

**Coral Amendment 10**  
**Establish a Shrimp Fishery**  
**Access Area Along the Northern**  
**Extension of the Oculina Bank**  
**Coral HAPC**

**Amendment 10 to the Coral, Coral Reefs, and Live/Hardbottom  
Habitats FMP of the South Atlantic Region**

**February 2021**



## What is Scoping?

Scoping is the first stage of the process to amend a fishery management plan after an issue has been identified (see steps in the process below). Scoping has two main purposes: (1) to inform you that the South Atlantic Fishery Management Council (Council) may propose new regulations or change existing ones and (2) to allow you the opportunity to comment on the issue or identify other issues that may need the Council’s attention. However, the proposed action in Coral Amendment 10 responds to an issue identified by rock shrimp fishermen initially in 2014 just after the Amendment was finalized. You will have another opportunity to provide comments during public hearings for this amendment, currently scheduled to be held in April or May 2021. **Figure 1** below shows the general progression of developing an amendment to a fishery management plan (FMP) and opportunities for public input.



**Figure 1.** Council process to develop a Fishery Management Plan or Amendment to a Fishery Management Plan.

## What is Being Proposed in this Amendment?

Coral Amendment 10 proposes expanding access to historic fishing areas along the eastern boundary of the northern extension of the Oculina Bank Coral Habitat Area of Particular Concern (OHAPC). Rock shrimp fishermen have requested that the area be reviewed to determine if historic trawling areas could be reopened to rock shrimp fishing.

The OHAPC was established through the original Coral FMP in 1982. Anchoring within the area by fishing vessels was prohibited in 1996 and the area was later expanded to include newly discovered *Oculina* coral habitat. With the discovery of extensive deepwater coral ecosystems, The Council expanded the OHAPC and deepwater Coral HAPCs (CHAPCs) through Coral Amendment 8 in (2014) (**Figures 2 and 3**). The amendment also allowed transit through the OHAPC by fishing vessels with rock shrimp on board, and modified vessel monitoring system (VMS) requirements for rock shrimp fishermen transiting through the OHAPC with rock shrimp on board.

Rock shrimp are harvested by otter trawl, which is a bottom tending fishing gear. Most vessels in the fleet are large and utilize up to four nets at a time. Tow times can last several hours depending on shrimp abundance. The catches of rock shrimp have been variable over the past decade with both high and low years occurring since 2014 (**Table 1**). Storms, abundance of other shrimp, regulations, and other factors have likely impacted rock shrimp landings. During the 1980s and 1990s, rock shrimp catches were occasionally higher than they are today, but the fishery had its best year since 2009 in 2017 (**Table 1**).

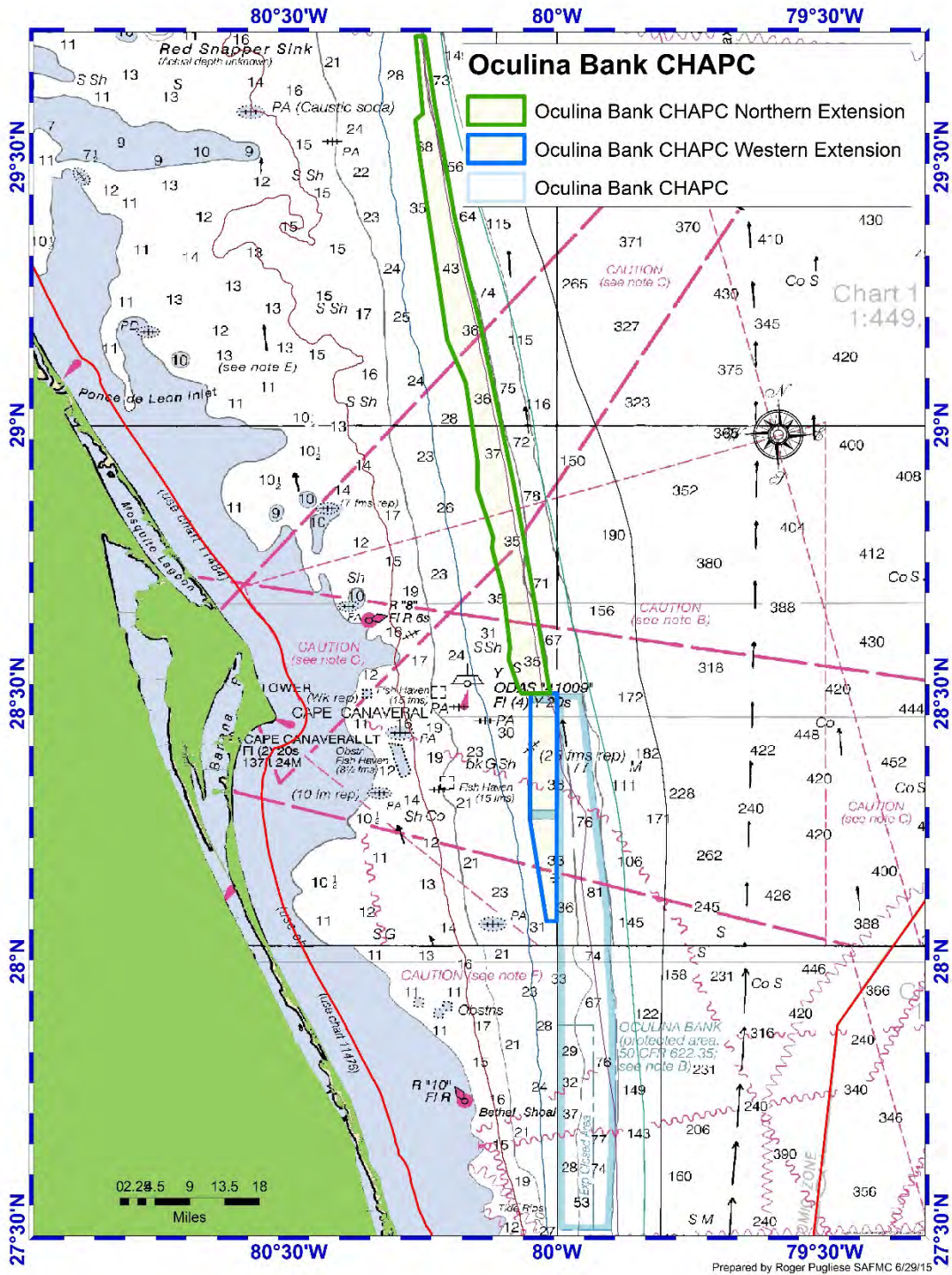
**Table 1.** Landings of rock shrimp off the Atlantic Coast from North Carolina through Florida, 2008-2018. Source: Atlantic Coastal Cooperative Statistics Program Non-Confidential Data Warehouse.

Year	Pounds (lbs)	Value (\$)
2008	1,875,108	\$3,898,639
2009	3,853,240	\$2,770,940
2010	1,382,142	\$1,960,764
2011	1,260,308	\$1,658,247
2012	238,649	\$499,700
2013	728,127	\$1,961,488
2014	380,012	\$1,136,986
2015	1,054,522	\$1,597,408
2016	285,646	\$780,718
2017	2,768,126	\$4,919,159
2018	928,140	\$1,457,535

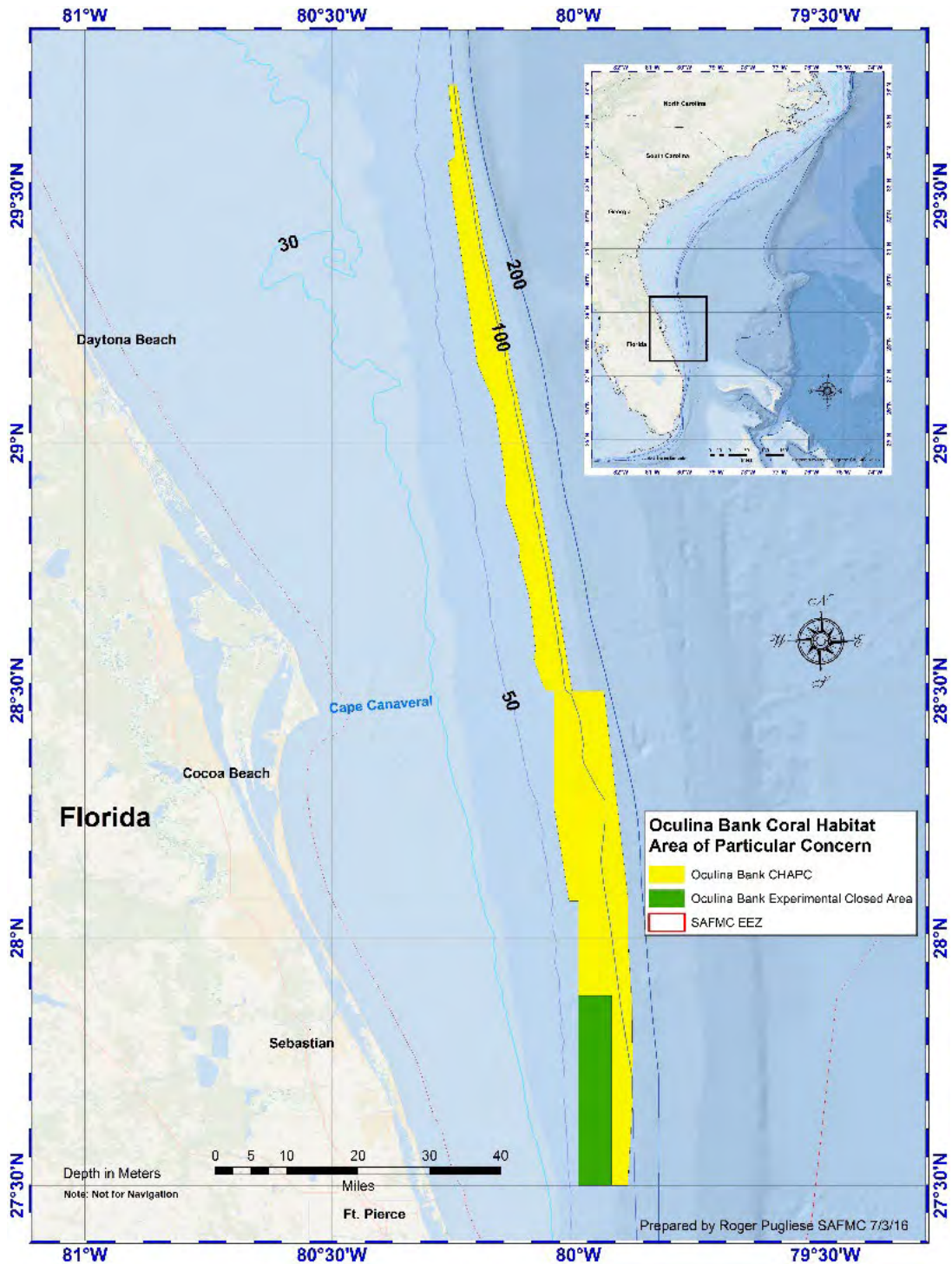
During development of Coral Amendment 8, the Council worked with the Habitat and Ecosystem, Coral, and Deepwater Shrimp Advisory Panels (AP) to find ways to best protect deepwater coral ecosystems while allowing the fishery to operate in historic fishing areas. **Figures 4 and 6** present past rock shrimp VMS representing vessel transit and fishing associated with the northern extension of the OHAPC. The Council ultimately modified the eastern boundary of the northern extension of the OHAPC in response to public input. However, after approval of Coral Amendment 8, some rock shrimp fishermen expressed concern because the fishery has, at times, operated slightly inshore of the northern extension boundary. In 2018 the Deepwater Shrimp AP recommended that the Council move the eastern boundary of the northern expansion westward, based on recommendations by rock shrimp fishermen. The Coral AP discussed fishing closer to the high relief coral habitat and expressed concern over sedimentation due to the plume from the fishing gear. In subsequent Council discussion, members indicated concern over potential interaction of the gear and juvenile deepwater snapper grouper species, which are known to inhabit the base of the coral habitats and mounds found along the eastern boundary.

Mapping of bottom habitat conducted in 2017 and 2011 in the northern extension of the OHAPC is presented in the options paper reviewed by the Council in December 2020 ([https://safmc.net/download/BB%20Council%20Meeting%20Dec%202020/Habitat%20Ecosystem/HabEco\\_A1\\_Coral10\\_Options\\_12\\_2020.pdf](https://safmc.net/download/BB%20Council%20Meeting%20Dec%202020/Habitat%20Ecosystem/HabEco_A1_Coral10_Options_12_2020.pdf)).

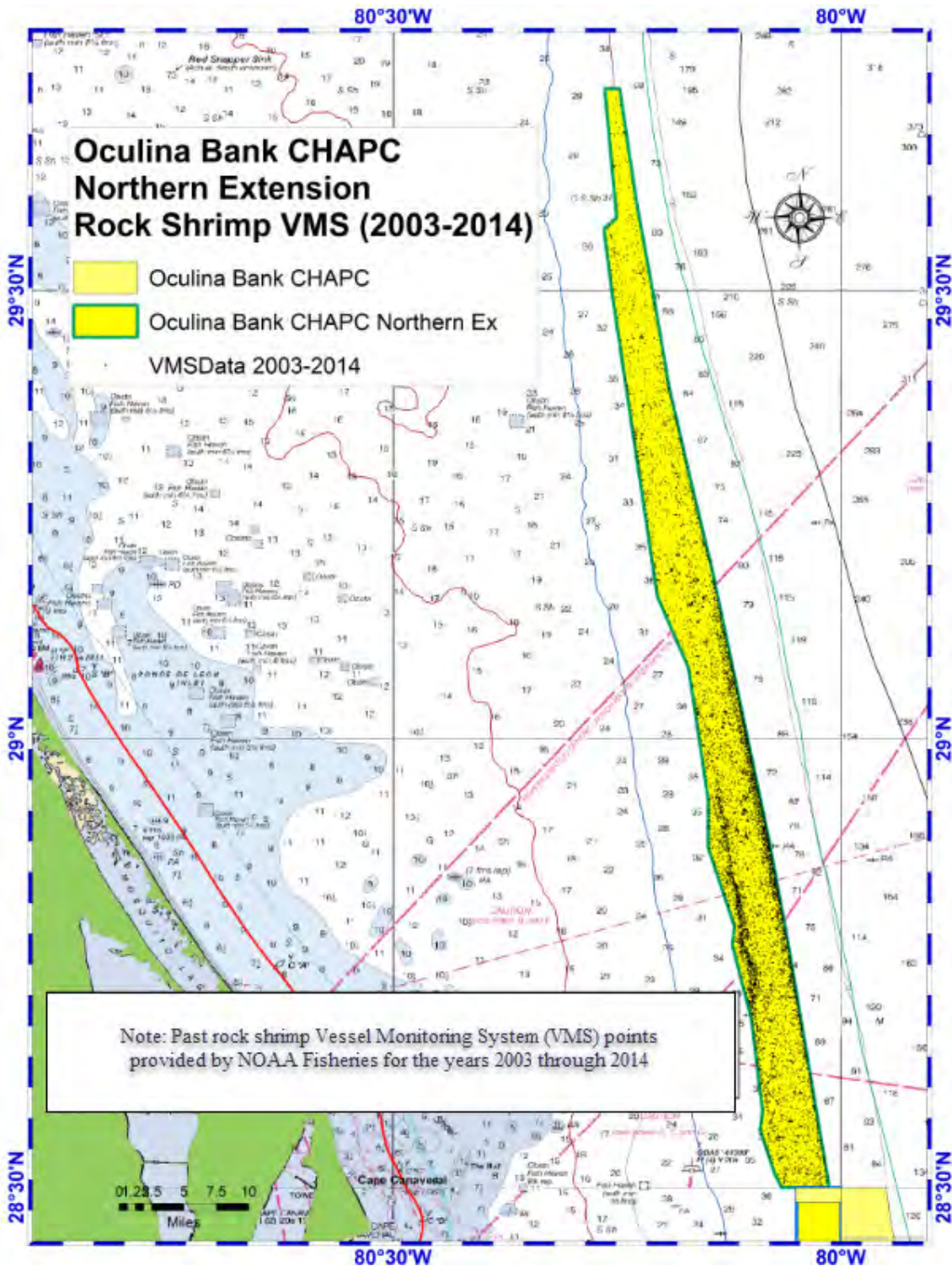
During the December 2020 meeting, the Council reviewed options for Coral Amendment 10 on possible establishment of a Shrimp Fishery Access Areas (SFAA) along the eastern boundary of the northern extension of the OHAPC and approved Coral Amendment 10 for scoping with a preferred alternative (See Action 1).



**Figure 2.** Map of *Oculina* Bank Coral Habitat Area of Particular Concern highlighting Coral Amendment 8 expansions north and west. Source: Roger Pugliese SAFMC Staff.



**Figure 3.** Map of *Oculina* Bank Coral Habitat Area of Particular Concern with implementation of Coral Amendment 8. Source: Roger Pugliese SAFMC Staff.



**Figure 4.** Rock shrimp VMS points in the northern extension of the Oculina Bank Coral Habitat Area of Particular Concern (2003-2013). Source: Roger Pugliese SAFMC Staff.

The Council extended protection through the OHAPC, to protect newly discovered extensive distribution of *Oculina* high relief coral mounds, low relief coral habitat and establishing conservation of the full extent of the deepwater *Oculina* coral ecosystem in the South Atlantic region. Fishermen requested the eastern edge of the northern extension of the *Oculina* Bank be reviewed to determine if historic trawling areas could be reopened to rock shrimp fishing. During the September 2020 meeting, the Council recommended proceeding to develop Coral Amendment 10 to include one action considering establishing a shrimp fishery access area (SFAA) along the eastern boundary of the northern extension of the OHAPC. The Habitat and Ecosystem, Coral, and Deepwater Shrimp APs discussed the possible establishment of a SFAA and comments were provided to the Council in December 2020. The following are SFAA alternatives for consideration based on coordinates provided by industry in 2014 (**Table A-1 in Appendix A**). Coordinates for **Preferred Alternative 2** are in **Table A-2 in Appendix A**. Coordinates provided by rock shrimp fishermen in 2013 are in **Table A-3 in Appendix A** and those corresponding to **Alternative 3** are presented in **Table A-4 in Appendix A**.

## PROPOSED ACTION

### **Action 1. Establish a Rock Shrimp Fishery Access Area along the eastern edge of the northern extension of the *Oculina* Coral Habitat Area of Particular Concern.**

**Alternative 1 (No Action).** No person may fish for or possess rock shrimp in or from the *Oculina* Bank Habitat Area of Particular Concern. No person may use a bottom longline, bottom trawl, dredge, pot, or trap. If aboard a fishing vessel, no person may anchor, use an anchor and chain, or use a grapple and chain.



**Preferred Alternative 2.** Establish a rock shrimp fishery access area along the eastern edge of the northern extension of the Oculina Bank Coral Habitat Area of Particular Concern. Allow a shrimp vessel with a valid commercial vessel permit for rock shrimp to bottom trawl within the established area bounded by the following coordinates. No person may use a bottom longline, dredge, pot, or trap. If aboard a fishing vessel, no person may anchor, use an anchor and chain, or use a grapple and chain.

**Preferred Alternative 2** is based on coordinates presented by rock shrimp fishermen as part of March 2014 public comment which are along the eastern edge of the OHAPC Northern extension.

**Alternative 3.** Establish a rock shrimp fishery access area along the eastern boundary of the northern extension of the Oculina Bank Coral Habitat Area of Particular Concern. Allow a shrimp vessel with a valid commercial vessel permit for rock shrimp to bottom trawl within the established area bounded by the following coordinates. No person may use a bottom longline, dredge, pot or trap. If aboard a fishing vessel, no person may anchor, use an anchor and chain, or use a grapple and chain.

**Alternative 3** is based on coordinates presented by fishermen as part of March 2013 public comment which are along the eastern edge of the OHAPC Northern extension.

## Discussion:

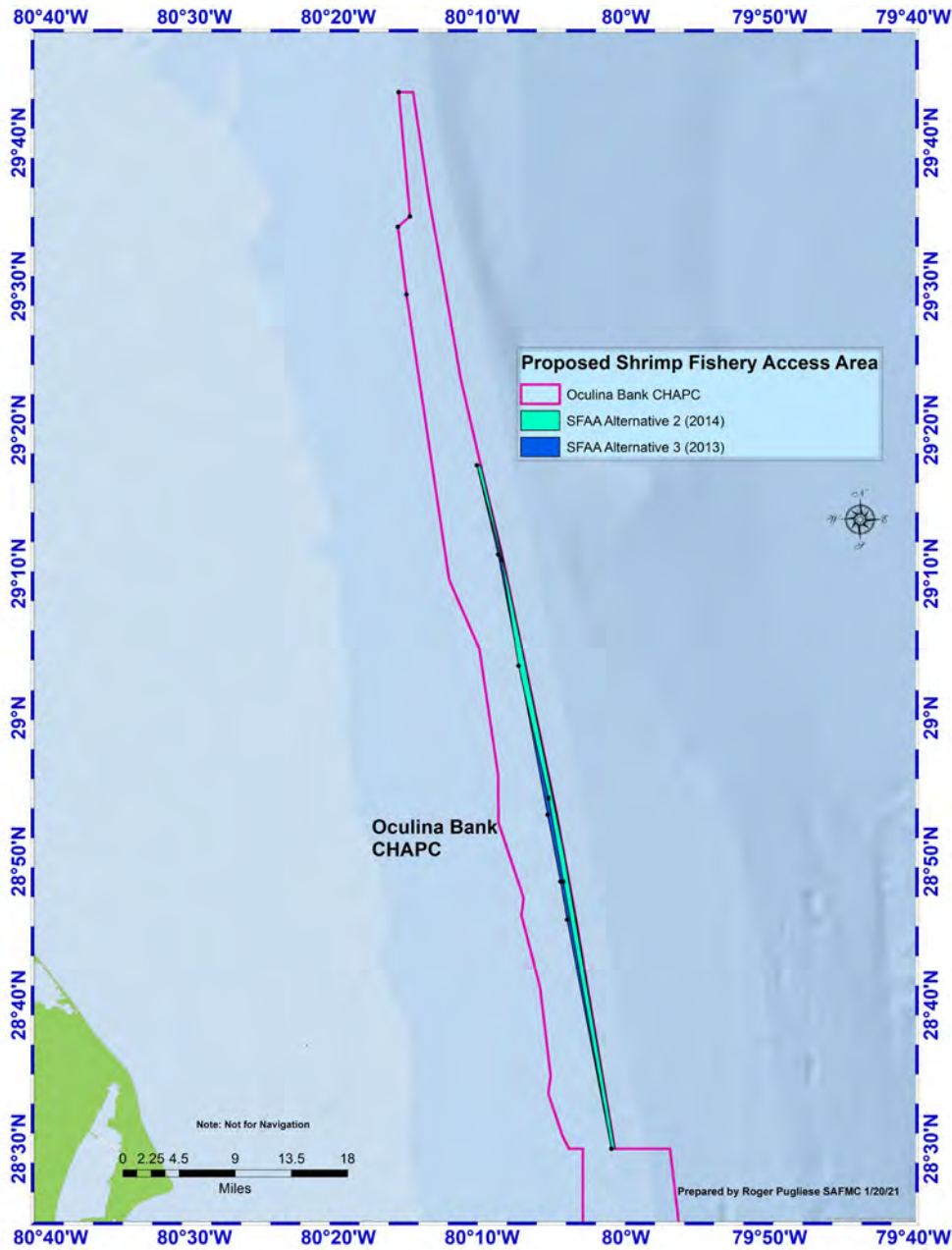
### Advisory Panel Input

The Deep Water Shrimp Advisory Panel met via webinar on November 10, 2020 and approved a motion supporting **Preferred Alternative 2**. A summary of AP comments received in November is included in **Appendix B**. The Coral Advisory Panel met via webinar on November 10, 2020 and approved a motion which supported **Alternative 1 (No Action)**. A summary of AP comments received in November is included in **Appendix B**. The Habitat Protection and Ecosystem Based Management Advisory Panel met on October 22, 2020 and expressed concerns regarding modification of the existing boundary given the proximity to the OHAPC boundary, the low percentage of historical effort in the area, and the fact that there is some “low relief” coral habitat in the area, questioned the need to open the area. However, members also noted given the historical extent of fishing in the area, support the fishing industry proposal while providing a buffer zone adjacent to coral pinnacles.

**Alternative 1 (No Action)** would retain the protection through the known northern extension of *Oculina* coral, to protect newly discovered high relief coral mounds, low relief coral habitat, and establish conservation of the full extent of the deepwater *Oculina* coral ecosystem in the South Atlantic region.

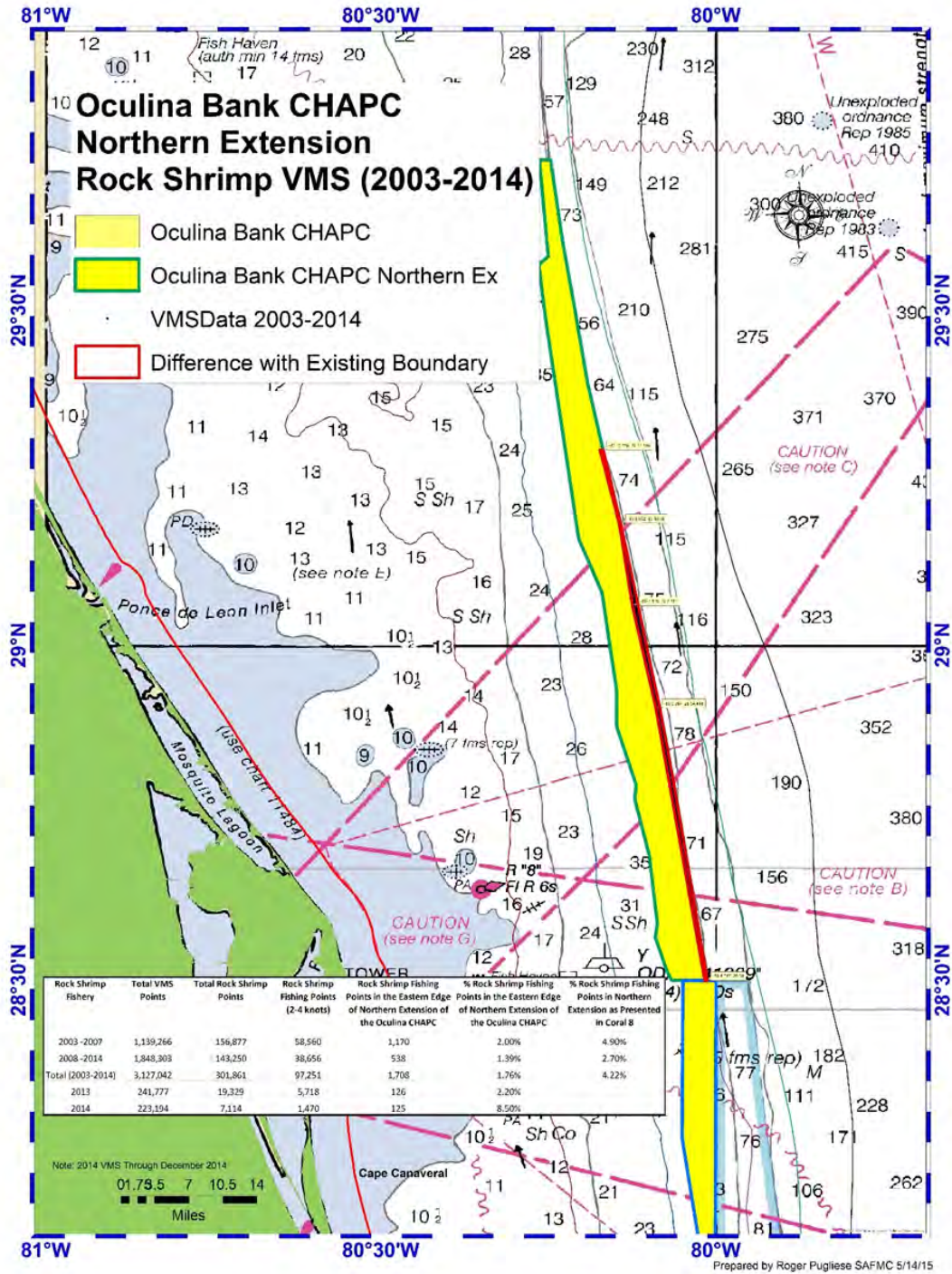
**Preferred Alternative 2 (Figures 5, 7 and 8)** encompasses approximately 22 square miles in depth ranges of 92 to 95 meters (m) inside the proposed boundary and 98 m for the existing outside boundary. From VMS data, the maximum depths trawled for rock shrimp appears to be approximately 150 m.

**Alternative 3 (Figure 5, 9 and 10)** encompasses approximately 32 square miles in depth ranges for the proposed inside boundary of 88-90 and for the existing outside boundary of 98 m.

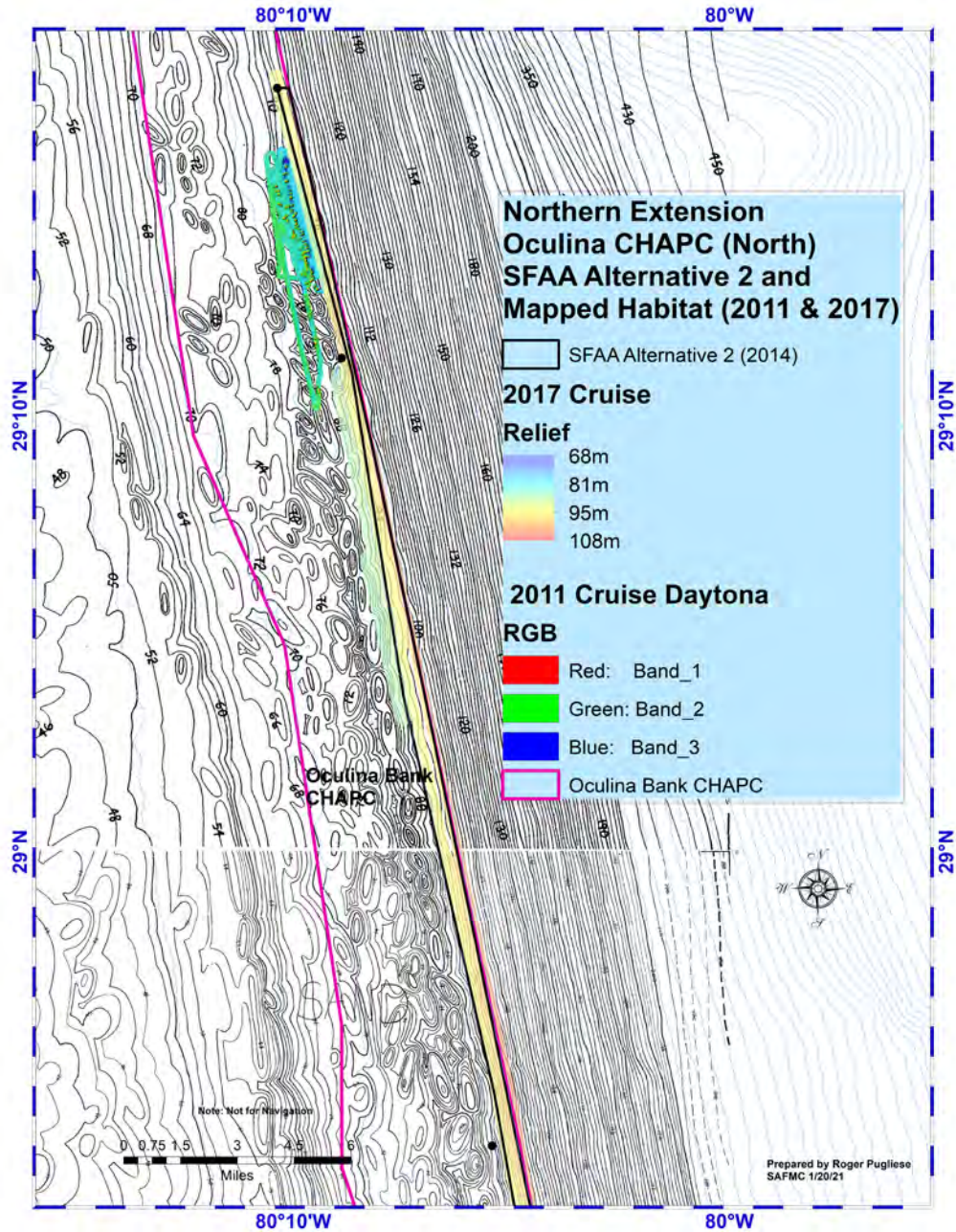


Note: Oculina Bank Coral HAPC width range (22,000-5,000ft.) Preferred Alt. 2 width range (2,000-500 ft.) and Alt.3 width range (3,300-1,400 ft.)

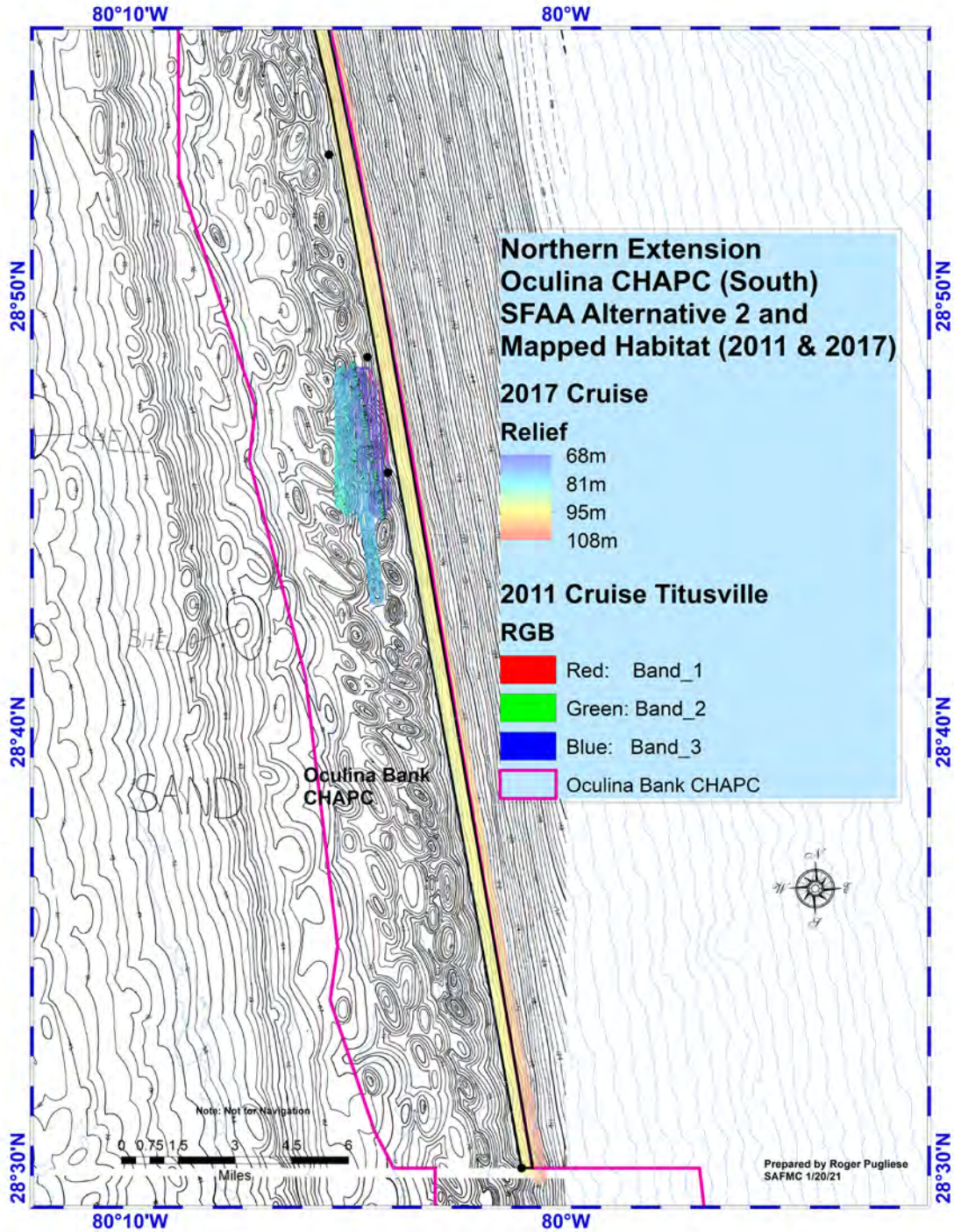
**Figure 5.** Northern Extension of the Oculina Bank Coral HAPC and SFAA **Preferred Alternative 2** (based on 2014 fishermen input) and SFAA **Alternative 3** (based on 2013 fishermen input).



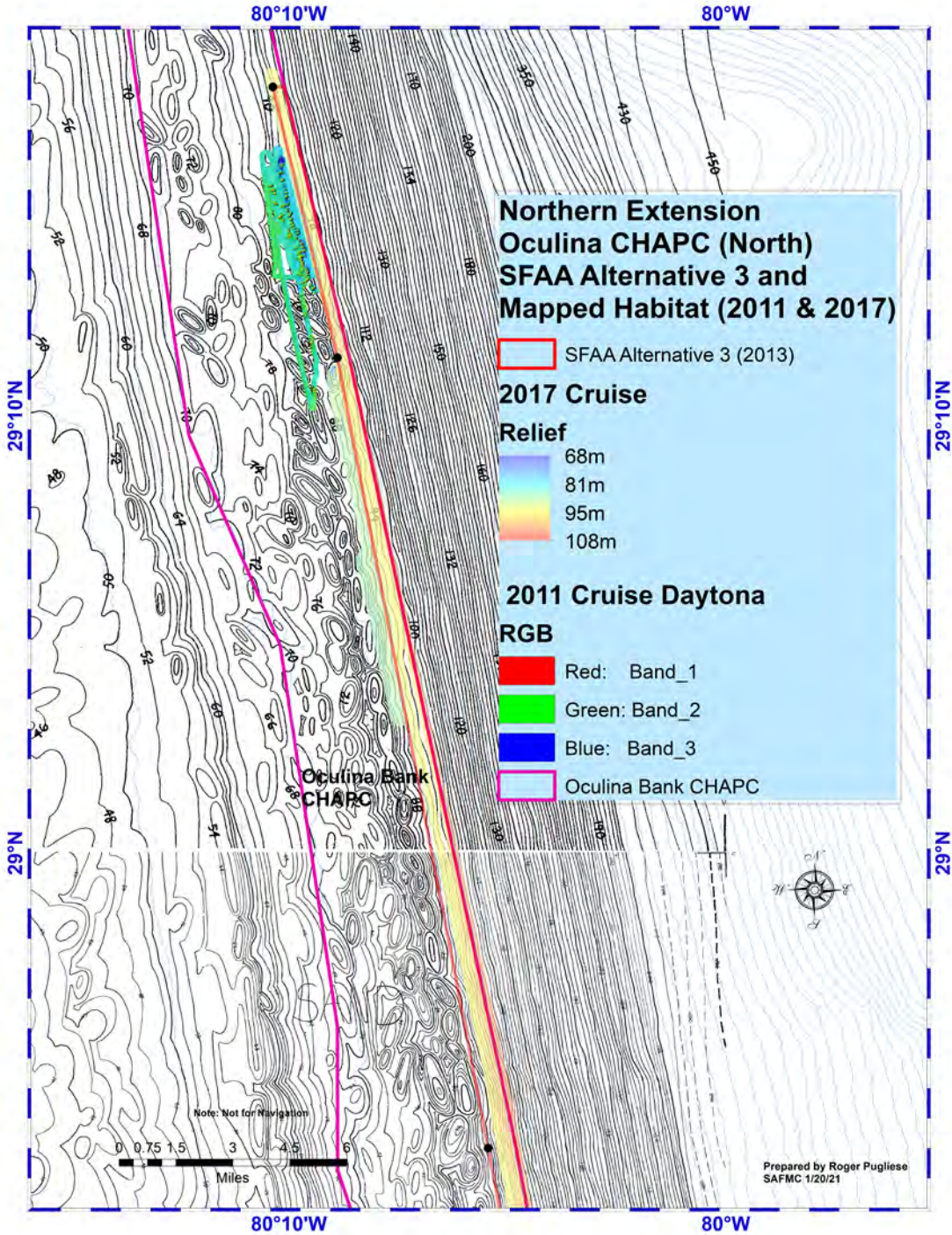
**Figure 6.** Relative position of possible SFAA along eastern edge of the northern extension of the Oculina Bank CHAPC including table of past fishing activity based on historic VMS data.



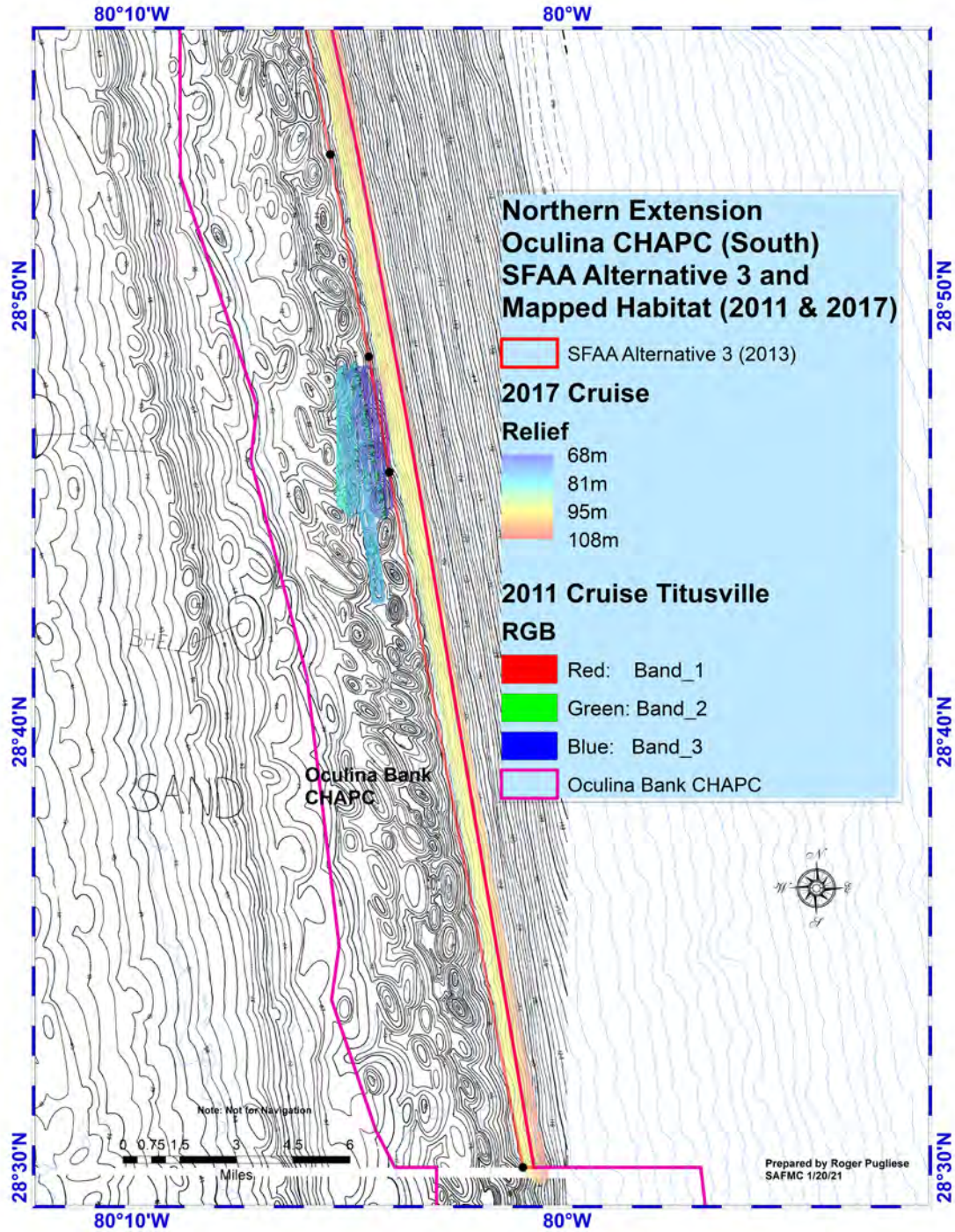
**Figure 7.** Northern extension of the Oculina Bank Coral Habitat Area of Particular Concern (North) **Preferred Alternative 2** SFAA and habitat mapped in 2017 during the Southeast Deep Coral Initiative (SEDCI) expedition and during the 2011 Pisces expedition.



**Figure 8.** Northern extension of the Oculina Bank Coral Habitat Area of Particular Concern (South) **Preferred Alternative 2** SFAA and habitat mapped in 2017 during the Southeast Deep Coral Initiative (SEDCI) expedition and during the 2011 Pisces expedition.



**Figure 9** Northern extension of the Oculina Bank Coral Habitat Area of Particular Concern (North) **Alternative 3** SFAA and Habitat mapped in 2017 during the Southeast Deep Coral Initiative (SEDCI) expedition and during the 2011 Pisces expedition.



**Figure 10.** Northern extension of the Oculina Bank Coral Habitat Area of Particular Concern (South) **Alternative 3** SFAA and Habitat mapped in 2017 during the Southeast Deep Coral Initiative (SEDCI) expedition and during the 2011 Pisces expedition.



## Expected Timing for Coral Amendment 10

	Process Step	Date
✓	Council directs staff to request input on industry requested SFAA in Northern Extension of OHAPC and options for scoping.	September 2020
✓	Habitat and Ecosystem AP Webinar input on SFAA.	October 2020
✓	Deepwater Shrimp AP and Coral AP Webinar input on SFAA.	November 2020
✓	Council reviews AP input and approves amendment for scoping.	December 2020
	Scoping Meetings	February 2021
	Council reviews public input and approves actions/alternatives for public hearings	March 2021
	Public Hearings	Spring 2021
	Council reviews the draft amendment, modifies the document as necessary, and approves for formal review.	June 2021
	Early 2022	Regulations effective

## How Do I Comment?

The Council requests that written comments be submitted using the online public comment form for each amendment available from the Public Hearings and Scoping Meetings page at <http://safmc.net/safmc-meetings/public-hearing-and-scoping-meeting-schedule/>

Comments submitted using the online comment form are immediately posted to the Council's website and available for all Council members and the public to view.

Written comments must be received by **5:00 PM on Friday, February 10, 2021.**

Comments by mail: Send comments to John Carmichael, Executive Director, SAFMC, 4055 Faber Place Drive, Suite 201, N. Charleston, SC 29405.

Comments by fax: 843/769-4520.

View presentations and access the public hearing and scoping documents from the Public Hearing and Scoping Meeting page at link above or contact the Council office at 843/571-4366 (toll free 866/SAFMC-10).

**APPENDIX A. Coordinates provided by rock shrimp fishermen and resulting coordinates for Alternative 2 and Alternative 3.**

**Table A-1.** Coordinates presented by rock shrimp fishermen as part of March 2014 public comment which are along the eastern edge of the OHAPC Northern extension.

<b>Coordinates Provided by Industry (2014)</b>	<b>Latitude</b>	<b>Longitude</b>
1	29.29213	-80.1728
2	29.183	-80.1442
3	29.05973	-80.1246
4	28.90697	-80.0898
5	28.81013	-80.0728
6	28.5	-80.017

**Table A-2. Preferred Alternative 2** based on coordinates presented by fishermen as part of March 2014 public comment which are along the eastern edge of the OHAPC Northern extension.

<b>Preferred Alternative 2</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	29.725	-80.2634
2	29.58102	-80.2502
3	29.56872	-80.2644
4	29.49025	-80.2544
5	29.29213	-80.1728
6	29.183	-80.1442
7	29.05973	-80.1246
8	28.90697	-80.0898
9	28.81013	-80.0728
10	28.5	-80.017

**Table A-3.** Coordinates presented by fishermen as part of March 2013 public comment which are along the eastern edge of the OHAPC Northern extension.

<b>Coordinates Provided by Industry (2013)</b>	<b>Latitude</b>	<b>Longitude</b>
1	29.29213	-80.1728
2	29.183	-80.1442
3	29.05973	-80.1246
4	28.90697	-80.0898
5	28.81013	-80.0728
6	28.5	-80.017

**Table A-4. Alternative 3** based on coordinates presented by fishermen as part of March 2013 public comment which are along the eastern edge of the OHAPC Northern extension.

<b>Alternative 3</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	29.725	-80.2634
2	29.58102	-80.2502
3	29.56872	-80.2644
4	29.49025	-80.2544
5	29.29213	-80.1728
6	29.18887	-80.1482
7	28.88742	-80.0907
8	28.81005	-80.0759
9	28.7659	-80.0681
10	28.5	-80.017

**APPENDIX B. Summary of Coral AP, Deep Water Shrimp AP and Habitat and Ecosystem AP Comments.**

**Deepwater Shrimp AP Summary Comments: (Webinar Nov 10, 2021)**

- The proposed fishery access area includes an area rock shrimp fishermen have historically fished and since they are using VMS, the buffer between the high relief coral habitat and access area boundary could be reduced to give them access to this area.
- Industry representative provided coordinates used in the proposed SFAA eastern boundary because several fishermen came back after Amendment 8 was completed and provided information to him indicating it was an important area.
- The eastern side of the northern extension of the bank will be important and considering the variability of where rock shrimp are available to the fishery from year to year.
- The area is extremely variable from year to year and hard to put a monetary value or productivity value.
- Multiple AP members stated their support for re-opening the proposed access area.
- Fishermen responded to a question from Coral AP members on the location of the boat versus the rig indicating they always knew precisely where the rigs were relative to the vessel.
- Fishermen know where they are putting gear down and are requesting additional working area claiming their intent is not to destroy any habitat because they acknowledge its benefit to their fishery.
- According to fishermen, in 300 feet of water and one thousand feet of cable out, the rigs are approximately 500 feet straight down behind the boat.
- Fishermen indicate they often drag very close to obstructions and know how to keep equipment safe and not damage bottom habitat and want to fish in areas where there is no coral.
- Dragging takes place east of and parallel to the pinnacles, so sediment should drop back down onto the bottom and not be a problem.
- Motion approved by Panel: To adopt the 2014 coordinates Eastern boundary of the northern extension of the OHAPC developed by industry and staff as a Shrimp Fishery Access Area as represented in Alternative 2a. SFAA boundaries based on coordinates presented by fishermen as part of March 2014 public comment.

**Coral AP Summary Comments: (Webinar November 10, 2021)**

- The issue of how far fishing activities should occur from important habitat is fairly well articulated in the public comments that John Reed (a former member of the Coral AP) provided to the Coral AP before the meeting.

- There is a need to have a sufficient protective buffer in place to protect the corals from sediments that become suspended in the water column because of the fishing gear interaction with the mud bottom.
- The muds are composed of clays and very small particles that can become suspended in the water column for considerable distances and sediment plumes can travel up to 20 kilometers.
- Allowing fishing gear interactions within 100 to 2,000 meters would be putting corals at risk.
- The maps indicate the presence of low relief less than one meter which could include hard bottom communities that are providing EFH for deepwater species managed under the Snapper Grouper Fishery Management Plan.
- It was recommended that the protective buffer would help protect the coral pinnacles and also low relief hard bottom.
- Fishing less than one thousand meters from the coral habitat is too close, however the work has not been done to know exactly what the optimal distance should be.
- A margin of error is needed considering current might not be running the way you think, stronger than you think, or an upwelling occurring so you may not know ahead of time exactly where your gear or sediment plume will go.
- Mapping is limited and funding is scarce to map the Oculina banks.
- Members supported a establishing a substantial buffer of possibly one thousand meters from the habitat as an approach that would the address and account for uncertainty as directed by the Magnuson Stevens Act.
- It is important to protect the whole Oculina coral ecosystem from the impact of fishing and having a substantial buffer around that ecosystem will accomplish that goal.
- Creating marine protected areas that are too small results in everyone fishing right up to the edge and fish populations inside the protected areas are no different than the fish populations outside the protected areas not accomplishing anything other than reducing some impacts from fishing gear.
- Use numbers for relief on maps instead of low and high to provide greater context and more information.
- When measuring/evaluating distances between the new proposed fishery access area boundary and where the reef resources are, horizontal lines shouldn't be drawn from the pinnacle base where we know they're still living habitat important for snowy grouper and other important fishery species in that area and should be drawn from the extent of the reef resources including low relief habitat.
- There is uncertainty about the location of the rig on the bottom. National Marine Fisheries Service data indicates 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 current. So,

taking a conservative estimate means that the horizontal distance between the boat and the rig can be anywhere from about 230 meters to 510 meters.

- Concern was raised over the distance between the location of the boat versus the rig and if we had track points on the rigs at all times, they could be identified and the precision would be increased.
- Based on hydrodynamic drag, if you had the prominent direction of the current exactly parallel to the high relief feature, the reef feature causes drag which is going to create eddies that would spin off on the left or western side. If a sediment plume was created, that would cause entrainment of particles up onto the reef even if you were dragging off in the soft bottom east of the reef.
- Protecting areas around the base of the pinnacles is important because growth of damaged *Oculina* on the Banks is slow, very spotty and low and when it does come back, it tends to be on the marginal areas or base around the main Pinnacles.
- When you reduce a species down to the extent that the *Oculina* in the Banks have been reduced, it is going to take time to recover since you don't have the population to produce the larvae to bring it back quickly.
- The Panel indicated the present boundary provided a buffer and approved a motion supporting the no action alternative.
- Motion approved by Panel: Consider Option 1 status quo. (Do not develop an action to address the issue).

### **Habitat Protection and Ecosystem Based Management Advisory Panel Summary**

**Comments:** (October 22, 2022)

- Generally expressed concerns regarding modification of the existing boundary.
- Given the proximity to the CHAPC boundary, the low percentage of historical effort in the area, and the fact that there is some “low relief” coral habitat in the area, questioned the need to open the area.
- Need to define “low relief” and to put the area in proper context.
- Some members advocated supporting the fishing industry where we can given the historical extent of fishing in the area, corridor widths, and the desire to provide a buffer zone adjacent to coral pinnacles.
- Secure VMS data for before and after the establishment of the CHAPC. If the area was reopened, and therefore represented “new” ground for fishing, it could be heavily used.
- Look at the effort data, we should perhaps consider narrowing the area in those areas which were lightly fished.
- While socioeconomic concerns are not the purview of the Habitat AP, they should at least consider them.

- Request to keep AP informed with regard to any Council action on this item, and especially with respect to future opportunities to put additional conservation measures in place for the additional area of continuous coral pinnacles.