

Council Members,

At the last Council Meeting there was a lot of uncertainty regarding Coral Amendment 10 and allowing the rock shrimp industry access to an area along the southeast boundary of the Coral Amendment 8 northern OHAPC extension. It is understandable considering most council members were not on the council at that time and I'm sure the barrage of emails from the environmental and academic network added uncertainty and discomfort to the decision.

I have attempted to provide some history and explanations that will hopefully clear some things up. I hope that you support the Preferred Alternative 2 to provide rock shrimp fishermen access to the area defined in the alternative. I know it's a tough decision in today's climate but I wanted to make sure you had the perspective of the rock shrimp fishermen as part of the information you have for making this decision.

Thank you for taking the time to review this information. If you have any questions, I am available and more than happy to provide additional input.

Mike Merrifield
Deepwater Shrimp AP Chair
Cape Canaveral Shrimp Co

SAFMC Council Members:

Coral Amendment 10 seemed to be a small matter at first glance: rock shrimp fishery was requesting access to a small, previously, historical rock shrimp trawling area where access was prohibited by Coral Amendment 8. Things seemed to be progressing smoothly – until John Reed and friends became very active in campaigning against the preferred alternative 2 of the amendment. I understand their objective is to protect coral habitat by closing as much bottom with as much buffer as possible. It's easy to villainize the commercial fishing industry. This has been a 25 year effort at a minimum that has resulted in fleet reductions and ever tightening restrictions on the industry. The industry has adapted to these changes by becoming completely accountable to the resource, being even better stewards of the ocean environment and decapitalization to less than a quarter of what it once was.

The rock shrimp industry whole-heartedly supports protecting the Oculina coral. Some believe the rock shrimp production is dependent on the Oculina Bank in one way or another which explains why they are adjacent to one another. The rock shrimp captains worked with SAFMC staff to develop the coordinates for preferred alternative 2 to meet the criteria of protecting the coral habitat and giving the rock shrimp fishermen access to important, historical fishing bottom that is significant when rock shrimp are present on the offshore side of the Oculina Bank. This area is 22 square miles with an average depth of 98 meters.

Rock shrimp are driven by water temperature and available habitat. Cold water upwellings and Gulf Stream changes push rock shrimp to the soft sand/mud bottom inshore and offshore of the Oculina Bank year to year, even week to week. When rock shrimp are offshore, the bottom along the southeaster border is very important due to the fishing strategy. Trawling through the middle of the rock shrimp is liking herding cattle by cutting through the middle of the herd. The rock shrimp scatter in both directions. Trawling the edge first pushes them to more open bottom away from the closed area.

Sedimentation from rock shrimp trawl gear is not comparable to dredging operations or spoilage dumping that create sediment plumes through the entire water column, in the same area, repetitively for the duration of the operation. The Oculina Bank in this area is situated in a south-southeast to north-northwest position. The Gulf Stream typically runs 3-5+ knots due north, particularly when the rock shrimp are inhabiting the offshore side of the bank. What little sedimentation created will drift north and away from the coral. At the closest points (Points 2, 8 and 5), the Oculina coral is over 3, 7.5 and 8 football fields away respectively. How much buffer is enough?

Studies have recorded trawl gear bottom impact to be 1-5 cm or less than 2 inches. Trawl gear is calibrated to minimize bottom contact. Heavy bottom contact results in shorter gear life and costly gear replacements. The gear is designed and calibrated to operate in loose substrate, obstacle free bottom.

Just as the Coral AP is made up of professional academics and scientists, the rock shrimp captains are professional fishermen – particularly captains that fish the offshore side of the Oculina Bank. They understand the currents. They know the bottom. They have the right electronics to read the bottom. They know where the OHAPC boundaries are and how to stay out of it. They are keenly aware of where their gear is at all times – the safety of their crew and vessel are dependent on knowing where their gear is in relation to the vessel and any obstructions on the bottom.

The VMS data is very clear. Coral Amendment 10 is a request by the rock shrimp industry to have access to historical, important rock shrimping area. This is not a request for access to any new area.

VMS is required for all rock shrimp vessels. They do not wonder into protected areas or they risk very steep fines and confiscation of their entire catch resulting in hundreds of thousands of dollars.

The essence of this amendment is in the Possible Effects section. What is known and what is not. There is great pressure to succumb to the potential threats as outlined by those that oppose this amendment. The rock shrimp industry is unique and iconic to the southeast and produces a valuable food product to the American consumer. I hope that you can support Coral Amendment 10 Action 1 Preferred Alternative 2 to establish a shrimp fishery access area where VMS has shown this to be a historic rock shrimp fishing area with adequate buffer to protect the Oculina coral.

Thank you. I have also included a document that summarizes some of the history leading up to Coral Amendment 10 as many council members were not present for Coral Amendment 8.

Mike Merrifield
Deepwater Shrimp AP Chair
Cape Canaveral Shrimp Co

History of Oculina Habitat Area of Particular Concern (OHAPC)

In 1984, the first Oculina HAPC “box” was created by the South Atlantic Fisheries Management Council. It was created to protect the Oculina coral mounds that existed in approximately the 70-90 meter depths from Fort Pierce to Cape Canaveral. Some shrimpers at that time (including rock shrimp industry pioneer Rodney Thompson) believed the ledges, pinnacles and Oculina coral were a rock shrimp nursery and they fully supported establishing a no-trawl area to protect the coral. When the actual 300 square mile Oculina HAPC rectangle was implemented (long north to south rectangle in RED), the rock shrimp fishermen were appalled and angry at the amount of historical rock shrimp fishing ground that was eliminated (the yellow rectangle extending the entire length of the OHAPC in 95-110 meters of depth). The western boundary was a straight north/south line that started at 68 meters at the southern end to 110 meters at the northern end. It actually traversed the Oculina reef, missing most of it. Less than one quarter of the original Oculina HAPC protected Oculina coral. The eastern boundary is a straight north/south line that follows the 220 meter contour. This effectively eliminated all historical rock shrimp fishing offshore of the Oculina bank from Ft. Pierce to Cape Canaveral that took place in approximately 95 meters to 150 meters of depth.

In 1994 the Oculina Experimental Closed Area was designated Inside the OHAPC.

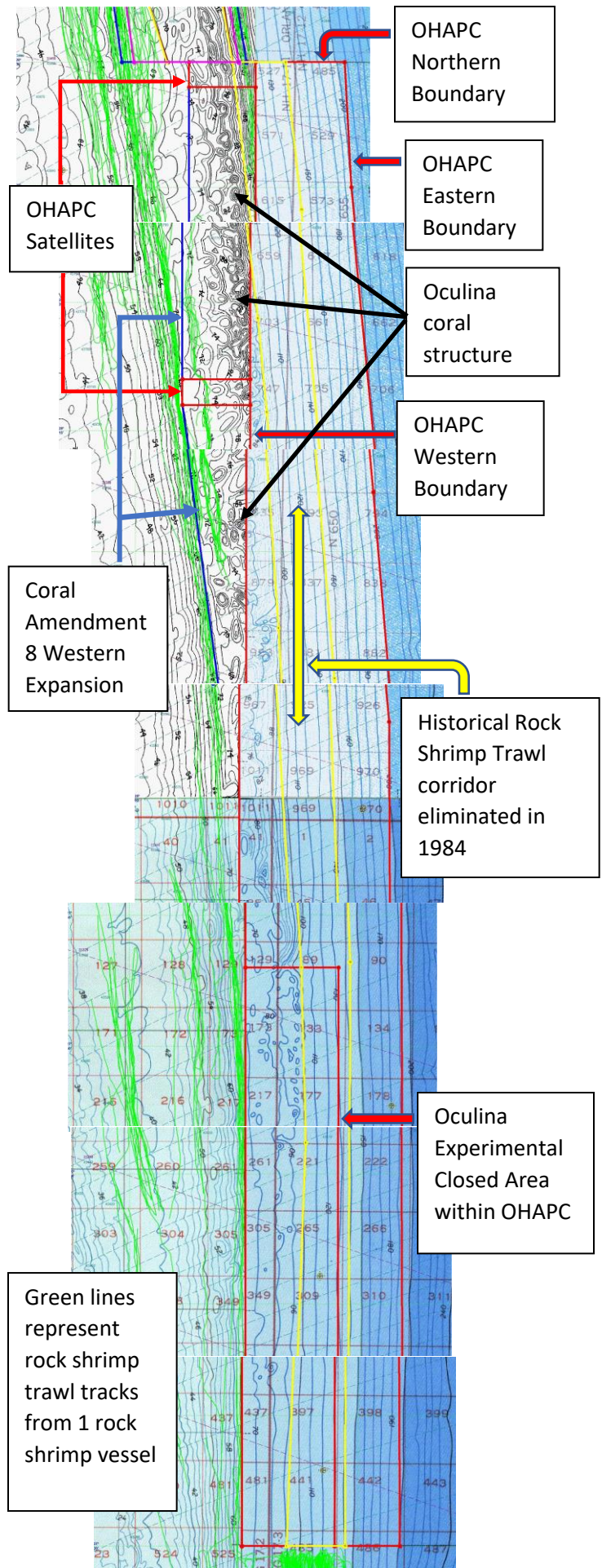
In 2000 the 2 satellite boxes jutting westward from the northern end of the OHAPC were added to protect additional Oculina coral but the space between them was still open.

Vessel Monitoring Systems were required by all rock shrimp vessels in 2003 as an enforcement measure to monitor the closed area. VMS was also implemented to show the council where the rock shrimp fishery operated and to prevent future regulatory efforts from taking away more historical rock shrimp fishing area.

Effective August 2015, Coral Amendment 8 expanded the western boundary of the OHAPC by connecting the satellites and extending further south to protect Oculina coral (blue lines).

Green lines on the chart are actual shrimp trawl tracks as recorded by a rock shrimp fishing vessel.

Black concentric circles indicate Oculina coral structure. Long wavy lines indicate sandy rolldown bottom.



Coral Amendment 8 extended the original Oculina Coral HAPC north to St Augustine adding 267 square miles and west adding another 76 square miles to the existing 92 square mile. It also added 490 square miles to the existing Stetson-Miami Terrace Coral HAPC and created a 10 square mile Cape Lookout Coral HAPC. A transit provision was provided to give rock shrimp and red shrimp fishermen the ability to traverse the approximately 155 mile long Coral HAPC under specific gear stowage and speed requirements.

Regarding the northern OHAPC extension, Coral Amendment 8 started with the Coral AP recommendation to expand the OHAPC northward to St Augustine from the 60 –100 meter depth bathymetry lines. Then Council Chair Harris recommended that a joint meeting be held between the Coral and Deepwater Shrimp APs. The joint meeting was a full day of cooperative, productive conversation with mutual understandings and agreements to work with staff to develop boundaries that both protected coral and left important rock shrimp fishing areas intact. There were even discussions about creating a Shrimp Fishery Access Area within the offshore portion of the original OHAPC at depths greater than 110 meters. Some Coral AP members agreed there was no data to indicate that that area must remain closed for protection of deepwater corals where deepwater corals do not exist. They asked for a survey to indicate if coral even existed in the OHAPC at depths greater than 100m. It was agreed that excluding it entirely as a Shrimp Fishery Access Area for the reason that it has been closed for so many years was not a sufficient reason. Unfortunately, the second half of the meeting minutes were lost.

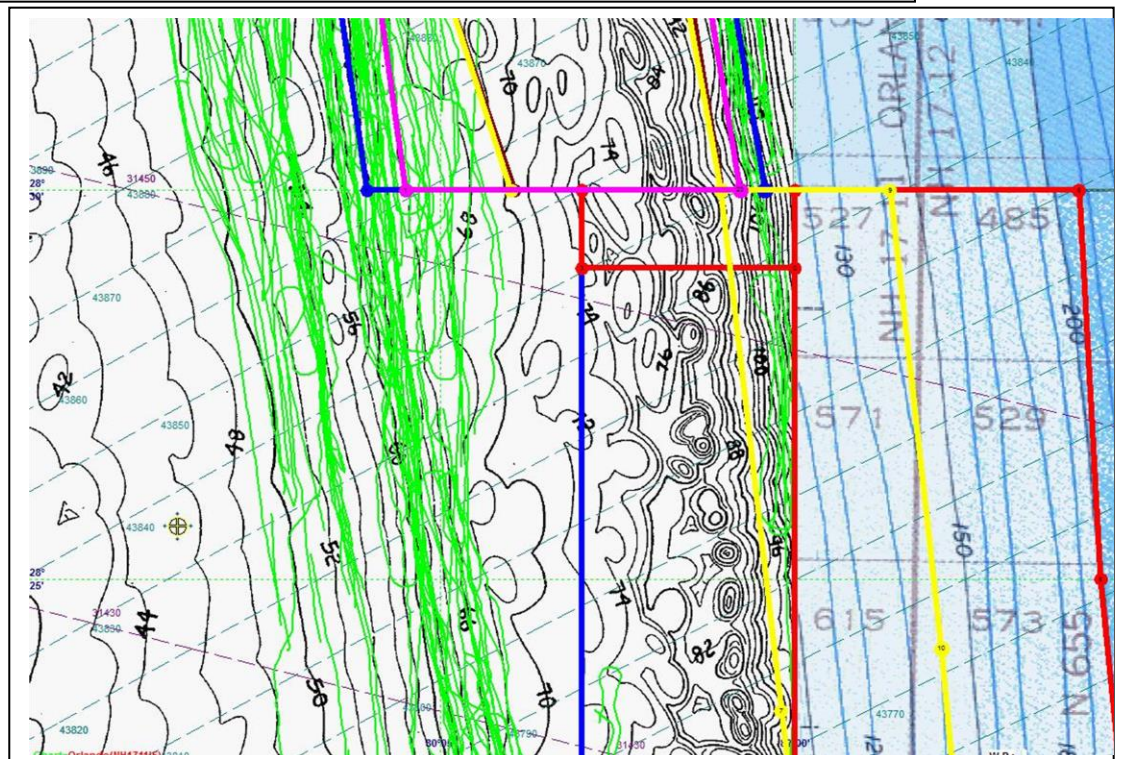
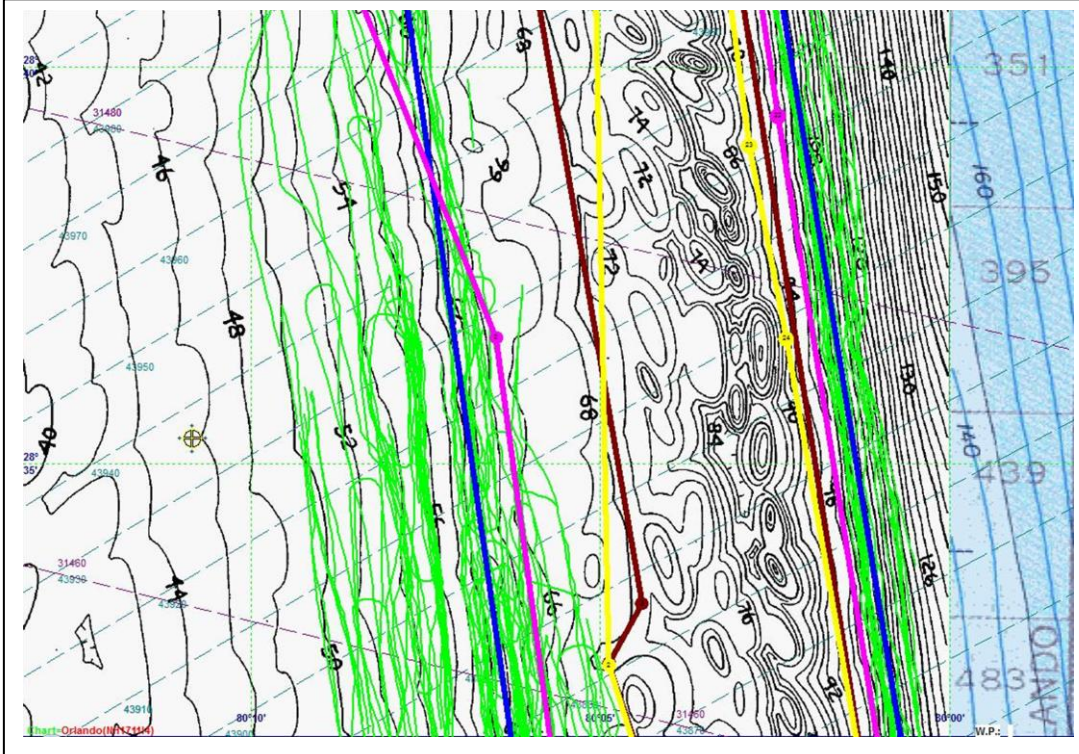
Coral Amendment 8 progressed as an iterative process of defining boundaries acceptable by both the Coral AP and the Deepwater Shrimp AP. The last iteration would have caused a delay in the amendment approval process so the council agreed to approve the amendment with the caveat that the last iteration be addressed at a later date.

The area in question is the southern half of the eastern boundary of the northern extension of the OHAPC – the area being addressed in Coral Amendment 10. This area was presented to the council as instrumental to the rock shrimp fishery **when the fishery is active on the offshore side of the Oculina Bank**. In the following year, 2014, this area was key to rock shrimp landings as most of the catch that year was on the offshore side. Council staff presented this area as insignificant to the rock shrimp fishery because of the number of VMS points in this area compared to the total number of rock shrimp VMS points during a set timeframe.

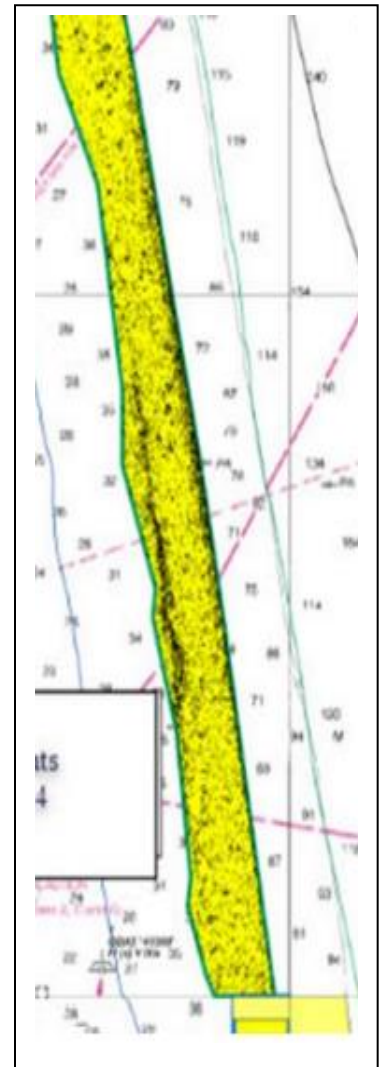
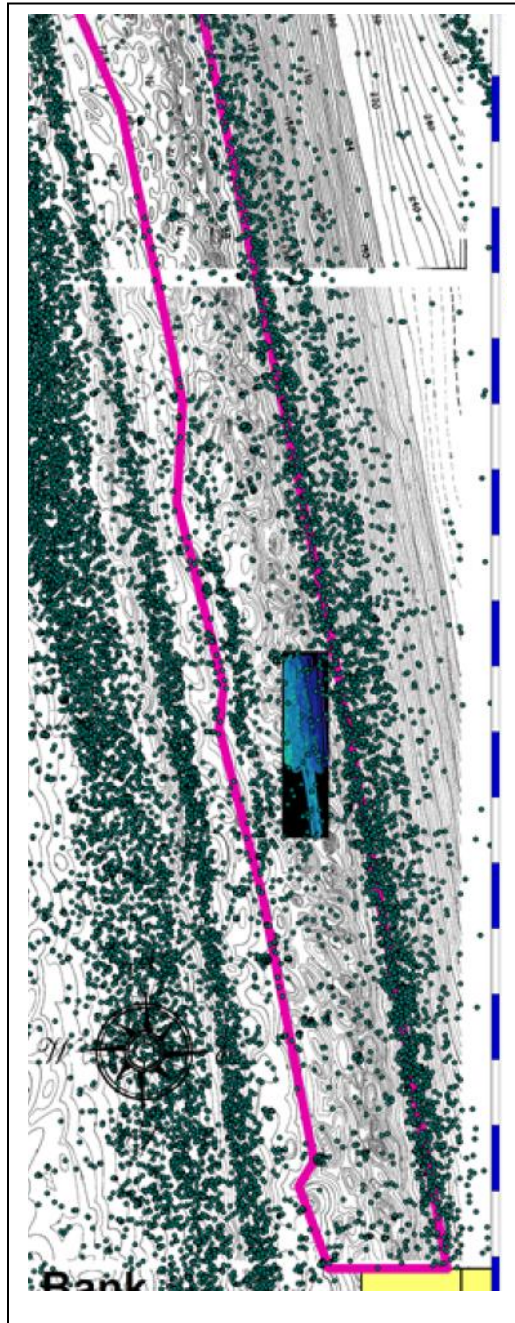
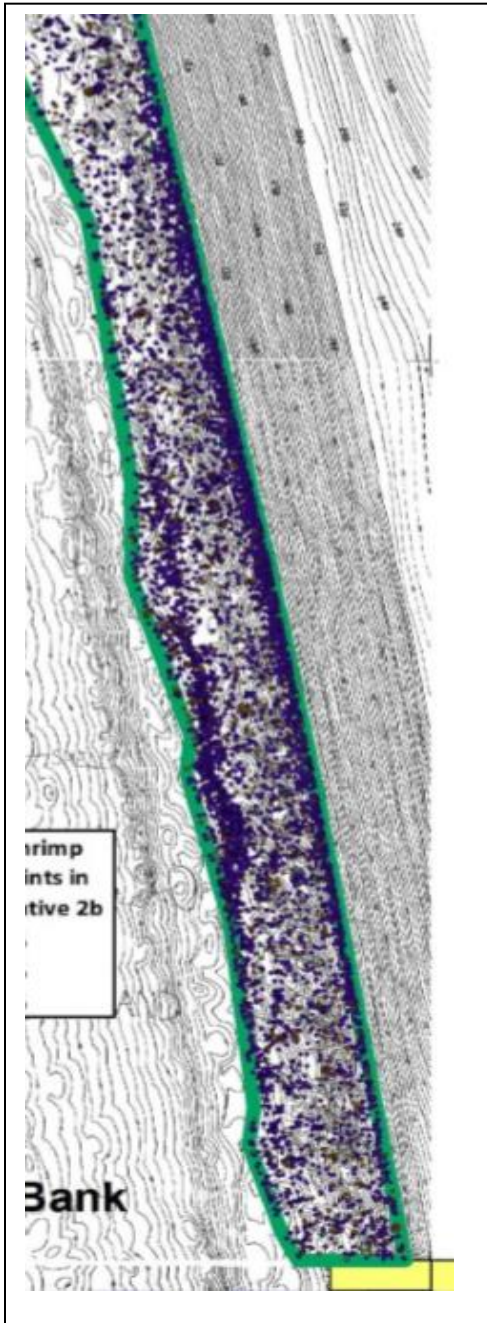
VMS was implemented in the rock shrimp fishery in order to track vessel locations for enforcement purposes and to understand where the rock shrimp fishery operated. There is no information in the VMS system that indicates catch or economic productivity.

There are numerous charts presented by Roger Pugliese that present this area in numerous ways. Some use a limited VMS subset from 2003-2011, some show bathymetry lines, some show both. To see where the rock shrimp fishery has operated in reference to where the Oculina coral exists, a chart should consist of bathymetry lines, Coral Amendment 8 boundary line, Coral Amendment 10 alternative 3 boundary from rock shrimp captains, Coral Amendment 10 preferred alternative 2 developed by rock shrimp captains with council staff and, most important, all VMS points at trawling speed from 2003 – 2015. VMS became a requirement in 2003 for all vessels with a rock shrimp permit and August of 2015 is the date the boundaries of the northern OHAPC extension went into effect. Most of the rock shrimp landed during the 2014-2015 season were caught in the area being considered for the Shrimp Fishery Access Area in Coral Amendment 10.

The charts below show the numerous iterations proposed relative to the rock shrimp trawl tracks recorded by a shrimp trawl captain. Fishermen trawl track data exactly matched VMS data as expected. Some areas where trawling had occurred in the past were not of significance for the fishermen and prohibiting access to those areas was not contested. Areas of importance were excluded from the OHAPC extension by moving boundary points to change the configuration. The area of most contention was the southeastern boundary of the northern OHAPC extension.



These are numerous versions of charts with VMS points. The OHAPC northern extension became effective in August 2015. It makes a difference which years of VMS data are displayed. The three charts below are different depictions of different data VMS data sets. It is important for the Council to have a clear understanding of the rock shrimp fishery activity that has historically taken place along the southeastern boundary and its proximity to the Oculina structure. Coral Amendment 10 Figure 6 does not appear to include VMS points from 2014 and 2015.



<p align="center">Coral Amendment 8</p> <p>Figure S-4. Action 1, Preferred Sub-Alternative 2b VMS data from 2003-2013</p>	<p align="center">Coral Amendment 8</p> <p>Development document VMS points near southern end of OHAPC extension</p>	<p align="center">Coral Amendment 10</p> <p>Figure 6. Rock shrimp VMS points in the northern extension of the OHAPC (2003-2013)</p>
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