August 12, 2025

John Carmichael
Executive Director
South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
N Charleston, SC 29405

RE: NRDC Comments on SAFMC Draft Joint Coral Amendment 11 and Shrimp Amendment 12

Dear Mr. Carmichael,

The Natural Resources Defense Council (NRDC) submits this comment regarding the South Atlantic Fishery Management Council's (Council) proposal to establish a rock shrimp fishery access area (SFAA) within the designated Oculina Bank Habitat Area of Particular Concern (OHAPC) through Draft Joint Amendment 11 to the Coral Fishery Management Plan (FMP) and Amendment 12 to the FMP for the Shrimp Fishery of the South Atlantic region.[1] We continue to have strong concerns that shrimp trawling along the OHAPC would threaten the unique and highly sensitive *Oculina varicosa* ecosystem, and we urge the Council to select Alternative 1 (No Action).

In 2022, the National Marine Fisheries Service (NMFS) disapproved the previous iteration of this proposal, Coral Amendment 10, on the bases that (1) the Council did not provide adequate analysis to demonstrate the action would minimize adverse effects on the Oculina coral and habitat pursuant to the essential fish habitat requirements of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1853(a)(7); and (2) the Council did not adequately demonstrate how bycatch would be minimized, *id.* § 1851(a)(9). NMFS further advised the Council to address inconsistencies with the goals and objectives of its Coral FMP, which among other objectives, aims to "minimize, as appropriate, adverse human impacts on coral and coral reefs."[2]

Our review of the Joint Amendment 11/12 materials indicates that the SFAA proposal has not changed significantly since 2022, nor have the available data and analyses that were the context for our chief concerns in 2022—i.e., that the proposed boundaries of the SFAA would re-open an important protective buffer between shrimp trawl gear and Oculina coral habitat, which increases the risk of both direct trawling impacts and indirect impacts, via sediment plumes and disease, to the corals.

Therefore, we respectfully resubmit to the Council our previous comments to NMFS on Coral Amendment 10, which detail our specific concerns with adherence to the Magnuson-Stevens Act's EFH requirements

[1] South Atlantic Fishery Management Council, Draft Joint Amendment 11 to the Fishery Management Plan (FMP) for Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region and Amendment 12 to the FMP for the Shrimp Fishery of the South Atlantic region (June 2025), available at https://safmc.net/documents/coralam11_shrimpam12_publichearingdraftamendment_aug2025-pdf/.
[2] Gulf of Mexico Fishery Management Council and South Atlantic Fishery Management Council, Fishery Management Plan for Coral and Coral Reefs of the Gulf of Mexico and South Atlantic Environmental Impact Statement, April 1982, https://safmc.net/documents/2022/04/coral-fishery-management-plan.pdf/.

and the Coral FMP, both of which we think remain relevant for the Council's consideration. We have also attached to this letter, for reference, a group letter signed by 48 local and national organizations opposing Coral Amendment 10, as well as NMFS's letter dated July 28, 2022, rejecting Coral Amendment 10.

Thank you very much for the opportunity to comment and consideration of our comments urging No Action on these draft amendments. We are happy to answer any questions or provide further information upon request.

Sincerely,

Molly Masterton
Senior Attorney, Oceans
Natural Resources Defense Council
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**Enclosures:* (1) NRDC Comments to NMFS Opposing Coral Amendment 10 (2022); (2) Organizational Sign-on Letter Opposing Coral Amendment 10 (2022); (3) NMFS letter rejecting Coral Amendment 10 (2022).

June 28, 2022

Kelly Denit
Director, Office of Sustainable Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Frank Helies
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, FL 33701

RE: NRDC Comments on SAFMC Coral Amendment 10, Docket No. NOAA-NMFS-2021-0126

Dear Ms. Denit and Mr. Helies:

The Natural Resources Defense Council (NRDC) respectfully submits this comment regarding the South Atlantic Fishery Management Council's (Council) proposed Amendment 10 to its Fishery Management Plan for the Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP).[1] The Council's preferred alternative 2 would establish a shrimp fishery access area (SFAA) within the northernmost known limit of the unique and highly sensitive *Oculina varicosa* ecosystem and within the designated Oculina Bank Habitat Area of Particular Concern (OHAPC).[2]

NRDC strongly recommends that the National Marine Fisheries Serivice (NMFS) disapprove the Council's preferred alternative in Amendment 10 based on nonconformance with the requirements of the Magnuson-Stevens Act and the Council's Coral FMP. As discussed further below, this includes insufficient consideration of the adverse impacts of bottom trawling on essential fish habitat (EFH) in and around the proposed access area, and lack of analysis regarding the practicability of keeping the area protected from bottom trawling. Despite recent scientific research and additional supporting information from expert advisors regarding the likely direct and indirect impacts of re-opening the proposed SFAA to bottom trawling, and likely minimal economic benefits to the limited access rock shrimp fishery, the Council concluded that these impacts were unknown. This analysis fails to use the best scientific information available and is insufficient to support the proposed reversal of EFH-HAPC protections. The proposed SFAA is also inconsistent with the objectives of the Council's own Coral FMP, which emphasizes the need

[1] National Oceanic and Atmospheric Administration, Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region; Coral Amendment 10, 87 Fed. Reg. 25,438 (April 29, 2022).

[2] South Atlantic Fishery Management Council, Amendment 10 to its Fishery Management Plan for the Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region ("Coral Amendment 10") (November 2021), https://safmc.net/documents/2022/04/coral-amendment-10.pdf/.

for enhanced protection in designated HAPCs, such as the OHAPC. Therefore, NMFS should instead approve preferred alternative 1 (no action) to maintain existing OHAPC protections.

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I. The Proposed Action is Bound by the MSA's Requirement to Minimize Adverse Fishing Impacts on EFH to the Extent Practicable.

Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), each of the Council's FMPs must "describe and identify essential fish habitat for the fishery," and must "*minimize to the extent practicable adverse effects on such habitat caused by fishing*, and identify other actions to encourage the conservation and enhancement of such habitat."[3] Congress added this requirement in 1996 to recognize the fundamental importance of marine habitats to healthy fisheries and to call on fishery managers to preserve the ecological role of habitats as part of the fishery management process. The MSA's supporting findings for the EFH authority hold more true today than ever:

> "One of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats. Habitat considerations should receive increased attention for the conservation and management of fishery resources of the United States."[4]

Notably, the South Atlantic Council was an early adopter of EFH and HAPC protections. Its designated Coral HAPCs, including the original 92-nm² Oculina HAPC, predate the 1996 codification of the EFH authority into law. Most recently, the Council expanded the OHAPC boundaries and protections in 2015 through Amendment 8 to its Coral FMP, thus encompassing the SFAA area currently at issue as EFH-HAPC and implicating the EFH requirements described here. The Council has also identified the Oculina HAPC as EFH-HAPC for the snapper-grouper species complex.[5]

EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity."[6] The MSA defines EFH broadly, including not simply popularly known habitats–like those containing corals, sponges, and other benthic organisms–but also those with other necessary components of a managed species' environment, including forage fish.[7] Councils are also encouraged to identify and protect particularly important habitat areas within EFH as Habitat Areas of Particular Concern (HAPC). HAPC may be identified based on one or more of the following considerations: (i) the importance of the ecological function provided by the habitat; (ii) the extent to which the habitat is sensitive to human-induced

[3] Magnuson–Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1853(a)(7) (emphasis added).
[4] 16 U.S.C. § 1801.
[5] South Atlantic Fishery Management Council, Comprehensive Ecosystem-Based Amendment 2 for the South Atlantic Region at 53 (July 2011), https://safmc.net/wp-content/uploads/2022/05/CE-BA-2_July-15-2011_Final.pdf.
[6] 16 U.S.C. § 1802(10).
[7] 50 C.F.R. § 600.910(a).

environmental degradation; (iii) whether, and to what extent, development activities are, or will be, stressing the habitat type; and/or (iv) the rarity of the habitat type.[8]

Pursuant to MSA's implementing regulations, "Councils *must act* to prevent, mitigate, or minimize any adverse effects from fishing, to the extent practicable, if there is evidence that a fishing activity adversely affects EFH in a manner that is more than minimal and not temporary in nature . . . . In such cases, FMPs should identify a range of potential new actions that could be taken to address adverse effects on EFH, include an analysis of the practicability of potential new actions, and adopt any new measures that are necessary and practicable."[9] Further, "[a]mendments to the FMP or to its implementing regulations *must ensure* that the FMP *continues to minimize* to the extent practicable adverse effects on EFH caused by fishing." [10] FMPs must explain the reasons for the Council's conclusions regarding the past and/or new actions that minimize to the extent practicable the adverse effects of fishing on EFH."[11] Although the MSA does not have detailed guidelines for what Councils should include in practicability analyses, at minimum the analysis should include "the nature and extent of the adverse effect on EFH and the long and short-term costs and benefits of potential management measures to EFH, associated fisheries, and the nation, consistent with National Standard 7."[12]

II. Amendment 10 Contains Insufficient Consideration of the Adverse Impacts of Bottom Trawling in the OHAPC.

Understanding the likely adverse impacts on bottom trawling in the proposed SFAA requires close consideration of the area's history and the Council and NMFS's rationale for existing protections in place. Since its original designation by the Council as OHAPC in the 1980s, research has continued to build upon our understanding of Oculina Bank as the only known location globally of deep-sea *Oculina varicosa* reef structures. Scientists have observed stunning biodiversity supported by the corals, and their research has underscored the dire threats posed to the corals by bottom-tending fisheries gears.[13] By the time the Council expanded the protected area and designated it as EFH-HAPC in 1998, most of the Oculina coral ecosystem had already experienced severe or complete loss of coral habitat due primarily to bottom trawling in the unprotected areas. The few, remaining intact reefs of significant size only survived within the boundaries of the originally protected HAPC.[14]

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[8] 50 C.F.R. § 600.815(a)(8).

[9] 50 C.F.R. § 600.815(a)(2)(ii) (emphasis added).

[10] Id. (emphasis added).

[11] Id.

[12] Id at § 600.815(a)(2)(ii-iii).

[13] George, R. Y., T. A. Okey, J. K. Reed, and R. P. Stone, Ecosystem-based fisheries management of seamount and deep-sea coral reefs in U. S. waters: conceptual models for proactive decisions. Pages 9–30 in R. Y. George and S. D. Cairns, eds. Conservation and adaptive management of seamounts and deep-sea coral ecosystems. Rosenstiel School of Marine and Atmospheric Science, University of Miami. Miami. p. 324. (2007).

[14] NOAA Fisheries, Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Essential Fish Habitat for Species in the South Atlantic; Amendment 4 to the Fishery Management Plan for Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP), Federal Register, vol. 65, no. 115 (June 14, 2000): 37292, https://www.govinfo.gov/content/pkg/FR-2000-06-14/pdf/FR-2000-06-14.pdf. 50 C.F.R. § 622.35(c). See

In 2015, the Council implemented the northern extension of the OHAPC (including the area at issue here) and corresponding fishing gear restrictions through Amendment 8 to its Coral FMP.[15] This action was based upon scientific findings of previously undiscovered high-relief Oculina coral mounds to the north and west of the previous OHAPC boundaries, first presented by Dr. John Reed and confirmed by NOAA's 2011 Deep Sea Coral Research Expedition.[16] The extension of the OHAPC protections was intended to incorporate most of the deepwater coral habitat that was presumed to occur in the region based on these recent research observations. This was not limited to high-relief mounds. According to the Council, "[c]ategories of deepwater *Oculina* habitats include pinnacles or bioherms, isolated coral thickets on hard bottom, and rubble with isolated live colonies. In addition, extensive areas of dead *Oculina* can form rubble habitat with isolated colonies of live coral."[17] In its rationale for the expansion, the Council highlighted the benefit the expansion would have for the corals, rock shrimp populations, species that use the bottom substrate as habitat, and other important species that would use the coral as a refuge, such as the snapper-grouper complex.[18] Subsequent surveys have indicated regrowth of the Oculina coral in the Northern OHAPC, supporting the important role of the OHAPC protections in aiding their continued recovery.[19]

In implementing fishing restrictions to prohibit bottom-tending mobile gears in the expanded OHAPC, the Council detailed the destructive impacts from gear that comes in contact with the seafloor, which it stated "inevitably disturbs the seabed and poses the most immediate direct threat to deepwater coral ecosystems."[20] Of these methods, the Council identified bottom trawls used to target shrimp species as the most ecologically destructive fishing method, explaining that "[b]ottom trawls can weigh several tons and the footrope is further weighted to keep the net in close contact with the bottom. The footrope is usually a chain or cable and sometimes includes large, heavy rollers (rockhopper gear) that ride over obstructions and keep the net from snagging and tearing."[21] The Council stated that this gear can "break fragile corals, dislodge reef framework, and scar corals, opening lesions for infection. Impacts of gear damage are not limited to direct crushing of live coral but also include effects of the attached chains, which can abrade and

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also Reed, J.K., Koenig, C.C., and Shepard, A.N. 2007. Impacts of bottom trawling on a deep-water Oculina coral ecosystem off Florida. Bulletin of Marine Science, 81: 481–496.

[15] Pursuant to current regulations: "No person may use a bottom longline, bottom trawl, dredge, pot, or trap in the OHAPC. If aboard a fishing vessel, no person may anchor, use an anchor and chain, or use a grapple and chain. There is not a shrimp fishery access area along the northern extension of the OHAPC." 50 C.F.R. § 622.224

[16] South Atlantic Fishery Management Council, Amendment 8 to the Fishery Management Plan for Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region and Environmental Assessment ("Coral Amendment 8") (Nov. 2013) at 24, https://safmc.net/documents/2022/04/coral-amendment-8.pdf/.
24.

[17] Coral Amendment 8 at 17.

[18] Id. at 5.

[19] Stacey Harter, John Reed, Stephanie Farrington, and Andy David, South Atlantic MPAs and Oculina HAPC: Characterization of fish communities, benthic habitat, and benthic marcrobiota, Final Report for 2015-2017 NOAA Cruises. NOAA CIOERT Cruise Report, at 29-30 (2018),
https://fau.digital.flvc.org/islandora/object/fau:40491/datastream/PDF/view.

[20] Coral Amendment 8 at 86.

[21] Id. at 86-87.

denude coral structures. Stress caused by abrasion may result in a decline in health or stability of the reef or live bottom system."[22]

In sum, the Council expanded the OHAPC protections in 2015 with close consideration of evidence regarding the extent of the Oculina ecosystem and likely impacts of trawling on the Oculina corals ecosystem. This included consideration of information obtained through scoping meetings, public hearings, and recommendations from the Scientific and Statistical Committee and relevant Advisory Panels. In finalizing Amendment 8, the Council also sought to minimize impacts to the rock shrimp fishing communities by adjusting the boundaries of the northward OHAPC expansion.[23] It also allowed rock shrimp vessels to transit through the OHAPC, specifically allowing vessels with rock shrimp onboard to travel to and from additional rock shrimp fishing grounds.

The Council's current proposal for Coral Amendment 10 is a significant change in course, which would permit bottom trawling on a buffer strip inside the OHAPC, directly adjacent to the fragile coral ecosystem. Yet, the Council neglects to demonstrate how the Coral FMP, as amended by these exemptions for bottom trawling, will continue to minimize adverse effects on EFH, and it fails to engage in any practicability analysis regarding "the nature and extent of the adverse effect on EFH and the long and short-term costs and benefits of potential management measures to EFH."[24]

Given the significance of Oculina Bank as EFH-HAPC for multiple species, this analysis should have been made explicit in Amendment 10. To the extent that practicability can be inferred from other considerations within the Council's Environmental Assessment, the Council does, in fact, identify *several* direct and indirect adverse impacts on the OHAPC that are likely to stem from increased bottom trawling, including the following:[25]

- **Direct impacts:**
    - "Although shrimp fishermen affirm that they avoid hard bottom habitat when trawling to avoid snags and gear loss, and rock shrimp prefer sand bottom, numerous instances of gear impacts to corals have been documented in the OHAPC."
    - "Fishermen are most likely to fish in areas where shrimp were previously caught; areas already impacted by past trawling activity on the low relief bottom. These areas could also be exhibiting signs of recovery as trawled low relief hard bottom or standing dead coral

[22] Id.

[23] NMFS summarized the Council decision in approving Amendment 8: "Recognizing that rock shrimpers do not trawl on coral or hard-bottom habitat, the Council, at its June 2013 meeting, adopted the Deepwater Shrimp Advisory Panel's recommendation for the modified northern Oculina Bank HAPC extension alternative, and chose that alternative as its preferred alternative." NOAA Fisheries, Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region; Amendment 8, 80 Fed. Reg. 42,423 (July 17, 2015).

[24] 50 C.F.R. § 600.815(a)(2)(ii-iii); 16 U.S.C. § 1853(a)(7).

[25] For a full list of expected biological effects see Coral Amendment 10 at 52-56.

rubble provides habitat for coral recruitment and coral growth subsequent to trawling events."

- "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."
- "Although rock shrimp occurrence in the proposed areas is variable, and fishing is expected to occur in areas impacted from previous trawling, any recovery of ecosystem services that has occurred since the last trawling event would be lost."
- Additionally, the Council developed two scenarios demonstrating how fishing along the OHAPC boundary could result in direct physical damage within the OHAPC boundaries.[26]

- **Indirect impacts:**
  - "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)."
  - Noting the observed extensive range of sediment plumes from dredging actitvity, with water quality impacts detected up to 20 km away in severe cases, the Council predicted that, "[d]epending on direction and magnitude of water currents in the affected area, shrimp trawls could create similar sediment plumes during fishing operations and the plumes could be transported to coral habitats."
  - The Council also noted that sediment plumes can create enabling conditions for coral diseases to thrive.[27]

Despite this, the Council puzzlingly concludes that the degree and likelihood of impacts of bottom trawling in the SFAA are "unknown" due to the paucity of habitat mapping and habitat characterization available for this area. Given well-documented impacts of bottom trawling on Oculina corals and the goal of the OHAPC to protect the Oculina ecosystem—not merely high-relief mounds—this cursory analysis is not in conformance with National Standard 2 requirement for Councils to base conservation and management decisions on the best scientific information available.[28]

Although the MSA and guiding regulations do not require any formal cost/benefit analysis as part of a practicability analysis, Councils often tend to place emphasis on economic feasibility of EFH protections because this may be easier to quantify than conservation benefits. Here, instead, the Council approved its preferred alternative despite being unable to demonstrate any economic benefit at all for the proposal:

[26] Id. at 55.

[27] Id. at 56.

[28] 16 U.S.C. § 1851(a)(2). In addition, the National Environmental Policy Act requires the Council and NMFS to take a "hard look" at alternatives for managing EFH. See *American Oceans Campaign v. Daley*, 183 F. Supp. 2d 1, 20-21 (D.D.C. 2000); 42 U.S.C. § 4321 et seq. The Council does not achieve this standard with Amendment 10.

> "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 (Table 3.3.1.2), *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 (Section 3.3.4). 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."[29]

This analysis falls well short of supporting any reversal of EFH protections. Further, it runs counter to the central contention that Coral Amendment 10 would help the fishery achieve optimum yield. From what socioeconomic data are included, affected vessels are highly dependent on revenue from other species, with rock shrimp accounting for only 20% of vessels' revenues on average.[30]

Lastly, the proposed SFAA also overlaps with EFH-HAPC for the commercially and recreationally important snapper-grouper complex. Oculina Bank is a known spawning site for several species, including three that are designated as overfished and subject to overfishing: snowy grouper, gag grouper, and red porgy.[31] Although the Council briefly notes the close association of these species with both live *Oculina* coral habitat and low-relief hardbottom communities, it neglects to assess the potential impacts of the SFAA on vulnerable snapper-grouper species and designated EFH-HAPC, again in non-conformance with the MSA's EFH requirements. As a management body that prides itself on implementing ecosystem-based fishery management measures, the South Atlantic Council should be looking at habitat recovery and fishery health in a more integrated manner in order to ensure that it develops conservation and management measures "necessary and appropriate for the conservation and management of the fishery, to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery."[32]

III. Amendment 10 Fails to Provide a Sufficient Buffer to Minimize Adverse Impacts to the Oculina Coral.

The proposed boundaries of the SFAA would re-open an important protective buffer, included in the Council's 2015 northern expansion of the OHAPC, between the shrimp trawl gear and Oculina coral habitat. This increases the risk of both direct trawling impacts and indirect impacts, via sediment plumes and disease, to the corals.

First, the footprint of bottom trawling is large and unpredictable given the size of the gear and water depths of 200-300 feet with strong currents. A wide berth is therefore required to prevent direct damage to sensitive

[29] Coral Amendment 10 at 57 (emphasis added).
[30] Id. at 28.
[31] Koenig, C.C., A.N. Shepard, J.K. Reed, F. Coleman, S. Brooke, J. Brusher, and K. Scanlon. 2005. Habitat and fish populations in the deep-sea Oculina coral ecosystem of the western Atlantic; NOAA Fisheries, Status of Stocks as of December 31, 2021.Accesssed at https://media.fisheries.noaa.gov/2022-01/q4-2021-stock-status-map.png and personal communication with Dr.Gilmore 3/11/22.
[32] 16 U.S.C. 1853(a)(1)(A).

corals outside of the access area. As the Council's Coral Advisory Panel (AP) reported to the Council, NMFS data estimates on the conservative end that the horizontal distance between a boat and its rig can be anywhere from about 230 m to 510 m.[33]

The Council estimated that its preferred alternative would provide a buffer between 310 and 750 m from the known high relief habitat occurring west of the SFAA.[34] However, the Council fails to specifically assess the sufficiency of its proposed buffer, nor does it address the fact that, at its narrower portions, the SFAA would be a mere 183 m wide, thus making it likely that trawl gear will veer from the intended trawl zone into protected areas.[35] The Council further neglects to recognize that the EFH-HAPC-protected Oculina ecosystem is broader than the high-relief mounds alone. Other areas of the OHAPC include standing dead coral, rock pavement, and rubble, which are also essential parts of the ecosystem.[36] Per the Council's analysis in Amendment 8, "[d]amage inflicted by bottom tending gear . . . is not limited to living coral and hard bottom resources but extends to disruption of the balanced and highly productive nature of the coral and live/hard bottom ecosystems."[37]

Second, a wide buffer is critical to protecting the Oculina ecosystem from sediment plumes and potential disease spread, regardless of whether a specific area contains detectable corals. Some areas in the OHAPC further away from corals also contain other sediment tupes such as silt, clay and mud, which can be suspended by disturbance to create sediment plumes. As summarized in Amendment 10, "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."[38] In considering appropriate buffer widths, the Council notes that recent research on bottom gear showed that suspended particles can travel and impact coral over 700 m from active dredging operations, and, in severe cases, water quality impacts have been detected up to 20 km away from the dredging activity when oceanographic features included unidirectional flow during the project.[39] The Council further reflected that sediment plumes can create enabling conditions for coral diseases to thrive, and that since 2014, Florida's shallow water coral reefs have been experiencing the most widespread and lethal coral disease outbreak in the world.

The proposed SFAA is in conflict with the Coral AP's suggestion that a 1,000 m buffer between known coral habitat (not merely high-relief mounds) and fishing grounds would be prudent to prevent adverse impacts to coral colonies.[40] The AP indicated the present boundary provided a buffer and, in voting unanimously against the proposed SFAA, approved a motion supporting the no action alternative.[41] In

[33] Coral Amendment 10 at 62.
[34] Id. at 66.
[35] Coral Amendment 8 at S-5.
[36] Id. 17.
[37] Id. at 113.
[38] Id. at 55.
[39] Id. at 56. Miller, M. W., J. Karazsia, C. E. Groves, S. Griffin, T. Moore, P. Wilber, and K. Gregg. 2016. Detecting sedimentation impacts to coral reefs resulting from dredging the Port of Miami, Florida USA. PeerJ 4:e2711, https://doi.org/10.7717/peerj.2711.
[40] Coral Amendment 10 at 66.
[41] Coral and Deepwater Shrimp Advisory Panels Meeting Minutes, November 10, 2020, p. 32.

addition to direct damage from trawls and indirect damage from sediment plumes, the Coral AP also noted that when corals do recover, they often come back at the base of the coral pinnacles which tend to be the very marginal areas that are likely to be in the existing buffer strip and risk being trawled again under Amendment 10.[42]

IV. Amendment 10 is Inconsistent with the Council's Own Coral FMP.

As described by the Council, the general intent of its Coral FMP is to "optimize the benefits generated from the coral resource while conserving the coral and coral reefs."[43] Specific management objectives of the FMP include: "(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."[44] Regarding item number 3, the South Atlantic Council has itself stated that it utilizes EFH-HAPCs as a tool to "emphasize subsets of EFH that warrant special protection."[45]

The Council's history of actions protecting the *Oculina varicosa* ecosystem as EFH-HAPC has been, to date, an example of the Coral FMP and EFH-HAPC designations meeting their stated goals. Amendment 10 proposes a significant change of course in those protections yet contains notably little consideration of how designated EFH-HAPC in Oculina Bank will continue to be conserved and adverse fishing impacts minimized. Regarding these impacts as "unknown" does not suffice to meet the goals of the Coral FMP.

IV. Oculina Bank is an Opportunity to Demonstrate Durable Marine Habitat Protections Under the MSA.

NMFS should also look at Amendment 10 through the lens of the President's Executive Order on Tackling the Climate Crisis at Home and Abroad, E.O. 14008, which directs NMFS to work toward conserving at least 30% of U.S. lands and waters by the year 2030.[46] Scientists have stressed the importance of achieving this target with strong protections that can help mitigate the impacts of the current biodiversity crisis. It bears re-emphasis that the *Oculina varicosa* ecosystem currently protected by the OHAPC is the only of its kind in the world, supports a robust array of biodiversity, is particularly vulnerable to both direct and indirect impacts of bottom-tending fishing gears (bottom trawls in particular), and is at risk from the impacts of climate change. Safeguarding this habitat from—at least— the most imminently harmful form of fishing can demonstrate that the MSA offers durable, science-based protections for vulnerable marine habitat. Any

[42] Coral Amendment 10 at 55.

[43] Coral Amendment 10 at 5. See also Gulf of Mexico Fishery Management Council and South Atlantic Fishery Management Council, Fishery Management Plan for Coral and Coral Reefs of the Gulf of Mexico and South Atlantic Environmental Impact Statement, April 1982, https://safmc.net/documents/2022/04/coral-fishery-management-plan.pdf/.

[44] Id.

[45] Coral Amendment 8 at 26.

[46] Executive Order on Tackling the Climate Crisis at Home and Abroad, Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

other course of action will strongly call into question recent comments made by the Councils and NMFS regarding the role of fishery management measures in the context of the America the Beautiful conservation initiative.

Lastly, we note with concern that NMFS references E.O. 13921, the Executive Order on Seafood Competitiveness and Economic Growth, as a rationale for the proposed action. We respectfully suggest that there is no mandate for NMFS to approve the Councils' recommended actions under E.O. 13921 and that furthering the deregulatory agenda of a prior Administration cannot take precedence over conserving marine habitat as ecologically significant and vulnerable as Oculina Bank.

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Thank you for considering these comments urging NMFS to disapprove the Council's preferred alternative in Amendment 10 to the Coral FMP, and to approve instead the no action alternative. We are happy to answer any questions or provide further information upon request.

Sincerely,

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National Marine Fisheries Service
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Silver Spring, MD 20910

June 28, 2022

Re: South Atlantic Fishery Management Council's Coral Amendment 10 Impacting Oculina Coral Reefs
NOAA-NMFS-2021-0126

Dear Administrator Spinrad and Assistant Administrator Coit,

The 48 undersigned organizations—representing millions of concerned citizens across the country—oppose the South Atlantic Fishery Management Council's proposed Amendment 10 to the Coral, Coral Reefs, and Hard Bottom Fishery Management Plan (hereinafter "Coral Amendment 10") that would open part of the Oculina Bank Habitat Area of Particular Concern (OHAPC) to bottom trawling. Removing decades-old protections for this deep-water coral ecosystem will harm the last remaining and recovering parts of this unique marine environment and will undermine the durability of habitat protections and designated protected areas under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Coral Amendment 10 is in direct conflict with the Biden/Harris Administration's vision for America the Beautiful and its commitment to conserving at least 30 percent of our Nation's land and waters by 2030.[1] We urge NOAA to honor its decades-long commitment to protecting this unique ecosystem.

The Oculina Bank off the east coast of central Florida is the *only* known place in the world where deep-sea *Oculina varicosa* form reef structures. This one-of-a-kind ecosystem supports marine life throughout the region well beyond the reef itself. A single 12-inch coral can host up to 2,000 animals, including small fish, crabs, shrimp, and mollusks—many of which are food for higher trophic levels.[2] Oculina Bank is also a spawning site for several species of groupers, important fish prized by recreational and commercial fishermen in the South Atlantic.[3,4] These species come to the reef from as far away as North Carolina and are increasingly threatened by overfishing, climate change, and habitat destruction.

[1] Exec. Order No. 14008, 86 Fed. Reg. 7619 (Feb. 1, 2021)
[2] Reed, J.K., R.H. Gore, L.E. Scotto, and K.A. Wilson. 1982. Community composition, structure, aereal and trophic relationships of decapods associated with shallow- and deep-water *Oculina varicosa* coral reefs. Bulletin of Marine Science 32: 761-786.
[3] Gilmore, G.R. and Jones, R.S. 1992. Color Variation and Associated Behavior in the Epinepheline Groupers, Mycteroperca Microlepis (Goode and Bean) and M. Phenax Jordan and Swain. Bulletin of Marine Science 51: 83–103.
[4] Koenig, C.C., A.N. Shepard, J.K. Reed, F. Coleman, S. Brooke, J. Brusher, and K. Scanlon. 2005. Habitat and fish populations in the deep-sea Oculina coral ecosystem of the western Atlantic.

According to Professor Grant Gilmore who has directly observed such spawning activity on research dives at the Oculina Banks, three species that are listed on NOAA Fisheries' Status of Stocks report of December 31, 2021 as overfished and experiencing overfishing spawn in the Oculina Banks -- snowy grouper, gag (grouper) and red porgy.[5] Further damage to the Oculina Bank spawning area will impede population recovery, normally one of the most important objectives of most Fishery Management Plans but not for Amendment 10. In short, the *Oculina* corals create a unique habitat upon which much marine life in the area depends.

As important and rare as this ecosystem is, it was almost destroyed entirely. In the 1970s and early 1980s, bottom trawling decimated the reef. Roughly 90% of this habitat was reduced to rubble by bottom-trawling fishermen—shrimpers, scallopers, and others.[6] Finally, NOAA and the South Atlantic Fishery Management Council designated the reef and the surrounding area a Habitat Area of Particular Concern ("HAPC") in 1984.[7] Prohibitions on trawling, fish traps, longlines and anchoring were implemented to protect the last vestiges of the reef.[8] With these protections in place, the coral began to recover.

The Council-approved Coral Amendment 10 would permit bottom trawling on a "buffer strip" inside the HAPC, directly adjacent to the fragile coral ecosystem.[9] In addition to damaging any potential coral recovery in the 22 square-mile buffer strip, trawling in the buffer will cause harm to the sensitive corals adjacent to the proposed Shrimp Fishery Access Area:

- Sediment plumes from nearby trawling will damage the *Oculina* coral, disrupting their ability to filter feed and preventing juvenile recruits from settling. According to evidence presented by the South Atlantic Council's Coral Advisory Panel and several scientists who have studied the *Oculina*, underwater currents in this area can be very strong and flow westerly, that is, from the buffer strip onto the remaining living corals.[10]
- Wayward trawls will damage corals outside the intended trawling area. Heavy shrimp trawling nets are difficult to always position correctly at depths of 200–300 feet, especially with the strong and variable cross currents typical of this area. Inaccuracy in tracking the nets' swath compounds these

[5] NOAA Fisheries, Status of Stocks as of December 31, 2021.Accesssed at https://media.fisheries.noaa.gov/2022-01/q4-2021-stock-status-map.png and personal communication with Dr.Gilmore 3/11/22.
[6] Reed, J.K., Koenig, C.C., and Shepard, A.N. 2007. Impacts of bottom trawling on a deep-water Oculina coral ecosystem off Florida. Bulletin of Marine Science, 81: 481–496.
[7] Under the MSA and implementing regulations, fishery management councils are encouraged to designate Habitat Areas of Particular Concern (HAPC) in areas that stand out for due to one or more of the following factors: their unique contribution to ecological function, their sensitivity to human-caused degradation, their exposure to development and other stressors, and their rarity as a habitat. 50 C.F.R. § 600.815(a)(8).
[8] George, R. Y., T. A. Okey, J. K. Reed, and R. P. Stone. 2007. Ecosystem-based fisheries management of seamount and deep-sea coral reefs in U. S. waters: conceptual models for proactive decisions. Pages 9–30 in R. Y. George and S. D. Cairns, eds. Conservation and adaptive management of seamounts and deep-sea coral ecosystems. Rosenstiel School of Marine and Atmospheric Science, University of Miami. Miami. p. 324.
[9] South Atlantic Fishery Management Council (August 2021), Draft Amendment 10 for the fishery management plan for coral, coral reefs, and hard bottom of the South Atlantic region; Establish a shrimp fishery access area along the northern border extension of the Oculina Bank HAPC: Environmental Assessment, p. 55.
[10] Amendment 10 to the Coral, Coral Reefs, and Live/Hardbottom Habitats FMP of the South Atlantic Region Scoping Document, February 2021.

issues.[11] National Marine Fisheries Service data conservatively estimates there can be 230 to 510 horizontal meters between the fishing trawl on the bottom and the trawling boat; the proposed fishing area is only 150 to 600 meters wide.[12] Hence, the heavy gear is likely to, at least occasionally, crush and destroy healthy coral outside the intended trawl zone.

For these reasons, the existing buffer strip is doing what it was designed originally to do: keep bottom gear and sediment away from sensitive corals. There simply is no replacement for the workings of a buffer strip in this case.

The risk posed by this proposal is unequivocal, which is why the South Atlantic Council's Coral Advisory Panel voted unanimously against it.[13] In addition to *acute* damage from trawls and *chronic* damage from sediment plumes, the Coral Advisory Panel pointed out that recovery of the remaining Oculina Bank is likely to be slow because populations have been so reduced that larvae production is low. The Advisory Panel also noted that when corals do recover they often come back at the base of the coral pinnacles which tend to be the very marginal areas that are likely to be in the existing buffer strip that will get trawled again.[14] The Council approved the amendment anyway, favoring *de minimis* economic gain for a few over the health of the ecosystem. The economic analysis included in Coral Amendment 10's Environmental Assessment and Regulatory Impact Review concluded that "economic effects cannot be quantified." The analysis also explicitly found that there would be no change to consumer prices or consumer surplus due to Coral Amendment 10, so any benefit (if one exists) of risking the *Oculina* coral would flow only to the small group of fishermen that would use this narrow area.[15]

In addition to threatening delicate ecosystems in the Oculina HAPC, the South Atlantic Fishery Management Council's recommendation to open the area, if put into effect, calls into question the efficacy and durability of habitat protections under the MSA. If NOAA-designated HAPCs cannot be relied on to protect the ecologically important and/or vulnerable habitats for which they were created, the designation loses meaning.[16] To be clear, the Council is not recommending the Oculina Bank HAPC designation be removed, nor are they alleging that the conditions that necessitated the HAPC's protection have abated. Instead—against the advice of scientists and their own Coral Advisory Panel—they seek to remove protections *to benefit a small number of individuals*.

We ask that NOAA's decision be based on science with the goal of upholding the long-term conservation of this habitat and unique coral ecosystem.

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[11] Kotwicki, S., Martin, M.H. and Laman, E.A. 2011. Improving area swept estimates from bottom trawl surveys, *Fisheries research*, 110: pp. 198–206.

[12] Amendment 10 to the Coral, Coral Reefs, and Live/Hardbottom Habitats FMP of the South Atlantic Region Scoping Document, February 2021, pages 10, 20-21.

[13] Coral and Deepwater Shrimp Advisory Panels Meeting Minutes, November 10, 2020, p. 32.

[14] Amendment 10 to the Coral, Coral Reefs, and Live Hardbottom Habitats FMP of the South Atlantic Region, November 2021, page 55

[15] Amendment 10 to the Coral, Coral Reefs, and Live Hardbottom Habitats FMP of the South Atlantic Region, November 2021, page 57.

[16] Sewell, B. and M. Masterton. 2021. A safety net for ocean fisheries: the case for stronger protection of essential fish habitat under the Magnuson–Stevens Act. National Resources Defense Council.

The Biden/Harris Administration has directed the executive branch, including NOAA, to work toward conserving at least 30% of U.S. ocean area by the year 2030.[17] Scientists have stressed the importance of achieving this target with strong protections that can help mitigate the impacts of the current biodiversity crisis. We need *more* meaningful, durable protections like those that exist for the Oculina HAPC, *not fewer*. In fact, if vital protections here can be stripped away with no basis in science, then it is hard to see how any HAPC designation can be seen as providing the type of long-term protection the Biden/Harris Administration is seeking through its commitment to 30X30 and the America the Beautiful initiative. NOAA's decision on this recommendation from the South Atlantic Fishery Management Council will have rippling consequences for how fishery conservation measures are evaluated and viewed in terms of their contributions to 30X30, the America the Beautiful plan, and the Conservation and Stewardship Atlas.

We have only one chance to protect this one-of-a-kind ecosystem. NOAA got it right in protecting the Oculina HAPC from harmful trawling practices decades ago. NOAA should make the right decision and uphold the progress made over the last 40 years to protect Oculina Banks. The undersigned organizations—many of whom advocated for some of the existing HAPCs, sanctuaries, and monuments—are watching NOAA's action closely for the precedent that will be set by Coral Amendment 10. We urge you in the strongest terms to maintain all current protections for the Oculina Bank Habitat Area of Particular Concern.

Sincerely,

Florida & Local Organizations

Conservation Alliance of St. Lucie County
Fort Pierce, FL
http://www.conservationallianceslc.org

Ocean Research Conservation Association
Vero Beach, FL
www.teamorca.org

Central Florida Zoo & Botanical Gardens
Sanford, FL
www.CentralFloridaZoo.org

Environment Florida
St. Petersburg, FL
www.environmentflorida.org

Florida Conservation Voters
Tallahassee, FL
www.fvoters.org

National Organizations

Marine Conservation Institute
www.marine-conservation.org

National Ocean Protection Coalition
www.oceanprotectioncoalition.org

Blue Frontier
www.bluefrontier.org

Azul
www.azul.org

Center for Sportfishing Policy
www.sportfishingpolicy.com

Center to Biological Diversity
www.biologicaldiversity.org

Coalition on the Environment & Jewish Life

[17] Exec. Order No. 14008, 86 Fed. Reg. 7619 (Feb. 1, 2021).

Florida Oceanographic Society
Stuart, FL
https://www.floridaocean.org

Florida Wildlife Federation
Tallahassee, FL
www.floridawildlifefederation.org

Friends of the Everglades
Stuart, FL
https://www.everglades.org

Kansas City Zoo
www.kansascityzoo.org

League of Women Voters of St. Lucie County
www.lwvslc.org

National Aquarium
www.aqua.org

Marine Resources Council
Palm Bay, FL
https://savetheirl.org

Palm Beach Zoo and Conservation Society
West Palm Beach, FL
https://www.palmbeachzoo.org/

Rivers Coalition
Stuart, FL
https://riverscoalition.org

Mystic Aquarium
Mystic, CT
www.mysticaquarium.org

Salt Strong
www.saltstrong.com

Shedd Aquarium
www.sheddaquarium.org
South Carolina Coastal Conservation League
Charleston, SC
www.coejl.org

Creation Justice Ministries
www.creationjustice.org

Defenders of Wildlife
www.defenders.org

EarthEcho International
www.earthecho.org

EarthJustice
www.earthjustice.org

Environment America
www.environmentamerica.org

Greenpeace, USA
www.greenpeace.org/usa

Healthy Ocean Coalition
www.healthyoceancoalition.org

Hispanic Access Foundation
www.hispanicaccess.org

Inland Ocean Coalition
www.inlandoceancoalition.org

Interfaith Power and Light
www.interfaithpowerandlight.org

League of Conservation Voters
www.lcv.org

Mission Blue
www.mission-blue.org

National Audubon Society
www.audubon.org

National Parks Conservation Association
www.npca.org

www.coastalconservationleague.org

South Carolina Wildlife Federation
www.scwf.org

National Wildlife Federation
www.nwf.org

Natural Resources Defense Council
www.nrdc.org

Oceana
www.oceana.org

The Pew Charitable Trusts
www.pewtrusts.org

Sierra Club
www.sierraclub.org

Surfrider Foundation
www.surfrider.org

The Ocean Project
www.theoceanproject.org

Wild Oceans
www.wildoceans.org

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
https://www.fisheries.noaa.gov/region/southeast

F/SER25:FH

07/28/2022

Mr. Mel Bell, Chair
South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
North Charleston, South Carolina 29405

Dear Mr. Bell:

By this letter, I am disapproving Amendment 10 to the Fishery Management Plan (FMP) for the Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region (Coral FMP). As you know, Amendment 10 to the Coral FMP (Coral Amendment 10) would establish an approximately 22 mi^2 shrimp fishery access area (SFAA) along the eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC) where fishing for and possessing rock shrimp are currently prohibited. The South Atlantic Fishery Management Council (Council) developed Coral Amendment 10 to help achieve optimum yield in the South Atlantic rock shrimp portion of the shrimp fishery and increase economic and social benefits to rock shrimp fishermen by increasing access to historic rock shrimp fishing grounds.

The Council approved Coral Amendment 10 for Secretarial review and implementation at its September 2021 meeting. In undertaking this review, section 304(a)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires the Secretary of Commerce (Secretary) to make a determination as to whether Coral Amendment 10 is consistent with the Magnuson-Stevens Act and other applicable laws and publish a notice of availability for the amendment in the *Federal Register*. Section 304(a)(2) of the Magnuson-Stevens Act requires this review to take into account the information, views, and comments received on the amendment from interested persons.

NOAA Fisheries noticed the availability of Coral Amendment 10 on April 29, 2022, and accepted public comments on the amendment through June 28, 2022 (87 FR 25438) [RIN 0648-BL09]. NOAA Fisheries received 353 distinct comments during that time period; however, several were form letters signed by many individuals, bringing the total number of people who commented on the Amendment to 32,200. Commenters included the Florida Fish and Wildlife Commission, commercial and recreational fishermen, fishing organizations, environmental groups, and the general public. The vast majority of comments opposed the proposed action stating that it is not based on the best scientific information available; fails to minimize adverse fishing impacts on essential fish habitat (EFH) to the extent practicable; is inconsistent with the goals and objectives of the Coral FMP; and is inconsistent with the goals and recommendations of the Biden-Harris Administration's *America the Beautiful* initiative, including the goal to conserve at least 30% of U.S. lands and waters by 2030, per Executive Order 14008 on *Tackling the Climate Crisis at Home and Abroad*.

NOAA Fisheries' review of Coral Amendment 10 determined the amendment and supporting analyses do not adequately demonstrate how the Council's proposed action is consistent with (1) Section 303(a)(7) of the Magnuson-Stevens Act, which requires FMPs to minimize to the extent practicable the adverse effects of fishing on EFH, and the goals and objectives of the Coral FMP, specifically in regards to protection of EFH; and (2) 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.

Essential Fish Habitat
Section 303(a)(7) of the Magnuson-Stevens Act and its implementing guidelines require that amendments to FMPs or the regulations implementing the amendments ensure the FMP continues to minimize to the extent practicable adverse effects on EFH caused by fishing. FMPs must explain the reasons for the Council's conclusions regarding new actions that minimize to the extent practicable the adverse effects of fishing on EFH (50 CFR 600.815(a)(2)(ii)).

The action proposed in Coral Amendment 10 has the potential to adversely affect habitat within the proposed SFAA and OHAPC. While *Oculina* coral, including coral rubble and high relief mounds, have not been reported inside the proposed SFAA, rock shrimp trawling could impact any low-relief hard bottom and coral rubble within the proposed SFAA that are providing substrate for corals to recruit and recover from previous trawling events. Such impacts could be direct impacts from shrimp trawl gear interactions with coral habitat or indirect impacts from sediment plumes created by shrimp trawl gear. However, the likelihood and degree of any such impacts are unknown due to a paucity of habitat mapping and characterization data for this area. By reducing between 42%-54% of the existing buffer between fishing grounds and known high relief habitat occurring west of the OHAPC boundary, the proposed action also could indirectly impact coral habitat within the OHAPC through sedimentation.

The Council established the OHAPC in the original 1984 Coral FMP. The Coral FMP restricted the harvest of corals, with one of the FMP Objectives being to "minimize, as appropriate, adverse human impacts on coral and coral reefs." To further this goal, the Council prohibited bottom trawling for snapper-grouper species through Amendment 1 to the Snapper-Grouper FMP in 1988. In 1991, Amendment 1 to the Coral FMP defined overfishing for prohibited corals (including *Oculina* coral) as an annual harvest that exceeds optimum yield, with the optimum yield equal to zero.

When the Council expanded the size of the OHAPC via Amendment 4 to the Coral FMP (effective in 2000), they added more fishing gear restrictions, including prohibiting bottom trawling and fishing for rock shrimp. Coral Amendment 4 was part of the Council's Comprehensive EFH Amendment, and in that amendment, the Council also established the OHAPC as an EFH-habitat area of particular concern (EFH-HAPC) for coral and snapper-grouper species. An EFH-HAPC for these species is a portion of EFH that is "particularly vulnerable to fishing activities." (50 CFR 600.815(a)(2)(i)). The Council stated that expanding the OHAPC would provide additional protection for EFH.

In 2015, the Council's Amendment 8 to the Coral FMP (Coral Amendment 8) further expanded the OHAPC to include the area at issue in Coral Amendment 10 based on new scientific information showing an extensive deep water coral ecosystem. From Amendment 8, page 86: "Bottom trawling is considered the most ecologically destructive fishing method (Chuenpagdee et al. 2003; Morgan and Chuenpagdee 2003). This gear type, used to target shrimp species in the South Atlantic living on or just above the seafloor, has been shown to severely impact deep-water coral ecosystems (Fosså et al. 2002; Puglise et al. 2005)."

In determining whether it is practicable to minimize an adverse effect from fishing, Councils should consider the nature and extent of the adverse effect on EFH and the long and short-term costs and benefits of potential management measures to EFH, associated fisheries, and the Nation, consistent with National Standard 7. In approving Coral Amendment 10, the Council considered that future trawling activity would likely occur where rock shrimp have been previously harvested, in low relief bottom areas already impacted by past fishing activities. However, the Council also recognized that the risk of directly impacting such habitat cannot be completely eliminated, as the rock shrimp portion of the fishery is prosecuted along the boundary of a closed area on a regular basis. To address the concerns that a portion of the proposed SFAA was identified through modeling as suitable deep-water coral habitat, NOAA

Fisheries proposed conducting scientific surveys (video, remotely operated vehicle, and possibly multi-beam sonar) to better characterize the area. The agency was able to survey a portion of the SFAA from May 30 - June 3, 2022 (30.11% of the North-South range of the SFAA; <1% of the total SFAA), and was unable to verify the presence of rock shrimp, *Oculina* coral, coral rubble, or suitable coral habitat in the area. Coral Amendment 10 concludes the net economic benefits of the SFAA cannot be quantified 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. More robust analysis is needed to demonstrate these benefits support a determination that the proposed action in Coral Amendment 10 minimizes adverse impacts to EFH to the extent practicable.

Bycatch

The national standard guidelines for complying with Section 301(a)(9) of the Magnuson-Stevens Act require Councils to assess the effects of each management measure on the amount and type of bycatch and bycatch mortality in the fishery and to select measures that, to the extent practicable, will minimize bycatch and bycatch mortality. A determination of whether a conservation and management measure minimizes bycatch or bycatch mortality to the extent practicable, consistent with other national standards and maximization of net benefits to the Nation, should consider the following factors: (A) Population effects for the bycatch species; (B) Ecological effects due to changes in the bycatch of that species (effects on other species in the ecosystem); (C) Changes in the bycatch of other species of fish and the resulting population and ecosystem effects; (D) Effects on marine mammals and birds; (E) Changes in fishing, processing, disposal, and marketing costs; (F) Changes in fishing practices and behavior of fishermen; (G) Changes in research, administration, and enforcement costs and management effectiveness; (H) Changes in the economic, social, or cultural value of fishing activities and nonconsumptive uses of fishery resources; (I) Changes in the distribution of benefits and costs; and (J) Social effects. The Councils should adhere to the precautionary approach found in the Food and Agriculture Organization of the United Nations Code of Conduct for Responsible Fisheries (Article 6.5), when faced with uncertainty concerning any of these factors (50 CFR 600.350(d)(3)).

The comprehensive bycatch practicability analysis supporting Coral Amendment 8 concluded the action to expand the OHAPC to include the area at issue in Coral Amendment 10 would benefit coral communities and ecosystems. From Coral Amendment 8, page G-3: "These proposed actions would prevent fisheries from expanding into the proposed areas along with associated bycatch. Therefore, the actions in Coral Amendment 8 would likely result in long-term, positive ecological benefits and prevent disruptive changes that could occur in the community structure of coral reef ecosystems." The cursory discussion of bycatch in section 3.2.2 of Coral Amendment 10 concludes the proposed action is not expected to result in significant changes in bycatch within the proposed areas since there is only a small amount of predicted fishing effort. More robust analysis through a Bycatch Practicability Analysis is needed to demonstrate that the proposed action in Coral Amendment 10 minimizes bycatch and bycatch mortality to the extent practicable.

Conclusion

If a Council FMP or amendment is disapproved based on inconsistencies with the Magnuson-Stevens Act or other applicable law, section 304(a)(3) of the Magnuson-Stevens Act requires the Secretary to recommend actions the Council could take to conform the amendment to the relevant legal requirements. Section 304(a)(4) of the Magnuson-Stevens Act provides Councils the opportunity to revise and submit revised amendments for Secretarial review after addressing the relevant legal requirements. As discussed above, to conform Coral Amendment 10 to the requirements of applicable law, the Council must adequately address through more robust analyses (1) how the proposed action minimizes to the extent practicable the adverse effects of fishing on EFH, as required by Section 303(a)(7) of the Magnuson-Stevens Act, and is consistent with the goals and objectives of the Coral FMP,

specifically in regards to protection of EFH; and (2) how the proposed action minimizes bycatch to the extent practicable and, to the extent bycatch cannot be avoided, minimizes the mortality of such bycatch, as required by National Standard 9 of the Magnuson-Stevens Act. In addition, the Council should consider input received during the public comment period when revising the amendment, including comments related to best scientific information available, minimizing impacts to EFH, inconsistencies with goals and objectives of the Coral FMP and the *America the Beautiful* initiative.

Thank you for your work on Coral Amendment 10. I appreciate and share your desire to increase economic and social benefits in the rock shrimp fishery, along with the interest many have expressed in ensuring the continued protection of vulnerable coral habitat. Our nation's valuable ecosystems, like the OHAPC, play an important role in combating the climate crisis. I trust you will agree that it is in the best interest of all stakeholders and resources potentially impacted by this action to ensure we sufficiently analyze and balance the tradeoffs and practicability of this important decision.

Sincerely,

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Date: 2022.07.28 11:43:17 -04'00'

Andrew J. Strelcheck
Regional Administrator

cc: John Carmichael
Myra Brower
John McGovern, Ph.D.
Rick DeVictor
Frank Helies
Monica Smit-Brunello