August 5, 2025

Re: OHAPC proposed Coral Amendment 11/ Shrimp Amendment 12_ Border of proposed SFAA

For 10 years (2010- 2021) I was 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 current eastern border of the OHAPC of Amendment 8 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. SAFMC Coral Advisory Panel (AP) 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 Coral 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). However, the Coral AP was not invited or allowed to participate in the Council's meeting last June where the Shrimp and Habitat members voted to proceed with the proposed amendment. How can that be, that the Coral AP with the most knowledgeable members regarding coral and Oculina were not allowed to attend the vote on the proposed Coral amendment? Perhaps because they had voted against Amendment 10, and this amendment 11-12 is virtually identical to that.

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. It appears that the SAFMC didn't have or use these available maps (NOAA Bathymetric chart, and 2011 NOAA fisheries multibeam maps) when drawing up the proposed SFAA boundary of Amendment 11-12 which is nearly identical to Amendment 10.

The proposed revised Amendment 11-12 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 abuts the high relief habitat, i.e., coral ecosystem habitat. Neither of these charts are shown in the proposed Amendment 11-12 proposal. Also the recent multibeam

mapping in 2025 is 2-m resolution so even a 1 m coral colony (over 100 years old) would not even show up.

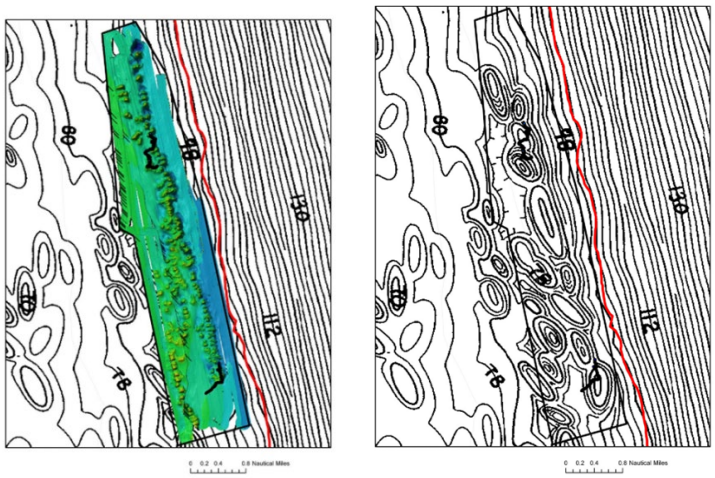

Figure 1 A (left). 2011 NOAA Ship Pisces multibeam sonar off Daytona area with overlay of two ROV dive tracks (Dives 11-156A, 11-156 B). B (right). NOAA regional bathymetric contour chart of same site; black polygon is area of the multibeam in Figure 1 A. Red line= 100 m contour line and OHAPC eastern 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.)

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).

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.

The shrimpers want to trawl near the high relief banks, as these areas are covered with coral rubble and mud, which extend out on the flat areas adjacent to the banks. Rock shrimp preferred habitat is rubble and mud. There is no reason to fish within the OHAPC eastern boundary. There are miles of mud to the east of the boundary, but no coral or coral debris. Trawling the mud east of the current OHAPC boundary should cause no harm to the OHAPC ecosystem and coral.

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