and NMFS to designate subsets of EFH to highlight priority areas for conservation and management. These subsets of EFH are called EFH-Habitat Areas of Particular Concern (EFH-HAPCs or HAPCs) and are designated based on ecological importance, susceptibility to human-induced environmental degradation, susceptibility to stress from development, or rarity of the habitat type.

Information supporting EFH and EFH-HAPC designations was updated (pursuant to the EFH Final Rule) in Fishery Ecosystem Plan (FEP) II (SAFMC 2018). Additional detailed information supporting the EFH designations appears in FEP I (SAFMC 2009), individual FMPs, general information on the EFH provisions of the Magnuson-Stevens Act and its implementing regulations (50 C.F.R Part 900 Subparts J and K), and the EFH User Guide (SAFMC 2024).

In addition to implementing regulations to protect habitat from degradation due to fishing activities, the Council cooperates with NMFS to comment on non-fishing projects or policies that may impact EFH. The Council established a Habitat and Ecosystem Advisory Panel (AP) and adopted a comment and policy development process that was recently revised in the Habitat Blueprint (SAFMC 2023). Members of the AP serve as the Council's habitat contacts and professionals in the field and have guided the Council's development of the policy statements. To access these policy statements, refer to the habitat website: https://safmc.net/fishery-management-plans/habitat/

Habitat Conservation
The Council has been proactive in advancing habitat conservation through extensive fishing gear restrictions in all Council FMPs and by directly managing habitat and fisheries affecting those habitats through two FMPs: the FMP for Coral, Coral Reefs and Live/Hard Bottom Habitat of the South Atlantic Region (Coral FMP;SAFMC 1984) and the FMP for the Sargassum Fishery of the South Atlantic Region (SAFMC 2003).

Ecosystem Approach to Conservation and Management of Deepwater Ecosystems
Building on the long-term conservation approach, the Council facilitated the evolution of the Habitat Plan into FEP and FEP II to assemble information on the physical, biological, and human/institutional context of ecosystems within which fisheries are managed. These two documents were intended to initiate the transition from single species management to

Ecosystem-Based Fisheries Management (EBFM) in the region. To support this, the South Atlantic Council adopted broad goals: (1) maintaining or improving ecosystem structure and function; (2) maintaining or improving economic, social, and cultural benefits from resources; and (3) maintaining or improving biological and cultural diversity.

Through Comprehensive Ecosystem-Based Amendment 1 (CE-BA 1; SAFMC 2009b), Comprehensive Ecosystem-Based Amendment 2 (SAFMC 2011), and Coral Amendment 8 (SAFMC 2013), the South Atlantic Council established and expanded deepwater coral HAPCs (CHAPCs) and co-designated them as EFH-HAPCs.

E.2. EFH for species managed under the Coral FMP

Essential Fish Habitat (EFH) for hermatypic stony corals includes rough, hard, exposed, stable substrate from Palm Beach County south through the Florida reef tract in subtidal to 30 m depth, subtropical (15°-35° C), oligotrophic waters with high (30-35o/oo) salinity and turbidity levels sufficiently low enough to provide algal symbionts adequate sunlight penetration for photosynthesis. Ahermatypic stony corals are not light restricted, and their essential fish habitat includes defined hard substrate in subtidal to outer shelf depths throughout the management area.

EFH for *Antipatharia* (black corals) includes rough, hard, exposed, stable substrate, offshore in high (30-35o/oo) salinity waters in depths exceeding 18 meters (54 feet), not restricted by light penetration on the outer shelf throughout the management area.

EFH for octocorals excepting the order Pennatulacea (sea pens and sea pansies) includes rough, hard, exposed, stable substrate in subtidal to outer shelf depths within a wide range of salinity and light penetration throughout the management area.

EFH for Pennatulacea (sea pens and sea pansies) includes muddy, silty bottoms in subtidal to outer shelf depths within a wide range of salinity and light penetration.

E.3. HAPCs and C-HAPCs for species managed under the Coral FMP

Areas which meet the criteria for EFH-Habitat Areas of Particular Concern (EFH-HAPCs) for coral, coral reefs, and live/hard bottom include The 10-Fathom Ledge, Big Rock, and The Point (North Carolina); Hurl Rocks and The Charleston Bump (South Carolina); Gray's Reef National Marine Sanctuary (Georgia); The *Phragmatopoma* (worm reefs) reefs off the central east coast of Florida; Oculina Banks off the east coast of Florida from Ft. Pierce to Cape Canaveral; nearshore (0-4 meters; 0-12 feet) hard bottom off the east coast of Florida from Cape Canaveral to Broward County); offshore (5-30 meter; 15-90 feet) hard bottom off the east coast of Florida from Palm Beach County to Fowey Rocks; Biscayne Bay, Florida; Biscayne National Park, Florida; and the Florida Keys National Marine Sanctuary.

Under the FMP for Coral, Coral Reefs and Live/Hard Bottom Habitat, SAFMC can use its regulatory authority to designate coral-HAPCs to eliminate or reduce the impact of fishing on

those habitats. The first CHAPC that SAFMC designated was Oculina Bank in 1984. This area was expanded in 2000 to include the Oculina Experimental Closed Area and expanded again to include the northern extension in 2013. In 2010, SAFMC designated five new coral-HAPCs: Cape Lookout Coral HAPC, Cape Fear Coral HAPC, Blake Ridge Diapir Coral HAPC, Stetson-Miami Terrace Coral HAPC, and Pourtalés Terrace Coral HAPC. SAFMC added the EFH-HAPC designation to each of these areas in 2012 via CEBA-2.

E.4. EFH for species managed under the Snapper Grouper FMP

EFH for species managed under the Snapper Grouper FMP includes coral reefs, live/hard bottom, submerged aquatic vegetation, artificial reefs and medium to high profile outcroppings on and around the shelf break zone from shore to at least 183 meters (m) (but to at least 610 m for wreckfish) where the annual water temperature range is sufficiently warm to maintain adult populations of members of this largely tropical complex. EFH includes the spawning area in the water column above the adult habitat and the additional pelagic environment, including *Sargassum*, required for larval survival and growth, up to and including settlement. In addition, the Gulf Stream is an EFH because it provides a mechanism to disperse snapper grouper species larvae.

For specific life stages of estuarine dependent and nearshore snapper grouper species, EFH includes areas inshore of the 31 m contour, such as attached macroalgae; submerged rooted vascular plants (seagrasses); estuarine emergent vegetated wetlands (saltmarshes, brackish marsh); tidal creeks; estuarine scrub/shrub (mangrove fringe); oyster reefs and shell banks; unconsolidated bottom (soft sediments); artificial reefs; and coral reefs and live/hard bottom.

E.5. HAPC for species managed under the Snapper Grouper FMP

EFH-HAPC for species managed under the Snapper Grouper FMP include medium to high profile offshore hard bottoms where spawning normally occurs; localities of known or likely periodic spawning aggregations; nearshore hard bottom areas; The Point, The Ten Fathom Ledge, and Big Rock (North Carolina); The Charleston Bump (South Carolina); mangrove habitat; seagrass habitat; oyster/shell habitat; all coastal inlets; all state-designated nursery habitats of particular importance to snapper grouper (e.g., Primary and Secondary Nursery Areas designated in North Carolina); pelagic and benthic Sargassum; Hoyt Hills for wreckfish; the Oculina Bank HAPC; all hermatypic coral habitats and reefs; manganese outcroppings on the Blake Plateau; and Council-designated Special Management Zones (SMZ). Areas that meet the criteria for EFH-HAPCs include habitats required during each life stage (including egg, larval, post-larval, juvenile, and adult stages).

EFH-HAPCs for Golden Tilefish includes irregular bottom comprised of troughs and terraces inter-mingled with sand, mud, or shell hash bottom. Mud-clay bottoms in depths of 150-300 m are HAPC. Golden tilefish are generally found in 80-540 m, but most commonly found in 200 m depths. EFH-HAPC for Blueline Tilefish includes irregular bottom habitats along the shelf edge in 45-65 m depth; shelf break; or upper slope along the 100-fathom contour (150-225 m); hard bottom habitats characterized as rock overhangs, rock outcrops, manganese-phosphorite rock slab

formations, or rocky reefs in the South Atlantic Bight; and the Georgetown Hole (Charleston Lumps) off Georgetown, South Carolina.

EFH-HAPCs for the Snapper Grouper complex include the following deepwater marine protected areas (MPA) as designated in Amendment 14 to the Snapper Grouper FMP: Snowy Grouper Wreck MPA, Northern South Carolina MPA, Edisto MPA, Charleston Deep Artificial Reef MPA, Georgia MPA, North Florida MPA, St. Lucie Hump MPA, and East Hump MPA.

The Council established the Special management Zone (SMZ) designation process in 1983 in the Snapper Grouper FMP, and SMZs have been designated in federal waters off North Carolina, South Carolina, Georgia, and Florida since that time. The purpose of the original SMZ designation process, and the subsequent specification of SMZs, was to protect snapper grouper populations at the relatively small, permitted artificial reef sites and "create fishing opportunities that would not otherwise exist." Thus, the SMZ designation process was centered on protecting the relatively small habitats, which are known to attract desirable snapper grouper species.

In CE-BA 1 (SAFMC 2009b), the Council determined that SMZs met the criteria to be EFH-HAPCs for species included in the Snapper Grouper FMP. Since CE-BA 1, the Council has designated additional SMZs in the Snapper Grouper FMP including Spawning SMZs. The SMZ and EFH-HAPC designations serve similar purposes in identifying and protecting valuable and unique habitat for the benefit of fish populations, which are important to both fish and fishers. Therefore, the Council determined that a designated SMZ meets the criteria for an EFH-HAPC designation, and the Council intends that all SMZs designated under the Snapper Grouper FMP also be designated as EFH-HAPCs under the Snapper Grouper FMP.

E.6. EFH for species managed under the Shrimp FMP

SAFMC's EFH designation for shrimp applies to all waters from the EEZ to the landward most influence of the tide, from the Virginia/North Carolina border to the Dry Tortugas in the Florida Keys. Within this area, the specific habitats and locations that are EFH are listed below.

EFH Designations in the Comprehensive Amendment for *Penaeid Shrimp* (SAFMC 1998b):
For penaeid shrimp, Essential Fish Habitat (EFH) includes inshore estuarine nursery areas, offshore marine habitats used for spawning and growth to maturity, and all interconnecting water bodies as described in the Habitat Plan. Inshore nursery areas include tidal freshwater (palustrine), estuarine, and marine emergent wetlands (e.g., intertidal marshes); tidal palustrine forested areas; mangroves[9], tidal freshwater, estuarine, and marine submerged aquatic vegetation (e.g., seagrass); and subtidal and intertidal non-vegetated flats. This applies from North Carolina through the Florida Keys.

[9] Mangroves are defined by this document as a tree or shrub that grows in chiefly tropical coastal swamps that are flooded at high tide. This definition includes coastal areas dominated by buttonwoods as they are habitat with similar ecosystem services.

EFH Designations in the Comprehensive Amendment for *Rock Shrimp* (SAFMC 1998b):
For rock shrimp, Essential Fish Habitat (EFH) consists of offshore terrigenous and biogenic sand bottom habitats from 18 to 182 meters in depth with highest concentrations occurring between 34 and 55 meters. This applies for all areas from North Carolina through the Florida Keys. EFH includes the shelf current systems near Cape Canaveral, Florida which provide major transport mechanisms affecting planktonic larval rock shrimp. These currents keep larvae on the Florida Shelf and may transport them inshore in spring. In addition, the Gulf Stream is an essential fish habitat because it provides a mechanism to disperse rock shrimp larvae.

Designations in the Comprehensive Amendment for *Royal Red Shrimp* (SAFMC 1998b):
Essential Fish Habitat (EFH) for royal red shrimp include the upper regions of the continental slope from 180 meters (590 feet) to about 730 meters (2,395 feet), with concentrations found at depths of between 250 meters (820 feet) and 475 meters (1,558 feet) over blue/black mud, sand, muddy sand, or white calcareous mud. In addition, the Gulf Stream is an essential fish habitat because it provides a mechanism to disperse royal red shrimp larvae.

E.7. HAPC for species managed under the Shrimp FMP

Areas which meet the criteria for EFH-Habitat Areas of Particular Concern (EFH-HAPCs) for penaeid shrimp include all coastal inlets, all state-designated nursery habitats of particular importance to shrimp (for example, in North Carolina this would include all Primary Nursery Areas and all Secondary Nursery Areas), and state-identified overwintering areas.

Clarifications to Designations for *Penaeid Shrimp:*

1. The public and resource agencies have requested a complete list of the state-designated areas that may function as nursery habitats of species managed by the SAFMC. T Appendix 1 of the User Guide contains a complete list of State protected areas with marine and or estuarine waters that function as nursery habitat and/or that are designated as EFH or EFH-HAPC for Council-managed species. No state-identified overwintering grounds have been identified for penaeid shrimp.
2. Coastal inlets include the throat of the inlet as well as shoal complexes associated with the inlets (SAFMC User guide, Figure 2). Shoals formed by waters moving landward through the inlet are referred to as flood tidal shoals, and shoals formed by waters moving waterward through the inlet are referred to as ebb tidal shoals.

Clarifications to Designations for *Rock Shrimp:*
No clarifications of these designations have been requested during EFH consultations.

Clarifications to Designations for *Royal Red Shrimp*:
No clarifications of these designations have been requested during EFH consultations.

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Appendix F. OHAPC SFAA Mapping Results 2025 Update

In April 2025, NOAA Ship *Nancy Foster* collected bathymetry and backscatter data at 2m resolution across the 22 mi^2 proposed shrimp fishery access area (SFAA) in the *Oculina* Bank Habitat Area of Particular Concern (OHAPC). Figure 1 shows the OHAPC and proposed SFAA with available bathymetric information and spatially-precise *Oculina varicosa* observations. Data from the April expedition (NF2501) have been processed comprehensively and the bathymetry surface in particular shows few artifacts. Backscatter data were also collected to indicate relative hardness or roughness of the seafloor, with hard bottom and smooth surfaces each reflecting sound more strongly and appearing lighter in color (Fig. 2).

Known *Oculina* observations occur in a consistent depth range along the inshore extent of the OHAPC. The western boundary of the proposed SFAA is slightly deeper than these observations by a horizontal distance of approximately 300-1000 m. Mound features formed by these corals are not evident in the NF2501 multibeam bathymetry data collected in April 2025 inside the SFAA. Relatively large coral mounds are visible as small, elevated circles in older multibeam bathymetry data collected by NOAA Southeast Fisheries Science Center in 2005, to the south of proposed SFAA (Fig. 3).

The newest NOAA BlueTopo compilation also suggests that *Oculina* mounds extend along the same north-south line just west of the entire proposed SFAA. The regional BlueTopo, consisting primarily of interpolated bathymetry surfaces in the area around the OHAPC, does not resolve individual corals or mounds; it suggests the presence of relatively large aggregations of mounds. No large areas of coral mounds are visible in BlueTopo within the proposed SFAA (Fig. 4).

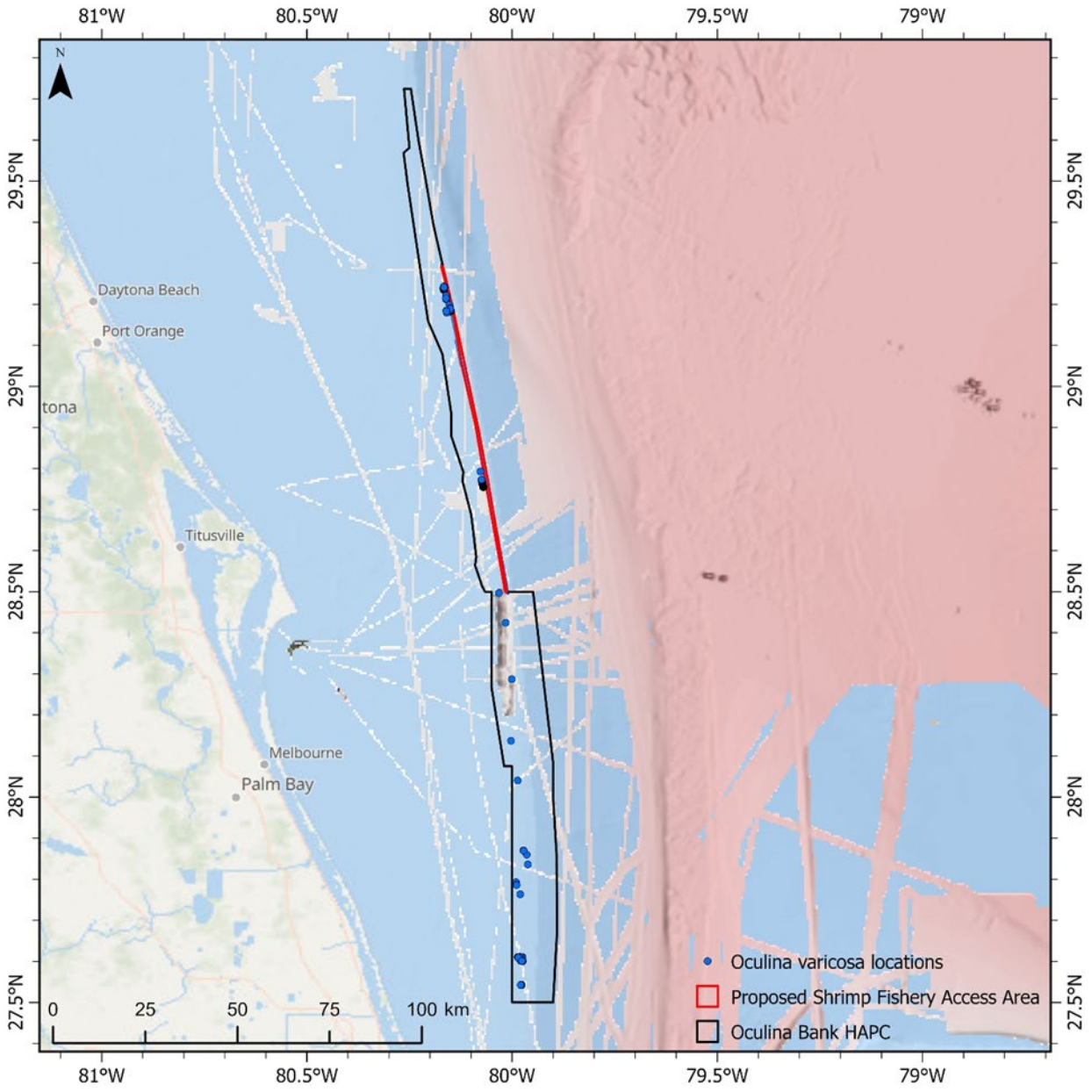

Figure F.1.1. Locations of the Oculina Bank Habitat Area of Particular Concern (HAPC, outlined in black) and proposed Shrimp Fishery Access Area (outlined in red) offshore South Florida. Spatially precise (±20 m) known locations of Oculina varicosa occurrence (blue circles) are included from the NOAA National Database for Deep-Sea Corals and Sponges. Available multibeam bathymetry (pink shading) from the NOAA National Centers for Environmental Information is also shown. There is very limited contiguous multibeam bathymetry data available within the OHAPC, since much of the existing coverage comes from vessel transits.

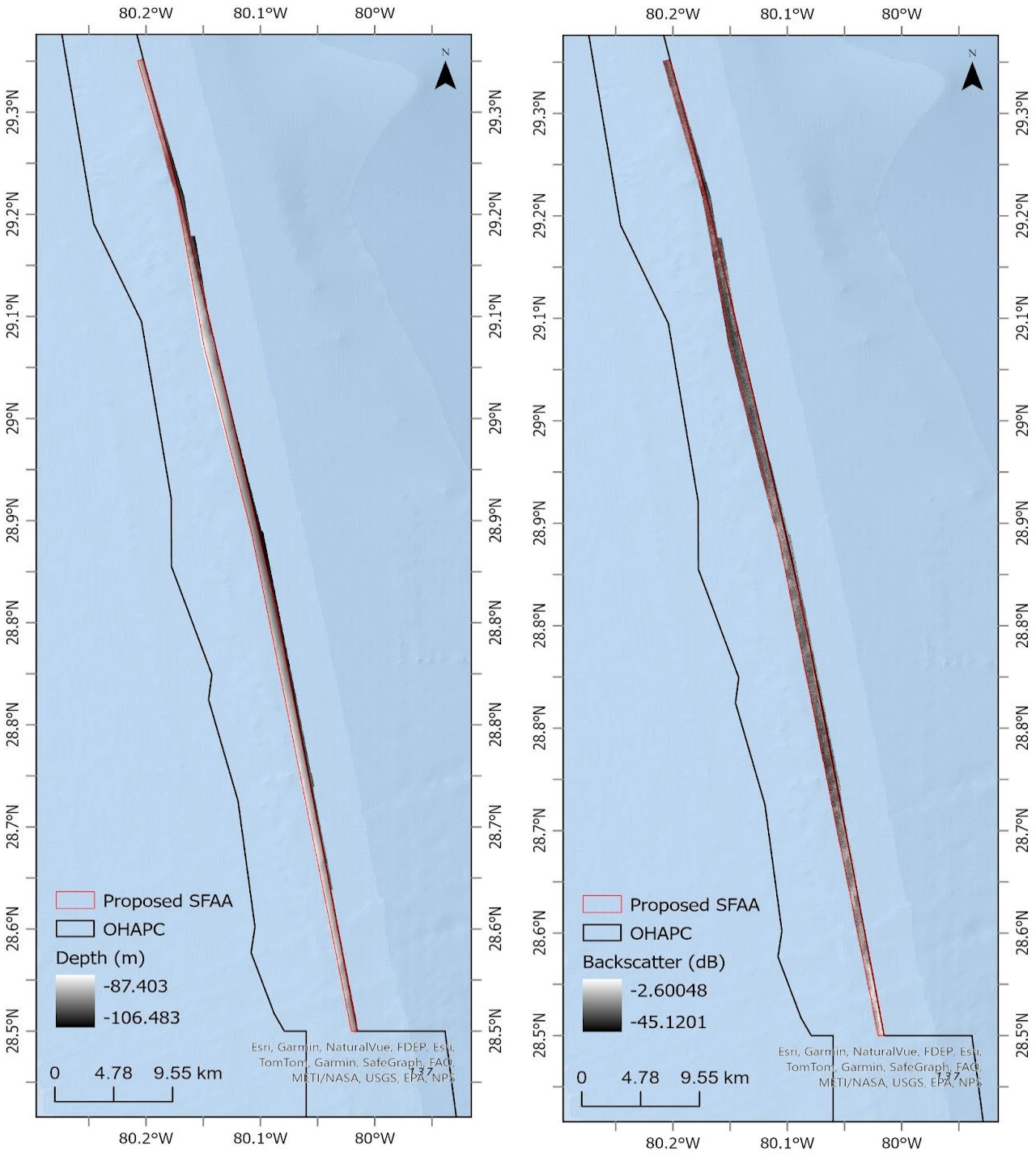

Figure F.1.2. Bathymetry (left) and backscatter (right) in the proposed SFAA collected in 2025 demonstrate depth ranges and substrate hardness suitable to support Oculina varicosa colonies.

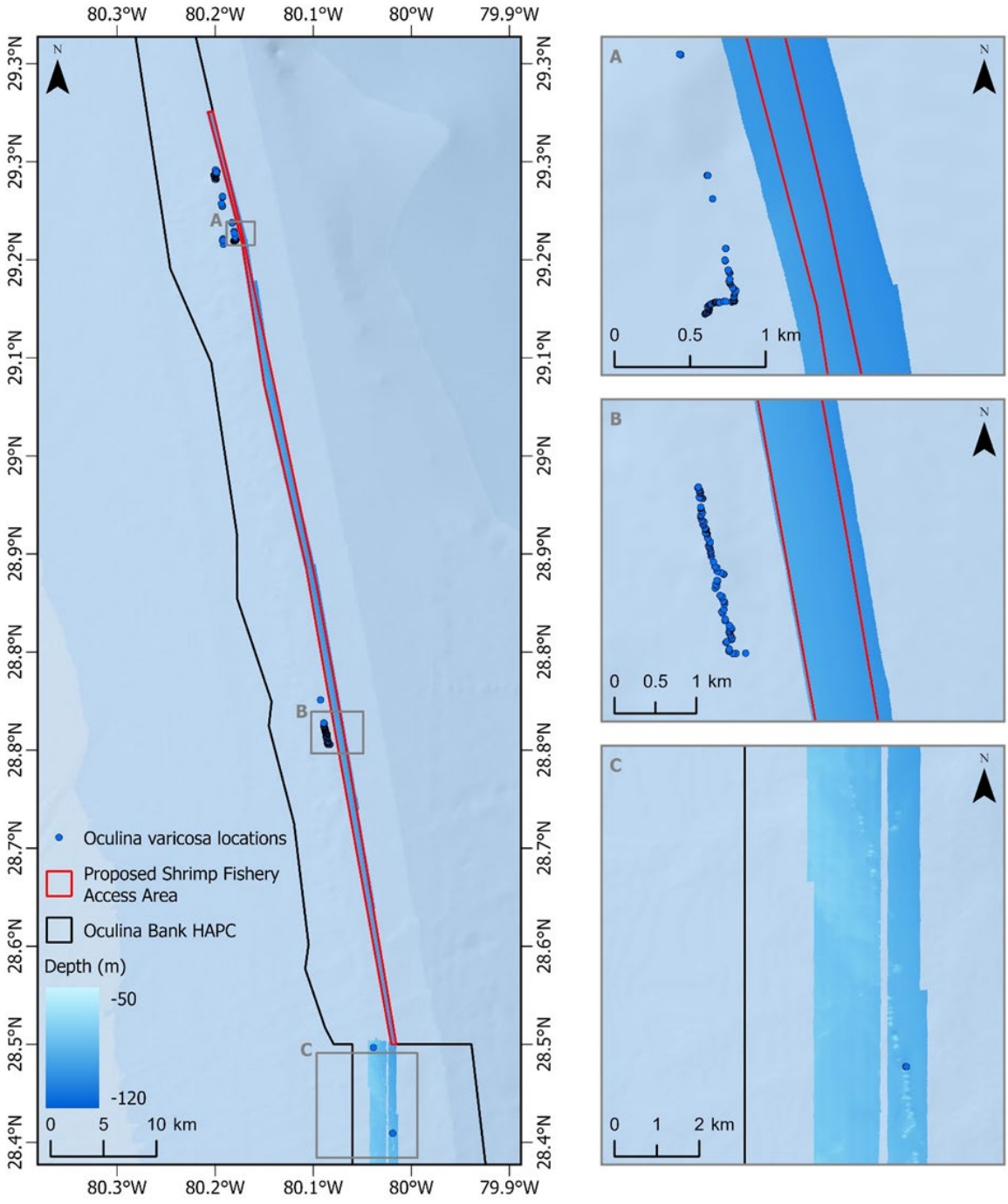

Figure F.1.3. *Oculina varicosa* colonies have been observed 360-1580 m west of the proposed SFAA. *Oculina* mounds are not evident in multibeam bathymetry collected by NOAA Ship *Nancy Foster* in April 2025 inside the proposed SFAA (e.g., panels A and B). In contrast, coral mounds are visible as lighter colored circles in the multibeam bathymetry collected by NOAA Southeast Fisheries Science Center in 2005 to the south of the proposed SFAA (panel C).

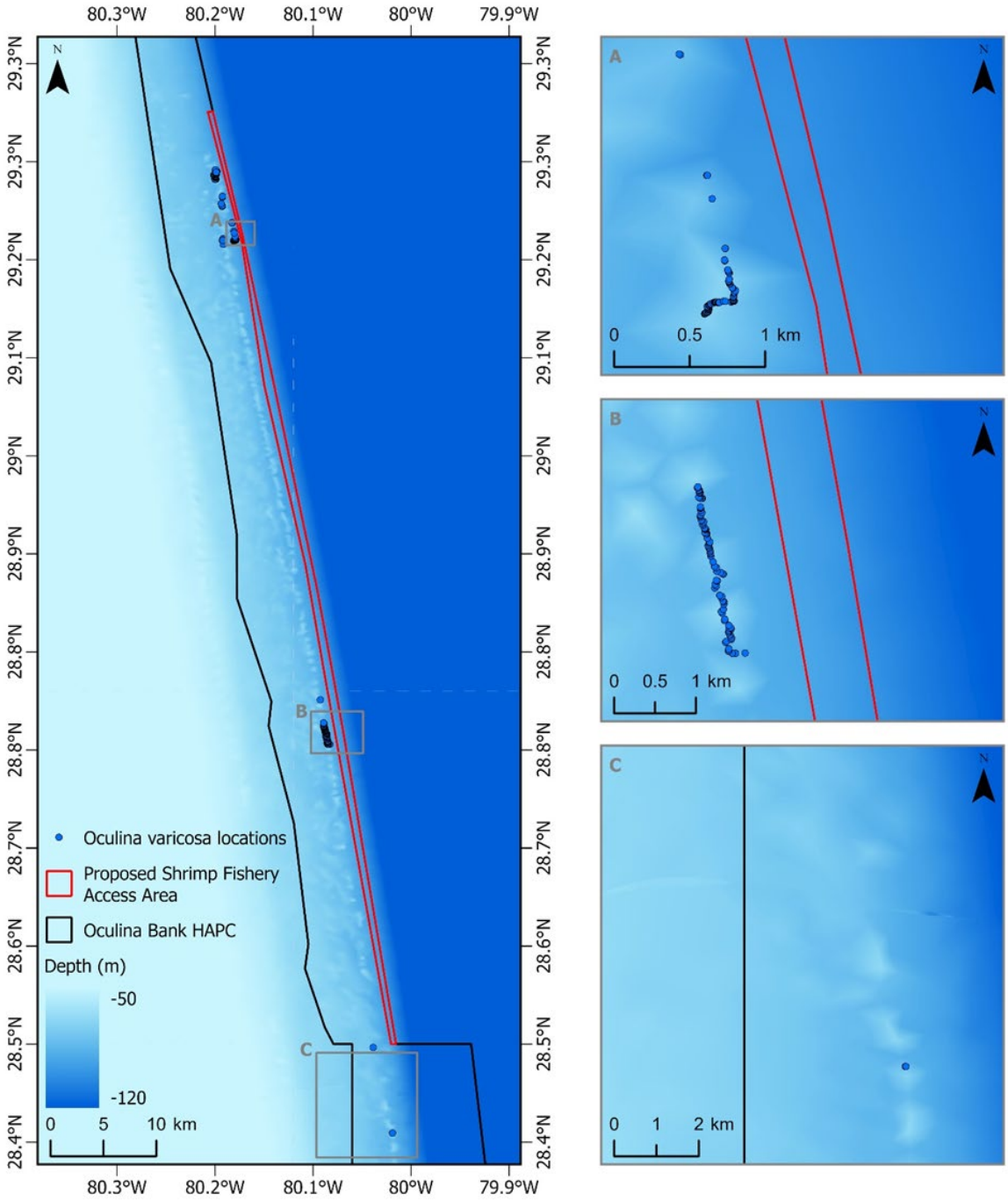

Figure F.1.4. Coral mounds are shown as small, elevated (i.e., lighter colored) shapes in the NOAA BlueTopo layer, visible in the background of this figure. Because underlying low resolution bathymetry data were collected primarily in the 1960s, individual coral mounds are not discernable, but aggregations are shown in panels A-C. No large areas of coral mounds are visible in BlueTopo within the proposed SFAA.

Appendix G. Visual Survey of the proposed Shrimp Fishery Access Area (SFAA) within the *Oculina* Habitat Area of Particular Concern (OHAPC) 28 May – 03 June 2022

Summary:

- The SEFSC was tasked with generating a quick-turnaround survey to provide visual data on the presence or absence of *Oculina* coral in the SFAA to the SEFSC, SERO and NOAA Fisheries.
- The SEFSC used a towed camera system as our observation platform. 14 dives were made but with currents between 4 and 5 kts, only 2 dives were successful.
- The data revealed no *Oculina*, live, dead or rubble, observed in the ~35 km surveyed (~27 km in the SFAA, ~7.5 km immediately east & west of the SFAA).
- In the >25 years of working on *Oculina* reefs off the east coast of Florida, all live colonies have been found on medium and high relief habitat. *Oculina* rubble is often found along the perimeter of the relief. The SEFSC has never observed live or standing dead colonies on the low and no relief areas between *Oculina* mounds, although small amounts of dispersed rubble have been noted.
- No live, standing dead or *Oculina* rubble was observed in or immediately adjacent to the SFAA in the May-June 2022 SEFSC visual survey.
- While the SEFSC cannot state definitively that no live *Oculina* colonies exist within the SFAA, based upon the results of the visual survey and the existing multibeam bathymetry of the entire SFAA (which shows only low or no relief), we predict the likelihood of live *Oculina* within the SFAA is very low.

For the full presentation, please refer to the SAFMC September 2022 Briefing book. The presentation is linked here: https://safmc.net/documents/fc2_a4_sefsc-oculina-hapc-survey-presentation_sept2022/

Figure G.1.1. Representative image of bottom within the SFAA. Sand/mud with small amount of shell hash. Laser spacing is 10 cm**.**

Appendix H. Fishery Impact Statement

TO BE COMPLETED

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires a Fishery Impact Statement (FIS) be prepared for all amendments to Fishery Management Plans (FMPs). The FIS contains an assessment of the likely biological, social, and economic effects of the conservation and management measures on: 1) fishery participants and their communities; 2) participants in the fisheries conducted in adjacent areas under the authority of another Council; and 3) the safety of human life at sea.

H.1. Actions Contained in Snapper Grouper Amendment

Body text

H.2. Assessment of Economic Effects

Body text

H.3. Assessment of the Social Effects

Body text

H.4. Assessment of Effects on Safety at Sea

Body text

Appendix I. Actions and Alternatives Removed from Consideration

Action 1. Establish a shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

Proposed Alternative 4. Establish a shrimp fishery access area that narrows the area proposed in **Preferred Alternative 2** lengthwise (Figure I.1.1).

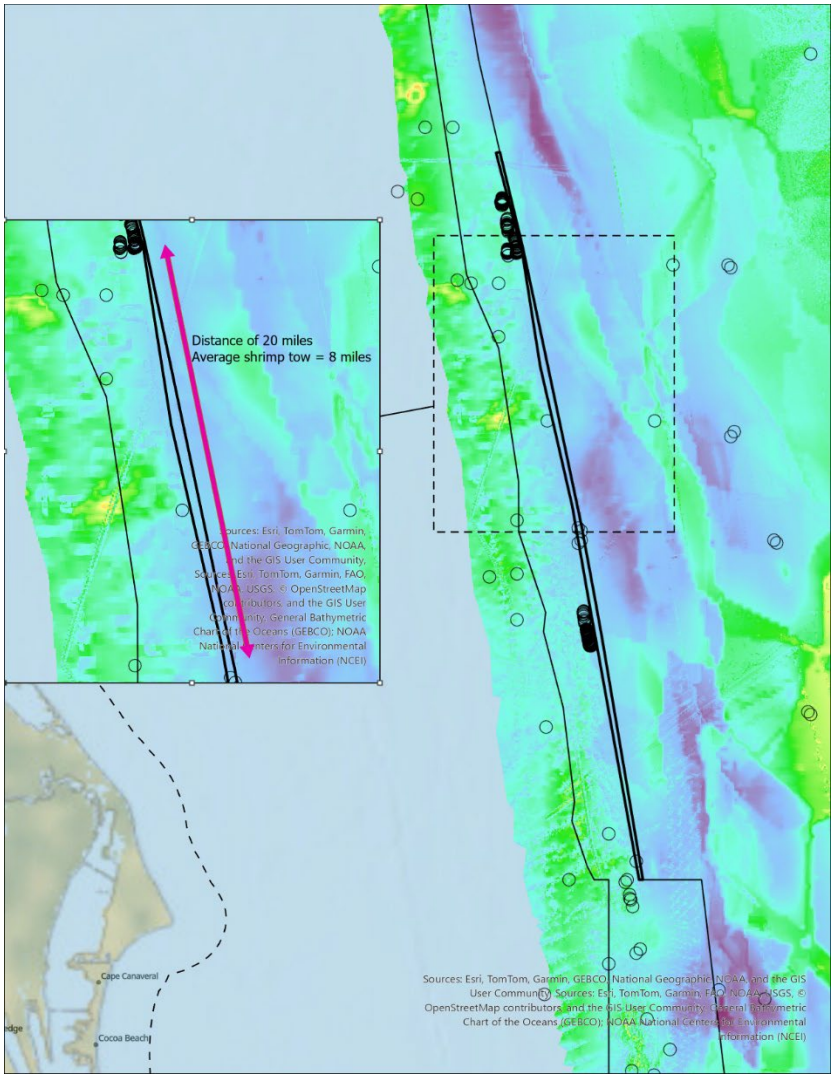

Figure I.1.1. The "Heat map" from Saldago et. al. (2022) based on a predictive algorithm. Blue denotes the least likely occurrence of coral; red/yellow denotes a high probability of coral. The circles indicate visually identified coral that have been observed and appear in the Deep-Sea Coral Data Portal (DSCRTP, 2024). The thicker black line denotes the boundary from Preferred Alternative 2 (preferred in Coral Amendment 10). The thinner black line is the OHAPC boundary. The inset is an identified 20-mile zone with low predicted coral and no known coral locations.

Discussion: During the June 2024 Council meeting there was discussion of adding an alternative that would shorten the **width** of the previous preferred alternative from Coral Amendment 10 (Preferred Alternative 2) to provide an additional buffer between where shrimping is conducted (according to vessel monitoring system [VMS] tracks) and the boundary of the OHAPC. During that same meeting shrimp fishermen noted that they already conduct trawls with a self-imposed 0.25-mile buffer to ensure they are remaining outside the OHAPC boundary, especially in the event of VMS malfunction. Because of this feedback from shrimp fishermen and lack of direction from the Council the interdisciplinary planning team (IPT) did not explore this as an alternative. After this meeting, the IPT had a sub-group meeting with staff from SERO, the Deep Sea Coral Research and Technology Program, National Center for Coastal Ocean Science, and the Habitat Conservation Division who provided a heat map of predicted coral locations in and around the OHAPC as well as visually identified coral locations mapped in the Deep Sea Coral Data Portal.

Based on the locations of known coral pinnacles and the lower likelihood of coral within a 20-mile stretch of the SFAA proposed in **Preferred Alternative 2**, and previous discussion of a "compromise" alternative, the IPT presented a brief outline for **Proposed Alternative 4** which would be to shorten the proposed SFAA (from **Preferred Alternative 2**) length-wise, as long as the resulting length was greater than the length of an average rock shrimp tow. The identified area is roughly 20 miles long. According to observer data, the average tow is 8 miles. The IPT noted that more analysis into tow length and alternative language development would be needed if the Council chooses to include this alternative for analysis.

At the March 2025 meeting, the Council reviewed and discussed this proposal from the sub-group. In the discussion, some Council members stated that they did not feel that this proposed alternative met the purpose and need of the amendment and emphasized that the action described in this amendment was to reopen historic rock shrimp fishing grounds that they felt were closed in error. Ultimately, the Council directed staff not to include this proposed alternative within the amendment.