From: SAFMC Administrator
To: Myra Brouwer; John Carmichael
Subject: FW: SAFMC Sept Meeting- Amendment 10- attachments
Date: Wednesday, September 21, 2022 9:40:25 AM
Attachments: Comment_JR1- Shrimp Fishery Access Area_Reed 6-23-22.docx
Comment_JR6- Marine Protected Areas- OHAPC_Reed 6-23-22.docx
Gilmore comment letter- 6-17-22.docx

From: John Reed <Jreed12@fau.edu>
Sent: Wednesday, September 21, 2022 9:20 AM
To: SAFMC Administrator <administrator@safmc.net>
Cc: John Reed <Jreed12@fau.edu>; Gilmore, Grant (rggilmorej@gmail.com) <rggilmorej@gmail.com>
Subject: RE: SAFMC Sept Meeting- Amendment 10- attachments

Here are the attachments referred to in the letter below.
John Reed

From: John Reed
Sent: Wednesday, September 21, 2022 9:15 AM
To: administrator@safmc.net
Subject: SAFMC Sept Meeting

Re: SAFMC Sept. Meeting, Discussion of Amendment 10 Oculina HAPC.

As an interested citizen and concerned scientist who has studied the deep-water Oculina coral reefs since 1976, I have the following comments:

1. I submitted the attached documents to the council's meeting website. I don't know if they received or read these. I will resend these in a separate email to you.
2. I tried to ask a question at the virtual meeting but my mike was muted by them.
3. The Council and individuals who did speak at the meeting totally ignored all the points that Andrew Strelcheck (NOAA Regional Administrator) made in his letter to Mell Bell (Chair, SAFMC) disapproving Amendment 10 (7/28/2022; F/SER25:FH).
4. In particular, they totally ignored the data regarding by-catch data of fin fish that Dr. Gilmore submitted.
5. Ignored year's worth of data that I collected regarding E-W bottom currents
6. Ignored effects of turbidity on corals and coral larvae
7. Ignored NOAA regional bathymetric data that I provided that shows high relief (i.e. coral habitat) habitat immediately adjacent to the western border of the proposed rock shrimp fishing area
8. By ignoring all the facts and science, the Council voted to proceed with the proposal 10.
9. In addition, Ms. Laurilee Thompson (Council member) was again allowed to vote on the motion that forwarded the decision to open up this issue again. Her financial connection to the rock ship industry's marketing, sales, and processing is well known and a conflict of

interest.

John K. Reed
Research Professor
Harbor Branch Oceanographic Institute
Florida Atlantic University
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Phone- 772-579-8215
Email- jreed12@fau.edu

June 23, 2022

To: www.regulations.gov

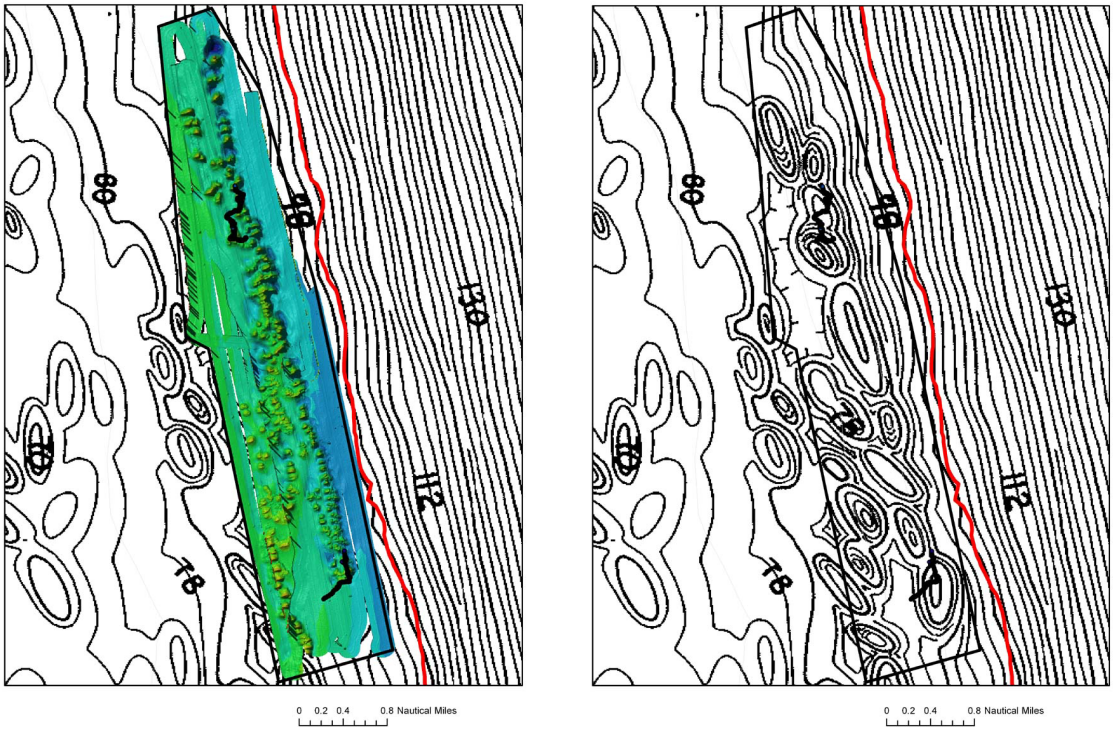
Re: NOAA-NMFS-2021-0126
Coral_Amendment10_Nov21_508
Public Comment

From:
John K. Reed
Research Professor
Harbor Branch Oceanographic Institute
5600 U.S. 1, North, Fort Pierce, Florida 34946
Email- jreed12@fau.edu

Comment: Shrimp Fishery Access Area (SFAA)
I am a senior research scientist and Research Professor at Harbor Branch Oceanographic Institution who has studied the deep-water Oculina coral reefs off Florida since their discovery in the 1970s. My research and that of many other scientists have provided data on the associated grouper/snapper fish and invertebrate communities associated with Oculina ecosystem showing the importance of protecting this truly unique ecosystem.

For the past 10 years (2010- 2021) I also have been a Co-Principal Investigator along with Stacey Harter and Andy David (NOAA Fisheries, Panama City Lab) on surveys for NOAA Fisheries and the SAFMC documenting the shelf-edge MPAs with ROV and multibeam sonar from south Florida to North Carolina, including the Oculina coral reefs and OHAPC. In fact, it was on our surveys in 2011 when we documented that the Oculina habitat extended north of Cape Canaveral and nearly up to St. Augustine. Our extensive surveys also show that the Oculina banks do not occur north of there, nor are they known to occur anywhere else on earth. These are truly a treasure, that should be protected for perpetuity. I presented these data from these NOAA cruises to the SAFMC; and together with members of the Council, Shrimp Advisory Panel, and Coral Advisory Panel present, the Council drew the new boundaries for the north extension that would protect all the coral habitat and ecosystem. In 2015 the SAFMC council passed the amendment to include the northern Oculina HAPC.

The region to the north of Cape Canaveral in the northern OHAPC is a continuation of the reef track that is apparent in NOAA regional bathymetric charts (Cape Canaveral 85, Titusville 84, New Smyrna 83, and Daytona 82). These regional contour charts were made by NOAA in 1983 at a scale of 1:100,000. They were obtained by the PI from NOAA (Scanned NOS Bathymetric Maps, Vol. 2, U.S. East and Gulf Coast) and were imported into ArcGIS 9.3 as georeferenced TIFF images. Reed and Farrington 2011 show that these NOAA regional charts are quite accurate in depicting high-relief features and when compared to newer multibeam maps (see Fig. 1 a,b). The multibeam clearly verifies high-relief features of the bathy charts although the individual mounds are not exact.



A. B.

Figure 1 A (left). 2011 NOAA Ship Pisces multibeam sonar off Daytona area with overlay of two ROV dive tracks (Dives 11-156A, 11-156 B). B (right). NOAA regional bathymetric contour chart of same site; black polygon is area of the multibeam in Figure 1 A. Red line= 100 m contour line and OHAPC eastern boundary (NOAA- CRM_10m_nad83). The multibeam map shows over 100 individual, high-relief mounds (base depth from 80-90+ m; peaks 60-70 m). Two ROV dives (thick black lines) verified that these are Oculina coral mounds (from Reed and Farrington, 2011, "A Proposal for Extension of the Boundaries of the Oculina Coral Habitat Area of Particular Concern (OHAPC)", submitted to South Atlantic Fishery Management Council, 21 pp.)

- Amendment 10 would allow bottom trawling within the OHAPC, leaving little buffer between the trawl nets and the high relief coral mounds. NOAA Regional Bathymetric charts clearly show the proposed area extends very close to high relief habitat, i.e., coral mounds (see Fig. 2; Reed letter to Janet Coit, NOAA Fisheries, April 7, 2022). Figure 2 shows exactly that the proposed SFAA is over probable coral habitat or immediately adjacent to it. Figure 2 shows background bathymetric contour lines which are very accurate for predicting probable high relief habitat (i.e., coral habitat). Also keep in mind that the multibeam map under parts of the SFAA are only 5 m resolution which will not even show corals of 10 ft diameter.

- The current eastern border of the OHAPC was purposely drawn along the 100 m contour line and varies from a minimum of 500 m to about 1000 m away from the high relief bathymetry. This is a quite reasonable buffer. Per the Coast Guard, straight borders, and wide buffer zones allows easier enforcement to keep potential poachers and errant trawls far from the reef habitat.

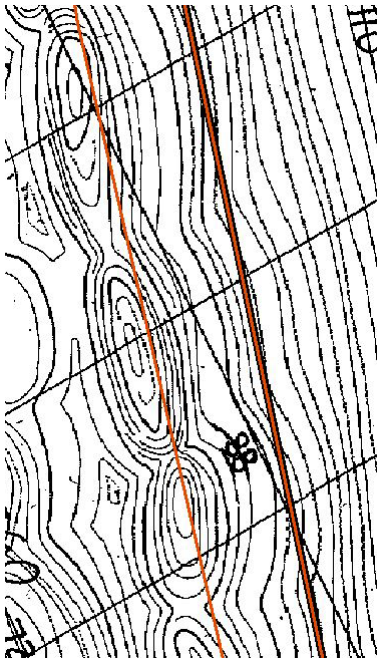


Figure 2. Proposed Shrimp Fishery Access Area (red polygon) in the northern Oculina HAPC with background of available bathymetric contour lines showing high relief topography and probable coral habitat directly adjacent to the western boundary of the proposed SFAA. Thick red line: current OHAPC eastern border. Thin red line: boundary of proposed Amendment 10 SFAA.

- Of the 89 km length of the proposed SFAA, two areas were mapped with multibeam sonar (10 km and 13 km in length) in detail to the west of the proposed SFAA. That means 74% of the length of the SFAA along the proposed western border has no multibeam sonar data. In other words, coral reefs could be immediately abutting the boundary. The SAFMC ignored these facts when drawing up the proposed SFAA boundary.

- SAFMC Coral Advisory Panel members supported establishing a substantial buffer of possibly 1,000 m from the known habitat as an approach that would address and account for uncertainty as directed by the Magnuson-Stevens Fishery Conservation and Management Act (Amendment 10 NMFS- SAFMC EA Report Aug 2021.pdf; 5.1.2 Coral AP Comments and Recommendations, pg. 59). The AP indicated the present boundary provided a buffer and approved a motion supporting the no action alternative (i.e., MOTION 11: Consider Option 1 status quo. Do not develop an action to address the issue).

- There is uncertainty about the location of the shrimp trawl rig on the bottom. National Marine Fisheries Service data indicate that the ratio of scope to depth for shrimp trawlers is, typically somewhere between 3 to 4.3 ratio in these depths and these kinds of currents. So, taking a conservative estimate means that the horizontal distance between the boat and the rig can be anywhere from about 230 m to 510 m (Amendment 10 NMFS- SAFMC EA Report Aug 2021.pdf; 5.1.2 Coral AP Comments and Recommendations, pg. 59).

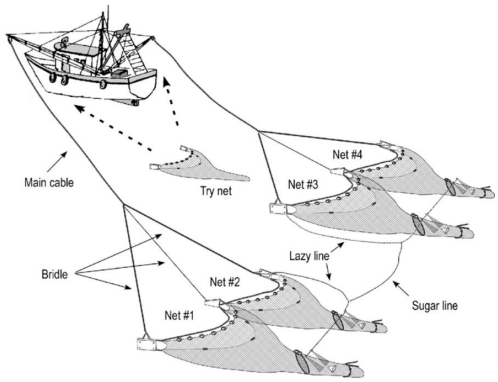


Fig 3. Typical gear configuration for U.S. southeastern shrimp vessels equipped with four nets. (Source: Scott-Denton et al. 2012; Amendment 10 NMFS- SAFMC EA Report Aug 2021.pdf; 5.1.2 Coral AP Comments and Recommendations, pg. 52).

- It is well known that the fishers (shrimp trawls) fish right on the border line of the HAPC. We have seen this numerous times while on NOAA vessels while working in the OHAPC. That means the fishers will track their vessels right along the new border and the nets will extend some unknow distance into the OHAPC, beyond their allowable fishing zone and into the no fishing zone (Fig. 3).

- Typically, fishers rely on standard chart packs for their navigation. The NOAA multibeam charts and NOAA regional bathymetric charts shown above are not available for their navigation. In other words, they are trawling blind as to what is on the bottom.

- Currently there are no shrimp fishery access areas within the OHAPC, and now is not the time to reverse course, nor to redraw the boundaries of the OHAPC. The deep-water Oculina coral reefs are a unique coral reef ecosystem like no other on earth. These are truly a treasure, that should be protected for perpetuity. Destructive fishing gear, specifically bottom trawls, should have no right to be used within the OHAPC. They have been banned for 38 years, there is no good data to suggest it is OK to allow it now.

References:

Koenig, C.C., A.N. Shepard, J.K. Reed, F.C. Coleman, S.D. Brooke, J. Brusher, and K.M. Scanlon. 2005. Habitat and fish populations in the deep-sea Oculina coral Ecosystem of the western Atlantic. American Fisheries Society Symposium 41: 795-805.

Reed and Farrington, 2011. A Proposal for Extension of the Boundaries of the Oculina Coral Habitat Area of Particular Concern (OHAPC), submitted to South Atlantic Fishery Management Council, 21 pp.

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

June 23, 2022

To: www.regulations.gov

Re: NOAA-NMFS-2021-0126
Coral_Amendment10_Nov21_508
Public Comment

From:
John K. Reed
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Harbor Branch Oceanographic Institute
5600 U.S. 1, North, Fort Pierce, Florida 34946
Email- jreed12@fau.edu

Comment: Marine Protected Areas; Oculina Habitat Area of Particular Concern

- Deep-water Oculina coral reefs are a unique coral reef ecosystem like no other on earth. The discovery of these reefs led to the formation of the Oculina Habitat Area of Particular Concern (OHAPC) in 1984 by the South Atlantic Fishery Management Council (SAFMC). The OHAPC was the first deep-water coral marine protected area in the world to protect a deep-water coral reef and prohibited bottom trawls, longlines, dredges, and anchors. The OHAPC was first established primarily to prevent the rock shrimp trawl fishery from damaging the coral habitat and to protect the associated grouper/snapper spawning aggregations. Unfortunately, the northern two thirds of the reef system remained open to these gear until 2000 and 2015 when the OHAPC boundaries were expanded to cover all the known Oculina ecosystem, and poaching has been an ongoing and unregulated problem.

- According to the Proposed Amendment 10 (NOAA-NMFS-2021-0126, Coral_Amendment10_Nov21_508; Summary):
"If approved by the Secretary of Commerce (Secretary), Amendment 10 to the Coral FMP (Coral Amendment 10) would 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. Coral Amendment 10 would increase access to historic rock shrimp fishing grounds while maintaining protection of the Oculina deep-water coral ecosystems, provide increased socioeconomic benefits to fishers, and increase the likelihood of achieving optimum yield (OY) in the rock shrimp portion of the South Atlantic shrimp fishery."

  Response:
  1) The entire OHAPC is the rock shrimp historic fishing grounds. Lost trawl nets on the reefs and within the OHAPC and reports by the Coast Guard attest to that [Coast Guard (at Coral and Shrimp AP meeting, Oct 2012)- Stated that 20 cases of illegal trawlers inside OHAPC; Coast Guard (Oct 2012)- Stated that prior to the VMS (2003) there were 'all kinds of entries' by trawlers into the OHAPC].
  2) Since 2000, when the boundaries of the OHAPC were expanded from Sebastian northward to Cape Canaveral, shrimp bottom trawlers have been caught poaching within the boundaries of the original OHAPC (OECA) and in the vicinity of Chapman's Reef and Jeff's Reef, the only remaining live, high-relief coral reefs. Recent dives completed with ROVs within the OHAPC have documented coral reefs wrapped with fishing lines, piles of bottom longlines, discarded trawl nets, and anchor lines (Reed et al., 2005).

3) Yes, opening up a closed marine protected area will increase the likelihood of catching shrimp; but will also decrease the likelihood of coral recruitment, decrease the recovery of the coral habitat, and subsequently decrease the recovery of fin fish populations.

- According to the Proposed Amendment 10 (NOAA-NMFS-2021-0126, Coral_Amendment10_Nov21_508; pg. 4):
"Information on the concentrated shrimp fishing effort in the area and its economic value to the rock shrimp portion of the shrimp fishery was discussed by the Council very late in the development of Coral Amendment 8. During these discussions, rock shrimp fishermen requested adjustment of the OHAPC boundary and provided coordinates that comprised the important fishing grounds in that area."

  Response:
  1) As stated above, the economic effect was discussed by the Council while developing Amendment 8. Members of the Shrimp Advisory Panel and the Coral Advisory Panel were present when the Council Senior Scientist (R Pugliese) drew the boundaries for the Northern OHAPC which included a buffer to keep the trawls away from the reefs, and was approved by the SAFMC in 2015.

- According to the Proposed Amendment 10 (NOAA-NMFS-2021-0126, Coral_Amendment10_Nov21_508; pg. 4):
"The Council also developed Coral Amendment 10 in response to the Presidential Executive Order on Seafood Competitiveness and Economic Growth (E.O. 13921) (85 FR 28471; May 7, 2020). Coral Amendment 10 would address the recommendation to reduce burdens on domestic fishing and to increase production within sustainable fisheries contained in E.O. 13921. This would be accomplished by re-opening a closed area to commercial fishermen who have lost access to areas that have been traditionally fished."

  Response:
  1) This EO is in direct opposition to Biden's 30x30 Initiative. The purpose of the OHAPC is to protect the Oculina coral habitat which in turn will allow the 'traditional' hook and line fin fisheries to recover. Opening up a marine protected area for small destructive fishery while negatively impacting larger more important fin fisheries makes no sense. 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. 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.

- If passed this Amendment will allow shrimp trawlers access to bottom trawl within the boundaries of a portion of the OHAPC. It will increase the degradation and proximal destruction of this unique-in-the world coral reef system. Adding in the already existing environmental stressors the coral reefs here (and around the world) and we could see the unintended expansion of degradation and destruction growing within the marine protected area. In a non-linear world of

ecosystem function one additional change/ variable can become the straw that breaks the camel's back. The purpose of marine protected areas like the OHAPC are to protect areas of essential habitat, fish populations and their spawning grounds. That is the whole purpose of establishing marine protected areas. It is not and should not allow special interests devest MPAs of their purpose. If we destroy the habitat, we lose the fish; if we lose the fish, we lose the fisheries.

- The nation's fisheries law, the Magnuson–Stevens Fishery Conservation and Management Act (Magnuson–Stevens Act or MSA), has played a critical role in curbing overfishing and rebuilding dozens of once-depleted fish stocks. The MSA recognizes the importance of protecting marine habitat from the impacts of both fishing gear and nonfishing activity, such as sand mining, dredging, and energy exploration and development. To this end, it requires that councils designate areas within their region as "essential fish habitat" (EFH), i.e., the habitat that is necessary for healthy fish populations (NRDC Report- A Safety Net for Ocean Fisheries: The Case for Stronger Protection of Essential Fish Habitat under the Magnuson-Stevens Act, April 2021, R:21-03-A).

- Dr. Sylvia Earle, a former chief scientist for NOAA , the head of Mission Blue and Explorer-in-Residence for National Geographic, has said of the Oculina Coral Reef issue (Pers. comm.): "The science is clear. The economics are clear. The ethical and moral mandates are clear. What remains of the intact East Florida Oculina reef system and the associated damaged areas, if left alone -- that is, protected from fishing, especially trawling, will yield enduring benefits now and forever. Giving a few shrimpers a green light to trawl these ancient systems into oblivion will destroy what could be an on-going source of life and livelihoods in exchange for a few bucks for a few people and then it will be over."

- Opening a portion of the HAPC to trawling is a bad precedent. What would prevent the trawlers from requesting other portions of the OHAPC or the Deepwater CHAPC protected areas to be opened? Now is the time to protect these reefs, to allow the corals to recover, to allow the spawning aggregations of important grouper and snapper to recover. Now is not the time to diminish an area that is already protected.

- 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. 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.

- The purpose of the OHAPC is to protect areas of essential habitat, fish populations and their spawning grounds. It is not and should not allow special interests devest HAPCs of their purpose. Opening these areas to the same fishery that destroyed the coral in the first place completely undermines the purpose of the protected areas. This action represents a giant step backwards in stewardship of our natural resources and sets a dangerous precedent for encroachment into other protected areas.

- I am requesting that NOAA Fisheries deny Amendment 10 to open a SFAA which allows trawling by shrimp fishers within the current boundaries of the OHAPC. I ask you to accept Alternative 1 (No Action) of the proposed Amendment 10: "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." Currently there are no shrimp fishery access areas within the Oculina Bank Habitat Area of Particular Concern, and now is not the time to reverse course, nor to redraw the boundaries of the protected area.

References:

NOAA National Marine Fisheries Service (NMFS) and the SAFMC have drafted an Environmental Assessment (EA) of potential impacts, cumulative effects, economic impacts, etc. for this proposal [https://safmc.net/download/BB%20Council%20Sept%202021/Habitat%20&%20Ecosystem/HabEco_A1b_Coral_Amendment10_Draft_August%2021%202021.pdf].

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Agency: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)
Document Type: Proposed Rule
Title: 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
Document ID: NOAA-NMFS-2021-0126-0010

Comment:
I am a fish ecologist who has spent his 53 year career studying the fish and fish ecology of Florida, the Southeastern United States, Bahama Islands and the Caribbean. During this time I have witnessed significant declines in critical fish habitat throughout this tropical/sub-tropical region. It continues to this day. Why? Is this a failure to protect fish habitat that supports our valuable fisheries? It appears so. It is well known, and highly documented, that coral reefs are the most biodiverse ecosystems in the world ocean. The unique East Florida Oculina reef system is a coral reef and supports the most biodiverse ecosystem, and habitat on the east central Florida continental shelf. So why permit a single localized commercial user group, such as the east Florida rock shrimp fishery, to kill a coral reef or eliminate the possibility of its restoration? Valuable grouper/snapper fisheries of the States of North Carolina, South Carolina and Georgia are also affected by the health of Oculina coral habitat. These valuable fishery species migrate and spawn annually from the Carolinas to east Florida and back. So loss of Oculina coral impacts interstate fisheries, not just a local fishery. In 2008 I made my last Johnson-Sea-Link submersible dive on the Oculina reefs and noted trawl damage, presence of trawl nets, otter door drag scars and wrecked coral rubble that had occurred since my last visit to this particular Oculina coral reef location in 2001. I had thought there was protection for these coral formations so that they could recover from previous shrimp trawling activity? How can scrimp trawls be allowed to kill Oculina coral when we know their fishery value? One primary reason the Oculina reef was protected was to allow the corals to regrow throughout their native range. We actually saw signs of this coral regrowth from professional divers that were making reef surveys off East Central Florida (pers. obs. Mr. Kerry Dillon under contract with NOAA/NMFS). If coral rubble zones were disturbed again by trawls they will fail to form the robust coral formations that supported the vital spawning activity of the prime Grouper/Snapper reef fisheries. All previous Oculina coral reef regions had to remain undisturbed to allow the coral to regrow. The unique and complex in situ coral studies that John Reed (HBOI) conducted from JSL submersibles documented the growth habits of Oculina coral. These experiments could not be conducted today without dangerous mixed gas diving from the surface. NASA, NOAA/NMFS and FFWCC had already supported mixed gas dives on east Florida reefs including Oculina from 2000 to 2008, but they were limited by human physiology and the difficult environmental conditions of the Oculina study sites. Literally thousands of man/woman hours have been spent to document the biota of the Oculina reef region off east central Florida. Much of this activity was supported by the Harbor Branch Oceanographic Institution beginning in 1975 and NOAA/NMFS/NURP. Literally millions of dollars have been spent with an army of researchers studying the ecology of these reef formations over the past 47 years. However, it appears that the fragile corals and fisheries they support have not been protected during this same period. This has also been well documented. I thought this was the responsibility of the Federal government since this vital ecosystem occurred in Federal waters! So why is the regional fisheries council (SAMFC) and the national government (NOAA Fisheries?) allowing the destruction of a (1) coral reef ecosystem and (2) habitat for our valuable fisheries for the interests of a single small/limited commercial shrimp fishery entity? I personally documented the rock shrimp trawl fish by-catch by participating in collecting and preserving the fish caught in shrimp trawls during a multi-annual Florida Department of Natural Resources (now the Florida Fish and Wildlife Conservation Commission) study off Cape Canaveral conducted by Dr. Stewart Kennedy, 1973-1974. The trawl by-catch was substantial. Fishery impacts were primarily on seabass (Centropristis spp.), grunts, flatfishes, cuskeels and batfishes. I am writing this letter to you to document the fact that considerable study of the east Florida continental shelf has already been done at the cost of millions of dollars,

Federal (NOAA/NMFS/NURP, NASA), Smithsonian Institution, State governments (Florida and South Carolina) and private laboratories, the Harbor Branch Oceanographic Institution (= HB Foundation was private 1971-2008). The information is available now to aid in your decision to protect these valuable coral reefs and restore them, or to allow their continued destruction at the cost of some of the most valuable fisheries within the Southeastern United States. New studies would be a waste of time and valuable Federal dollars. If you need further input please let me know.