

**Decision Document  
Amendment 10  
to the Fishery Management Plan  
for Coral, Coral Reefs, and Live Hard  
Bottom Habitat of the  
South Atlantic Region**

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

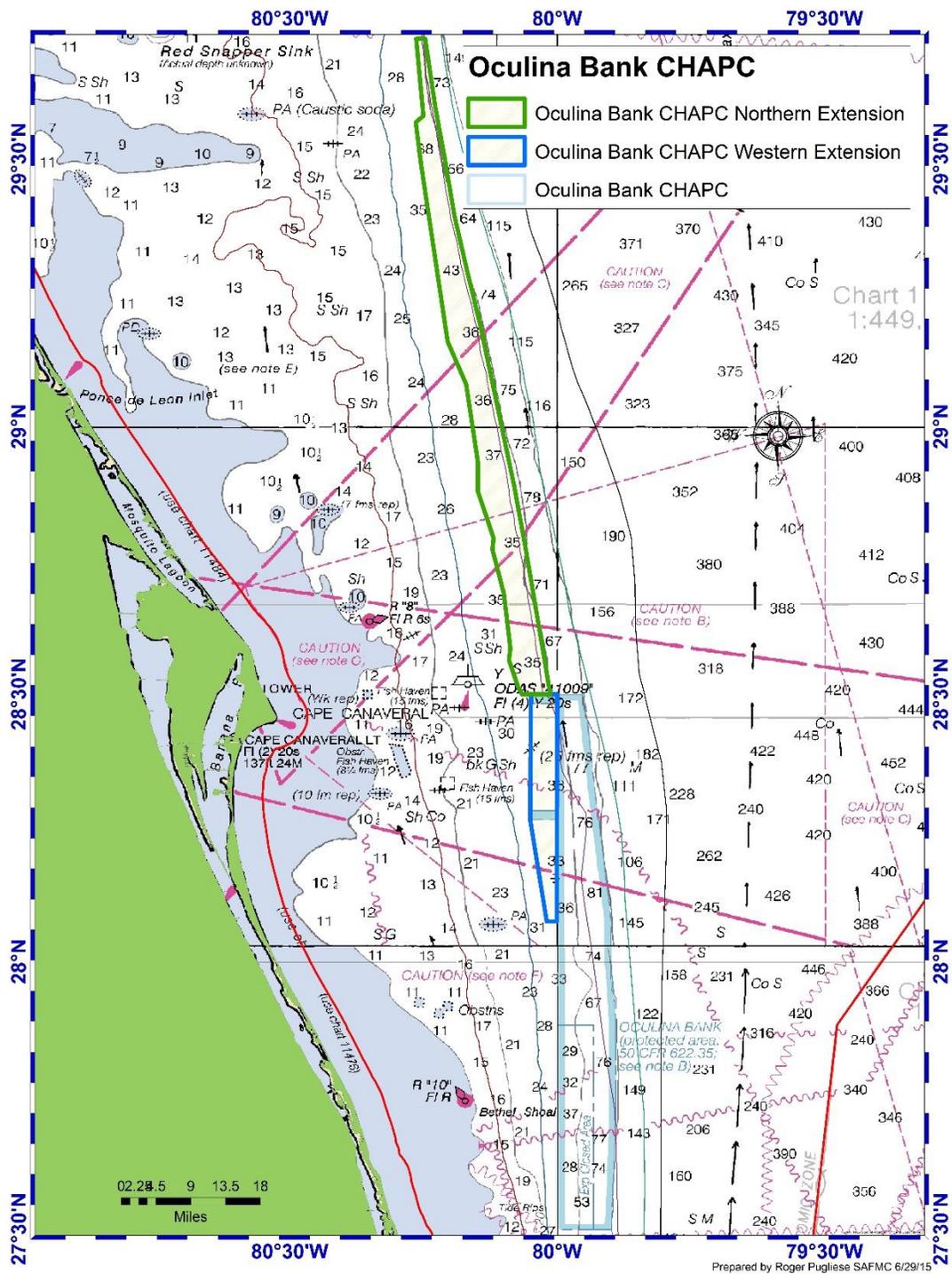
**August 2021**

South Atlantic Fishery Management Council  
4055 Faber Place Drive; Suite 201  
North Charleston, SC 29405

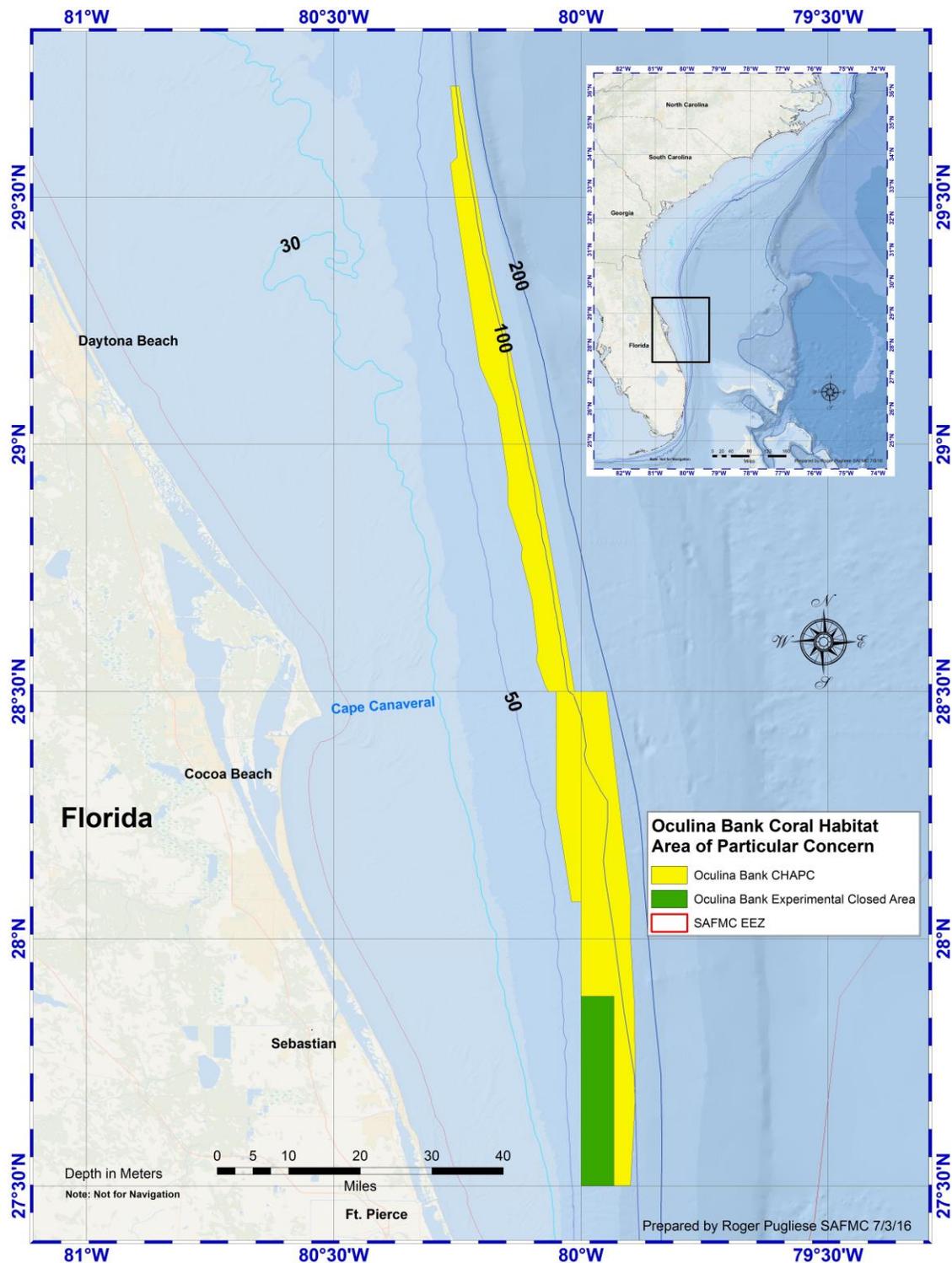
This Decision Document includes the actions and alternatives, a brief discussion for each action, and a summary of the analysis.

# Purpose of the Action

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) proposes to 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. Rock shrimp fishermen requested that the proposed area be reviewed to determine if historic trawling areas could be reopened to rock shrimp fishing. With the discovery of extensive deep-water coral ecosystems, the South Atlantic Fishery Management Council (South Atlantic Council) added the northern extension to the OHAPC through Amendment 8 to the Coral FMP in 2014 (**Figures 1 and 2**). Coral Amendment 8 also allowed transit through the OHAPC by fishing vessels with rock shrimp on board, and modified vessel monitoring system requirements for rock shrimp fishermen transiting through the OHAPC with rock shrimp on board. The South Atlantic Council recommended moving forward with the proposed action in response to the Presidential Executive Order (EO) 13921 on Seafood Competitiveness and Economic Growth in June 2020. This amendment would address the EO recommendation “Consider Re-Opening Closed Areas” to commercial fishermen that have lost access to many areas that they have traditionally fished. Coral Amendment 10 began development following South Atlantic Council’s guidance at the September 2020 meeting.



**Figure 1.** Map of Oculina Bank HAPC Highlighting Coral Amendment 8 Expansions North and West. Source: Roger Pugliese SAFMC Staff.



**Figure 2.** Map of the OHAPC with implementation of Coral Amendment 8.  
 Source: Roger Pugliese, SAFMC Staff.

## Objectives for this meeting

- Review and approve revised purpose and need
- Review draft Coral Amendment 10 and consider recommending approval for formal review.

## Amendment Timing

	Process Step	Date
✓	Council directs staff 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	May 2021
✓	Council reviews public input, modifies the document as necessary, and approves action.	June 2021
	<b>Council approves amendment for formal review.</b>	<b>September 2021</b>
	Regulations effective	Early 2022

## Revised Purpose and Need

### *Purpose for Action*

The purpose of Coral Amendment 10 is to **consider establishing** a shrimp fishery access area along the eastern edge of the northern extension of the Oculina Bank Habitat Area of Particular Concern where the **fishermen who have** a valid limited access Commercial Vessel Permit for Rock Shrimp (South Atlantic exclusive economic zone) would be able to fish for and possess rock shrimp.

### *Need for Action*

The need for Coral Amendment 10 is 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, while maintaining protection of the *Oculina* deep water coral ecosystems.

### **Committee Action:**

**APPROVE THE REVISED PURPOSE AND NEED STATEMENTS IN CORAL AMENDMENT 10**

# Changes to the Amendment since June 2021

- Minor edits to the Purpose and Need.
- Description of the history of the issue and past Council discussions was expanded upon.
- Coordinates within the tables under **Preferred Alternative 2** and **Alternative 3** were verified and updated to ensure compatibility with the codified text.
  - o Applicable figures within the document will be updated prior to submittal.
- Biological effects were updated to further describe potential direct and indirect impacts from the action, most notably effects from potential sedimentation.
- Additional information related to the optimum yield of the rock shrimp portion of the shrimp fishery was included.
- Additional information on monitoring, compliance, and enforcement was included, specific to existing VMS requirements applying to any allowable fishing within the SFAA.
- Summaries of additional public comments received during June 2021 meeting to date.
- The Regulatory Impact Review, Regulatory Flexibility Analysis, and the Fishery Impact Statement were added to the document.

# Action 1. Establish a shrimp fishery access area along the eastern edge of the northern extension of the Oculina Bank Habitat Area of Particular Concern.

**Currently:** 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. There are no shrimp fishery access areas within the Oculina Bank Habitat Area of Particular Concern.

**Preferred Alternative 2.** Establish a shrimp fishery access area that is 22 mi<sup>2</sup> along the eastern edge of the northern extension of the Oculina Bank Habitat Area of Particular Concern. Allow a shrimp vessel with a valid limited access Commercial **Vessel** Permit for Rock Shrimp (South Atlantic Exclusive Economic Zone) to bottom trawl for rock shrimp within the established area bounded by the following coordinates.

Point	Latitude	Longitude
1	29° 17.533' N	80° 10.367' W
2	29° 10.983' N	80° 8.65' W
3	29° 3.583' N	80° 7.483' W
4	28° 54.417' N	80° 5.383' W
5	28° 48.6' N	80° 4.367' W
6	28° 30' N	80° 1.017' W
7	28° 30' N	80° 0.767' W
8	28° 46.017' N	80° 3.483' W
9	28° 48.617' N	80° 3.95' W
10	28° 53.3' N	80° 4.817' W
11	29° 11.333' N	80° 8.617' W
12	29° 17.567' N	80° 10.117' W

**Alternative 3.** Establish a shrimp fishery access area that is 32 mi<sup>2</sup> along the eastern edge of the northern extension of the Oculina Bank Habitat Area of Particular Concern. Allow a shrimp vessel with a valid limited access Commercial **Vessel** Permit for Rock Shrimp (South Atlantic Exclusive Economic Zone) to bottom trawl for rock shrimp within the established area bounded by the following coordinates.

Point	Latitude	Longitude
1	29° 17.533' N	80° 10.367' W
2	29° 11.333' N	80° 8.9' W
3	28° 53.25' N	80° 5.45' W
4	28° 48.6' N	80° 4.55' W
5	28° 45.95' N	80° 4.083' W
6	28° 30' N	80° 1.017' W
7	28° 30' N	80° 0.767' W
8	28° 46.017' N	80° 3.483' W
9	28° 48.617' N	80° 3.95' W
10	28° 53.3' N	80° 4.817' W
11	29° 11.333' N	80° 8.617' W
12	29° 17.567' N	80° 10.117' W

**Preferred Alternative 2 (Figure 3)** would establish a shrimp fishery access area (SFAA) that encompasses approximately 22 mi<sup>2</sup> and is based on coordinates presented by rock shrimp fishermen as part of March 2014 public comment for Coral Amendment 8. This set of coordinates was reaffirmed during the most recent meeting of the Deep-water Shrimp Advisory Panel on November 10, 2020. The depths of the western boundary of the SFAA in **Preferred Alternative 2** range from 92 to 95 meters (m). On the eastern boundary of the SFAA, along the edge of the existing OHAPC, the average depth is 98 m.

**Alternative 3 (Figure 4)** would establish an SFAA that encompasses approximately 32 mi<sup>2</sup> and is based on coordinates presented by rock shrimp fishermen as part of their March 2013 public comment for Coral Amendment 8. The depths of the western boundary of the SFAA in **Alternative 3** range from 88 to 90 m. On the eastern boundary of the SFAA, along the edge of the existing OHAPC, the average depth is 98 m.

**Figure 5** presents the two alternatives overlapped for comparison. **Preferred Alternative 2**, is between 250 m to 500 m narrower than **Alternative 3**.

Vessels are required to carry a vessel monitoring system (VMS) to fish for deep-water rock shrimp. VMS is therefore a source of vessel operating information, and VMS points that correspond to a vessel moving at speeds between 2 and 4 knots are used as a proxy for fishing activity. Prior to 2014, when this area was closed to harvest for rock shrimp, rock shrimping along the eastern boundary of the northern extension of the OHAPC predominately occurred east of the existing boundary. Rock shrimp fishing inside the edge of the boundary accounted for

1.76% of all fishing points from 2003 through 2014, 2.20% of points during 2013, and 8.50% of points during 2014, based on historic trawling operations as represented by VMS data (**Table 1, Figure 6**). The amount of fishing effort that occurred along the eastern edge of the northern extension of the OHAPC, as measured by VMS fishing points, was essentially the same for 2013 and 2014. However, the percentage of the total fishing effort that occurred within that area increased in 2014 (8.5%) due to the decreased total rock shrimp fishing activity for the year. No information on fishing activity from VMS data exists from within the OHAPC from 2015 to present since trawling within the area was prohibited through the implementation of Coral Amendment 8 (final rule effective August 17, 2015). The final rule for Coral Amendment 8 required rock shrimp vessels transiting through the OHAPC to maintain a minimum speed of no less than 5 knots as determined by a VMS, which transmits vessel location at a rate acceptable to law enforcement (i.e., every 5 minutes). The fact that these vessels had VMS requirements was significant in the South Atlantic Council’s decision to allow transit through the OHAPC with possession of rock shrimp on board, and the VMS has enhanced the ability of law enforcement to enforce the OHAPC regulations, including those proposed in this amendment. Currently, when a rock shrimp vessel with rock shrimp on board transits the OHAPC, the VMS on that vessel must transmit at a minimum ping rate of 1 ping per 5 minutes. It is the South Atlantic Council's intent that under either **Preferred Alternative 2** or **Alternative 3**, when a rock shrimp vessel is within the proposed SFAA the vessel would continue to transmit at a minimum ping rate of 1 ping per 5 minutes.

**Table 1.** Past rock shrimp fishing activity based on historic VMS data.

Rock Shrimp Fishery	Total VMS Points	Total Rock Shrimp Points	Rock Shrimp Fishing Points (2-4 knots)	Rock Shrimp Fishing Points in the Eastern Edge of Northern Extension of the Oculina CHAPC	% Rock Shrimp Fishing Points in the Eastern Edge of Northern Extension of the Oculina CHAPC	% Rock Shrimp Fishing Points in Northern Extension as Presented in Coral 8
2003 -2007	1,139,266	156,877	58,560	1,170	2.00%	4.90%
2008 -2014	1,848,303	143,250	38,656	538	1.39%	2.70%
Total (2003-2014)	3,127,042	301,861	97,251	1,708	1.76%	4.22%
2013	241,777	19,329	5,718	126	2.20%	
2014	223,194	7,114	1,470	125	8.50%	

Source: VMS Data (2003-2014) and Coral Amendment 8 (SAFMC 2014).

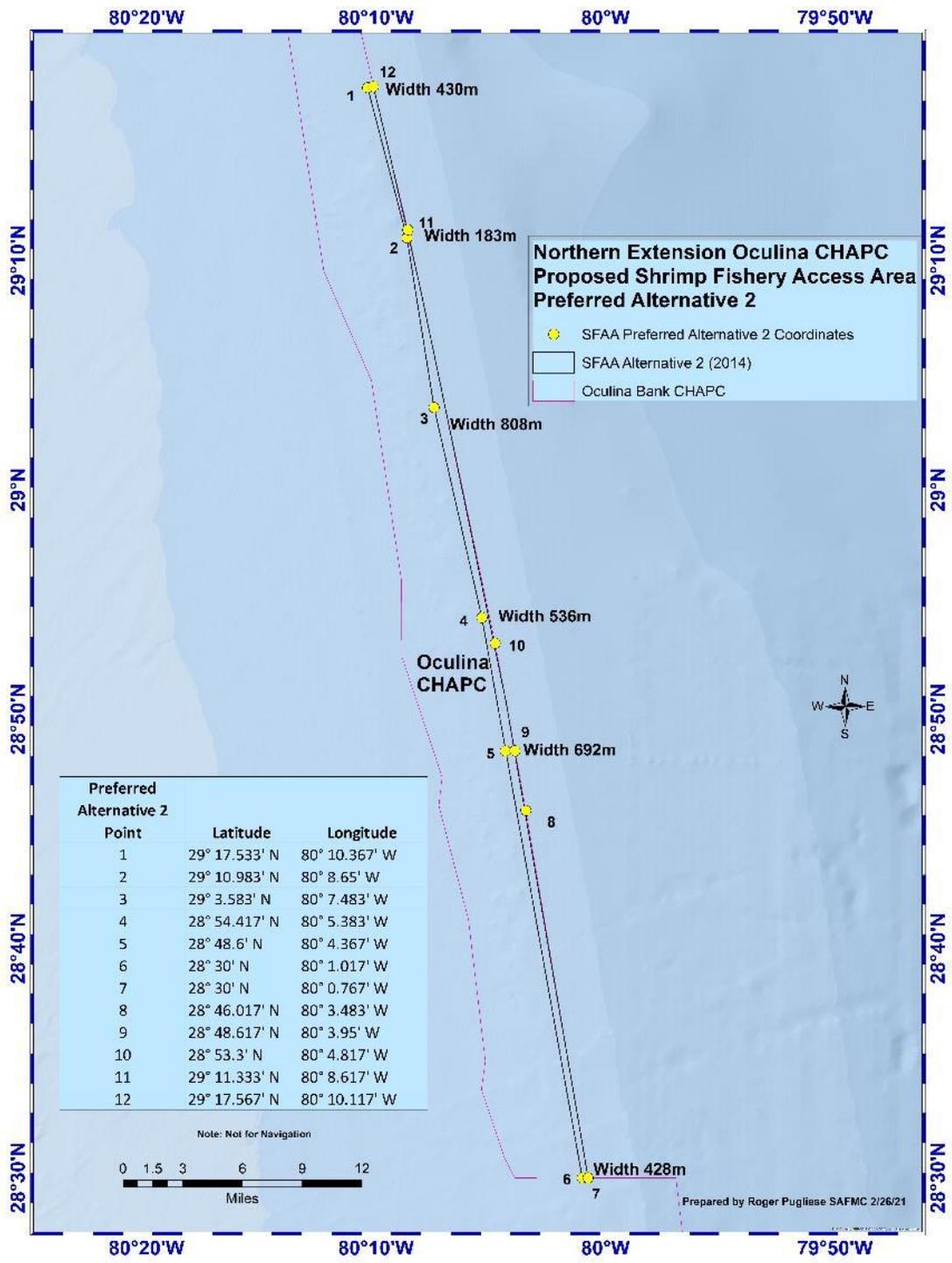
Note:

Total VMS Points- VMS points recorded by all shrimp vessels required to carry VMS

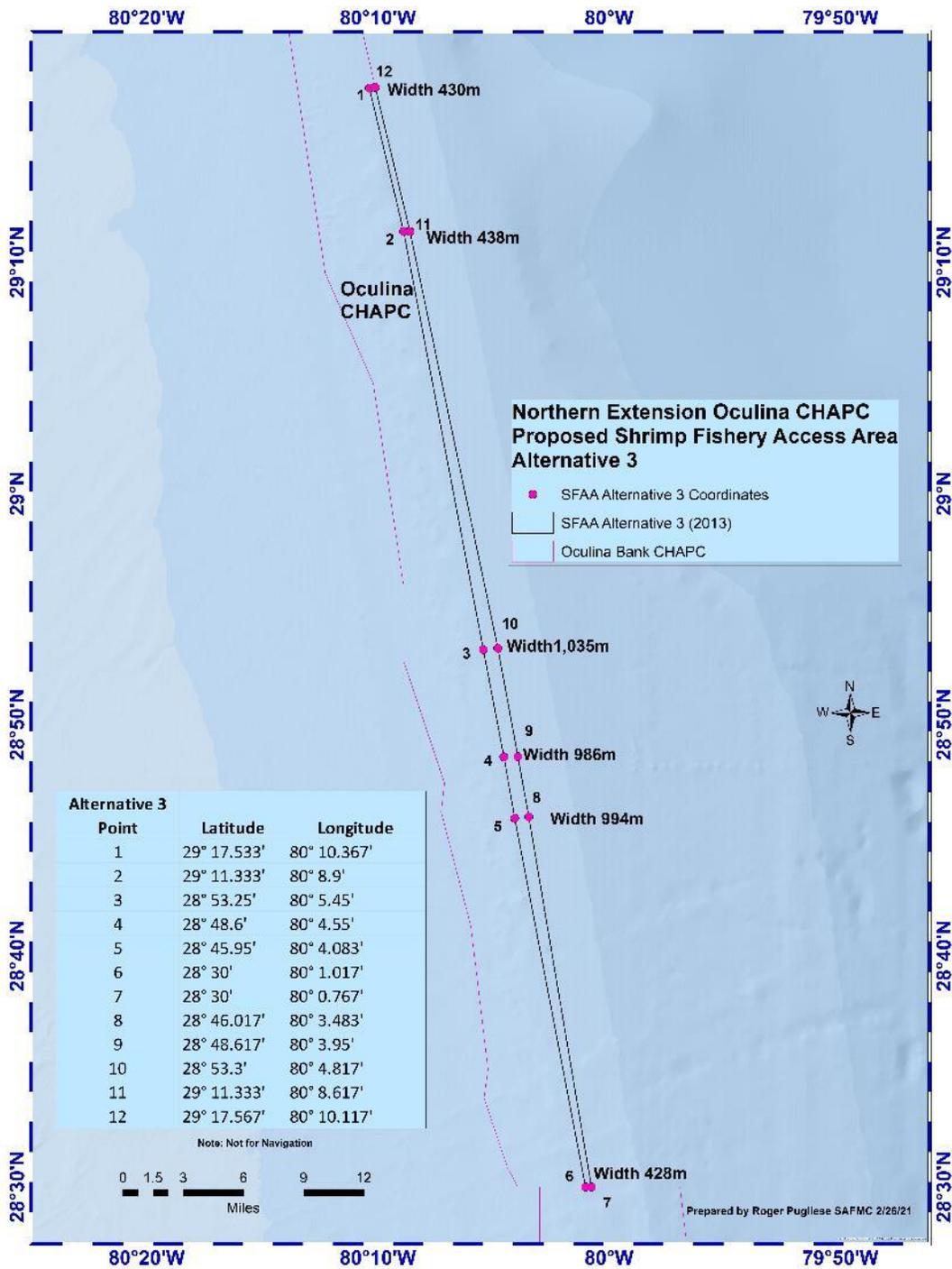
Total Rock Shrimp Points- VMS points for vessels operating in the area of the rock fishery

Rock Shrimp Fishing Points- VMS points for vessels in the area of the rock fishery with speed 2-4 knots

Rock Shrimp Fishing Points in E. Edge of N. Extension- VMS points for vessels with speed 2-4 knots in Eastern Edge of N. Extension

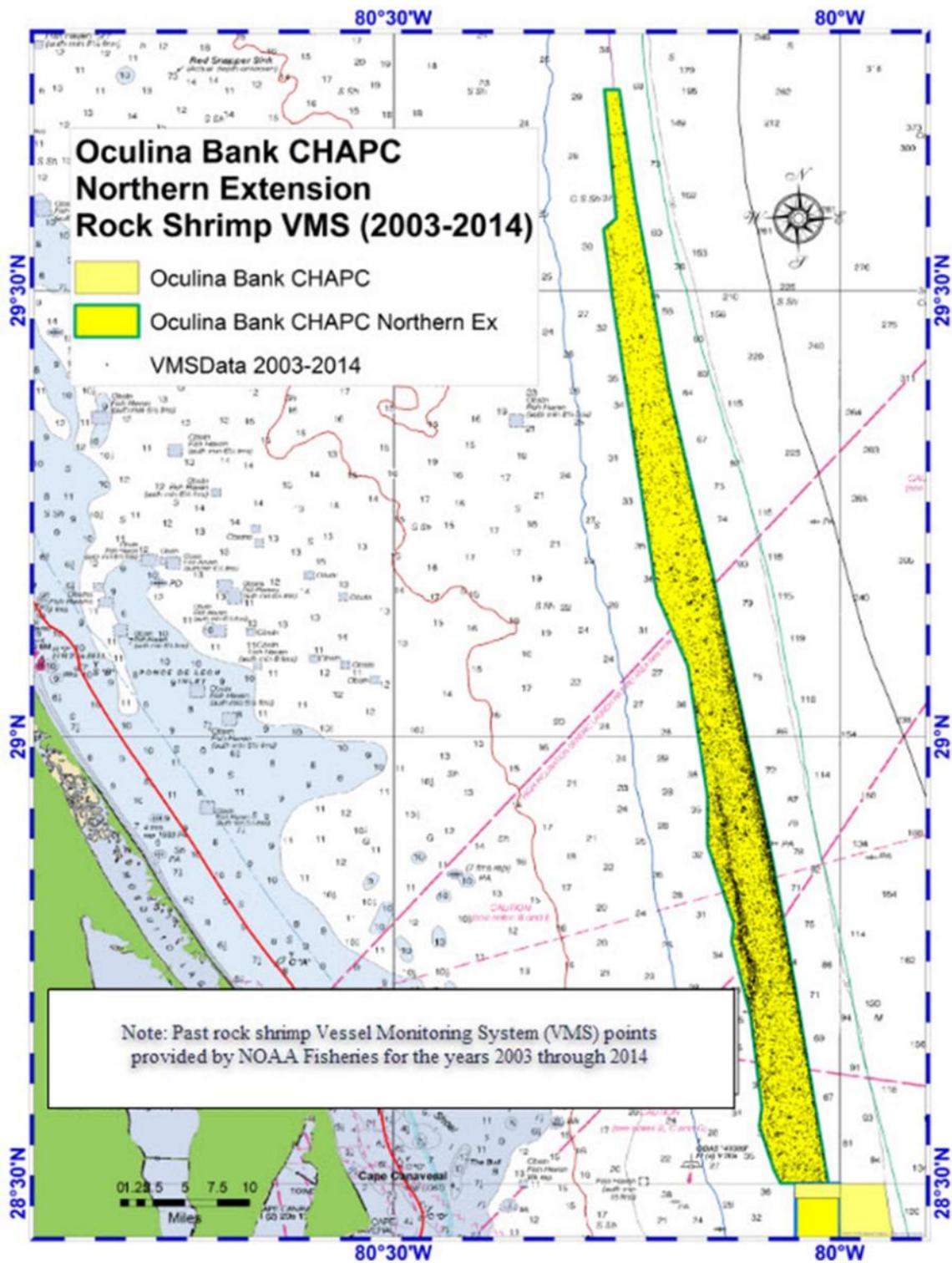


**Figure 3.** Coordinates and approximate widths for the proposed SFAA (Preferred Alternative 2).



**Figure 4.** Coordinates and approximate widths for the proposed SFAA (Alternative 3).





**Figure 6.** Rock shrimp VMS points in the northern extension of the OHAPC (2003-2014). Source: Roger Pugliese SAFMC Staff.

## Possible Effects

### *Biological:*

- Not establishing a SFAA would have no negative biological impacts.
- **Preferred Alternative 2** and **Alternative 3** could result in negative direct and indirect biological impacts to the deep-water coral habitat within the proposed SFAAs as they would allow intermittent bottom trawling for rock shrimp.
- Habitat mapping data for the proposed areas shows only low relief bottom with no high relief habitat in either **Preferred Alternative 2 (Figures 7a and 7b)** or **Alternative 3 (Figures 9a and 9b)**. Although no recent visual surveys have been conducted, it is possible that low relief hard bottom, coral rubble, and coral recruits on hard bottom and rubble are present in this area.

Given the narrow width of the proposed SFAAs, figures were created to split the areas into northern and southern extents (**Figures 7a and 7b, 9a and 9b**) with zoomed in versions (**Figures 8a and 8b, 10a and 10b**) to show detail of mapped bottom and habitat. Approximate distances from the western boundary of **Preferred Alternative 2** to the *Oculina* pinnacles mapped in 2011 are 750 m west of Pt. 5, 700 m west of Pt. 8, and 310 m west of Pt. 2 (**Figures 8a and 8b**). Approximate distances from the western boundary of **Alternative 3** to the *Oculina* pinnacles mapped in 2011 are 750 m west of Pt. 4, 386 m west of Pt. 5 and 115 m west of Pt. 2 (**Figures 10a and 10b**).

Direct biological impacts from bottom tending fishing gear on coral habitat as a result of **Preferred Alternative 2** and **Alternative 3** are unknown due to the paucity of habitat mapping and habitat characterization available for this area.

- No high relief bottom was mapped in the area, rock shrimp occurrence and fishing in the area is variable.
- Fishermen are expected to target rock shrimp in areas where previously captured and thus already impacted from years of previous trawling on low relief bottom.
- Any recovery of ecosystem services that has occurred since the last trawling event could be lost.
- With no visual surveys having been conducted it is not possible to know if low relief coral colonies susceptible to trawling are located within the proposed SFAAs.

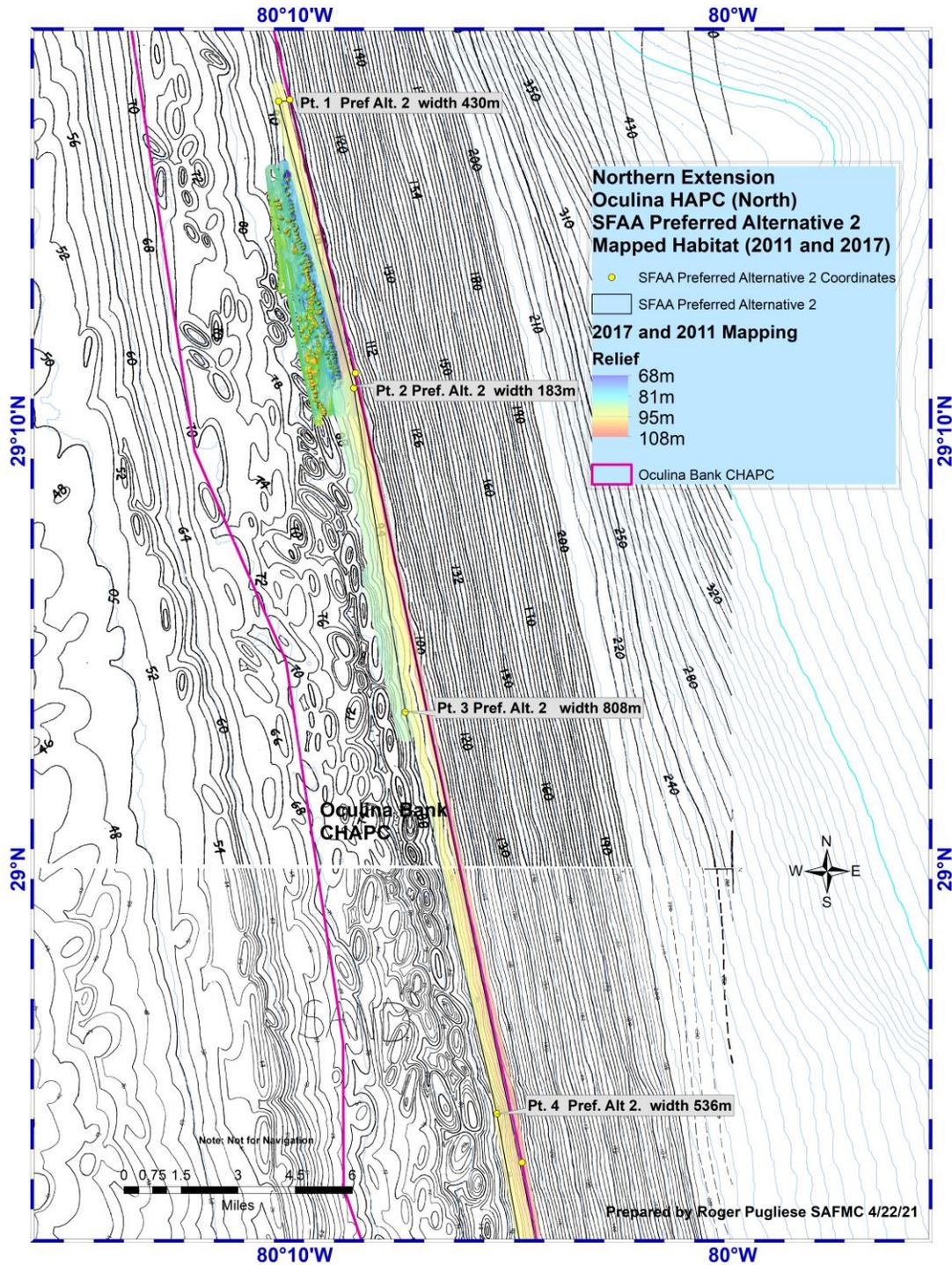
Indirect effects to coral could result through influx of suspended benthic sediments created while trawling the bottom.

- 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.
- Fine sediments tend to have greater effects on corals than coarse sediments.
- Coral experts and members of the Council's Coral Advisory Panel and Habitat and Ecosystem Advisory Panel indicated that establishing a protective (possibly 1,000 m)

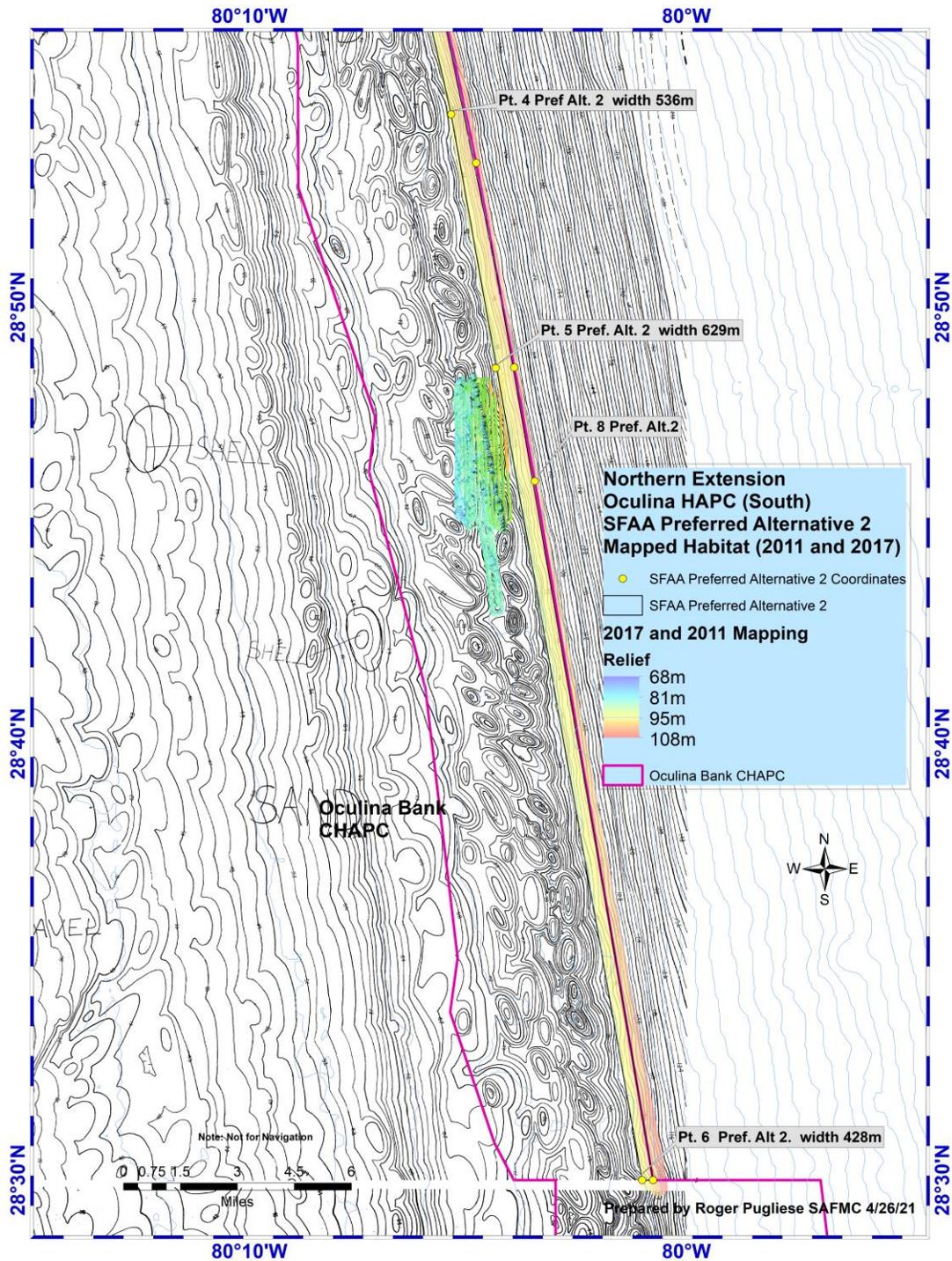
buffer between known coral habitat and fishing grounds would be prudent to prevent adverse impacts to coral colonies. However, research has not established exactly what the optimal buffer distance should be. Active dredging operations found suspended particles can travel and impact coral over 700m.

- The spatial extent of impacts from dredging can be variable, and in a severe case, water quality impacts have been detected up to 20 km away from the dredging activity when oceanographic features included unidirectional flow during the project. Depending on direction and magnitude of water currents in the affected area, shrimp trawls could create similar sediment plumes during fishing operations.

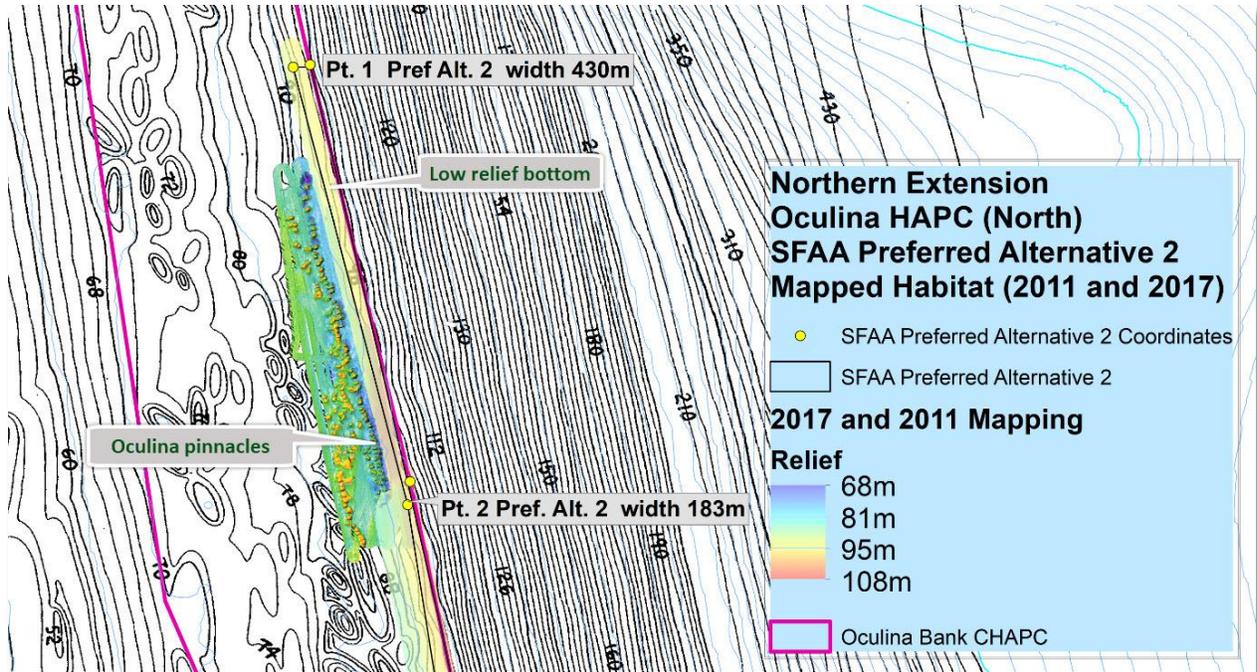
Potential negative biological impacts to the affected environment relative to **Alternative 1 (No Action)** would be greatest under **Alternative 3** (largest proposed allowable fishing area) followed by **Preferred Alternative 2**.



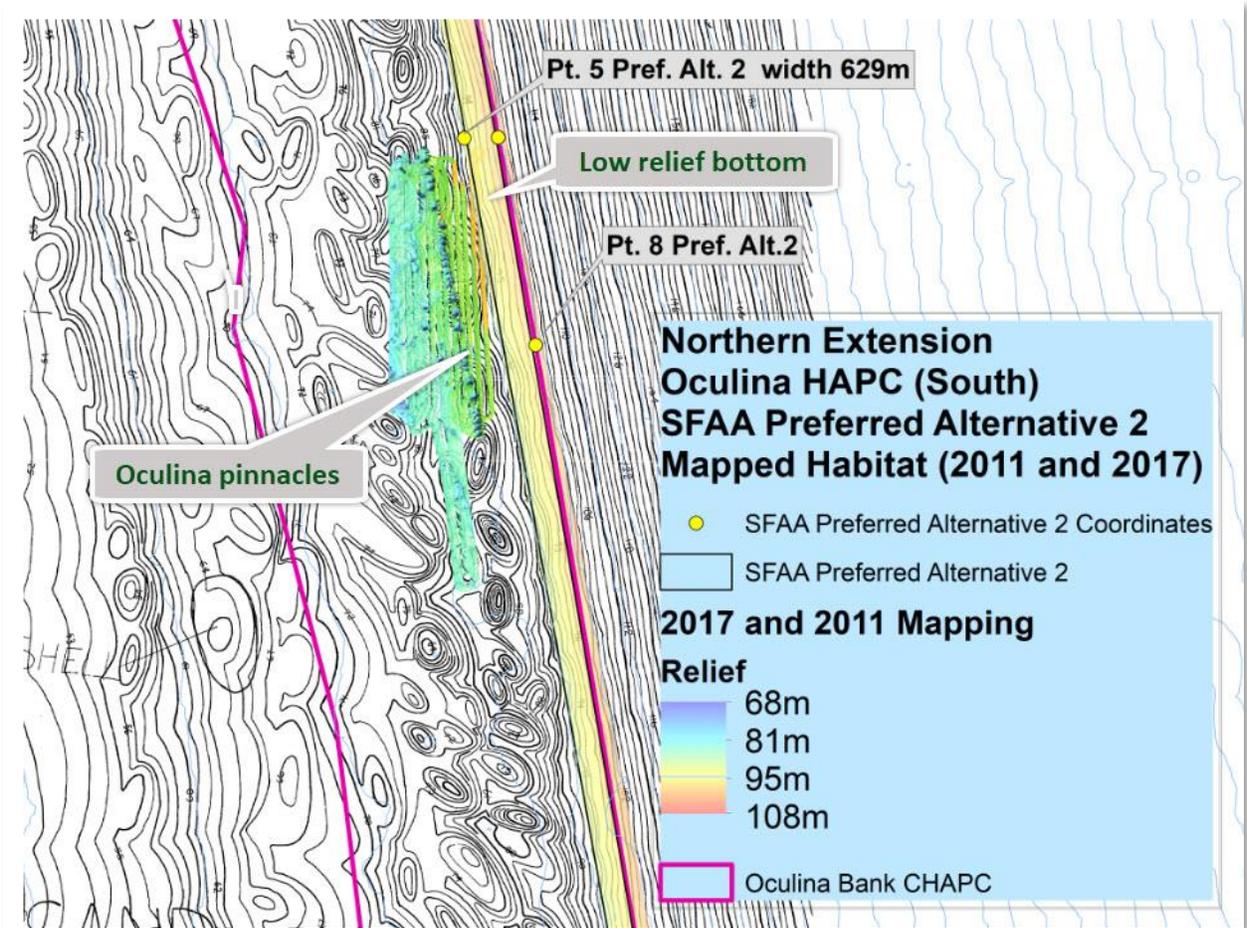
**Figure 7a.** Northern extension of the OHAPC (North) including the proposed SFAA (**Preferred Alternative 2**) and habitat mapped in 2017 during the Southeast Deep Coral Initiative (SEDCI) expedition and during the 2011 *Pisces* expedition.



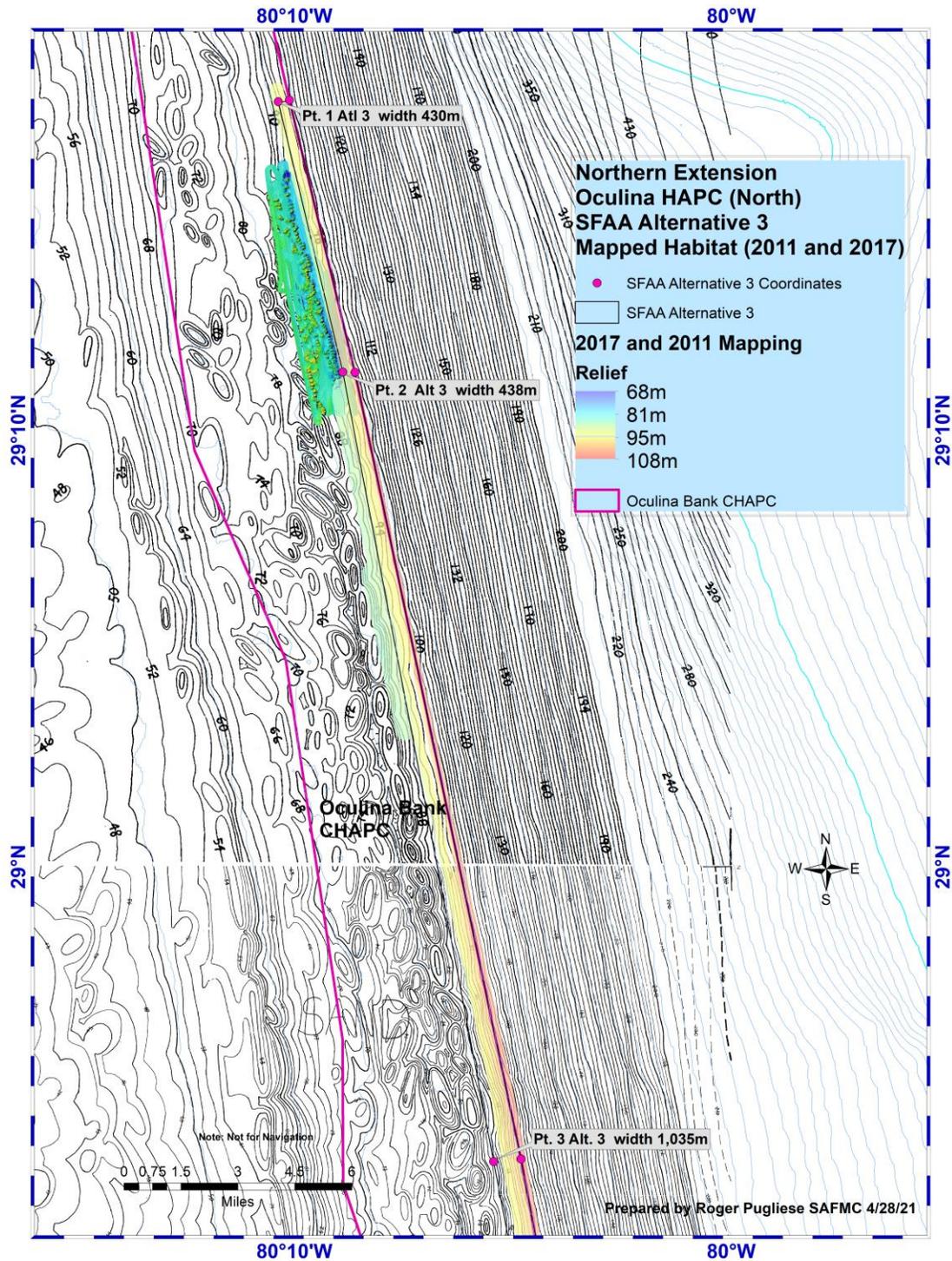
**Figure 7b.** Northern extension of the OHAPC (South) including the proposed SFAA (**Preferred Alternative 2**) and habitat mapped in 2017 during the SEDCI expedition and during the 2011 *Pisces* expedition.



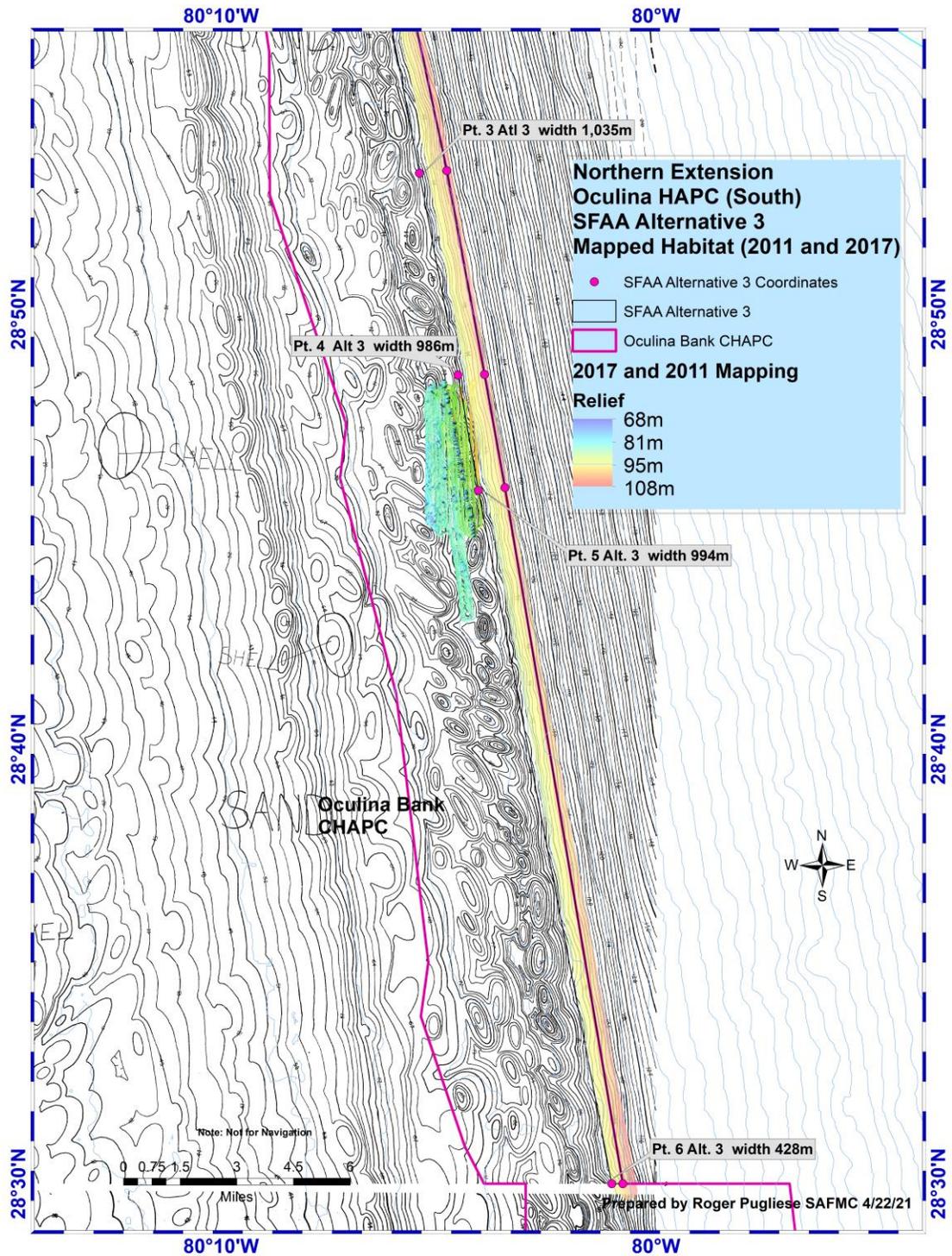
**Figure 8a.** Zoom in of northern portion of **Preferred Alternative 2** on mapped low relief bottom in relationship to mapped high relief *Oculina* pinnacle habitat distributed west.



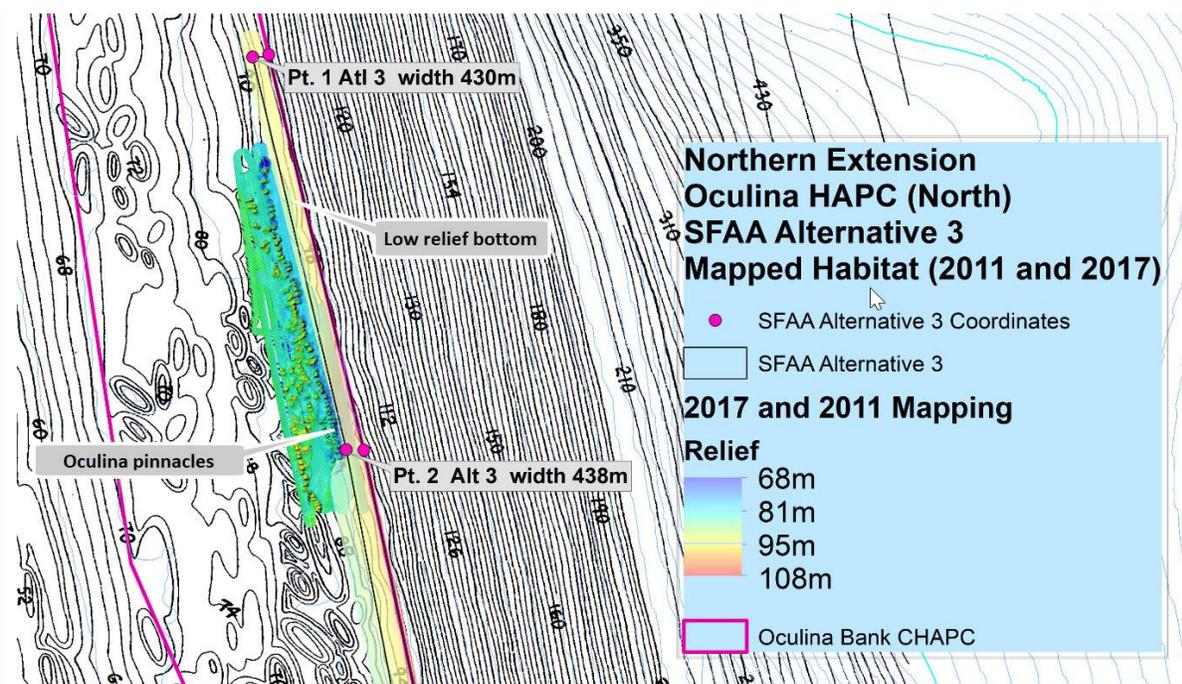
**Figure 8b.** Zoom in of southern portion of **Preferred Alternative 2** on mapped low relief bottom in relationship to mapped high relief *Oculina* pinnacle habitat distributed inshore.



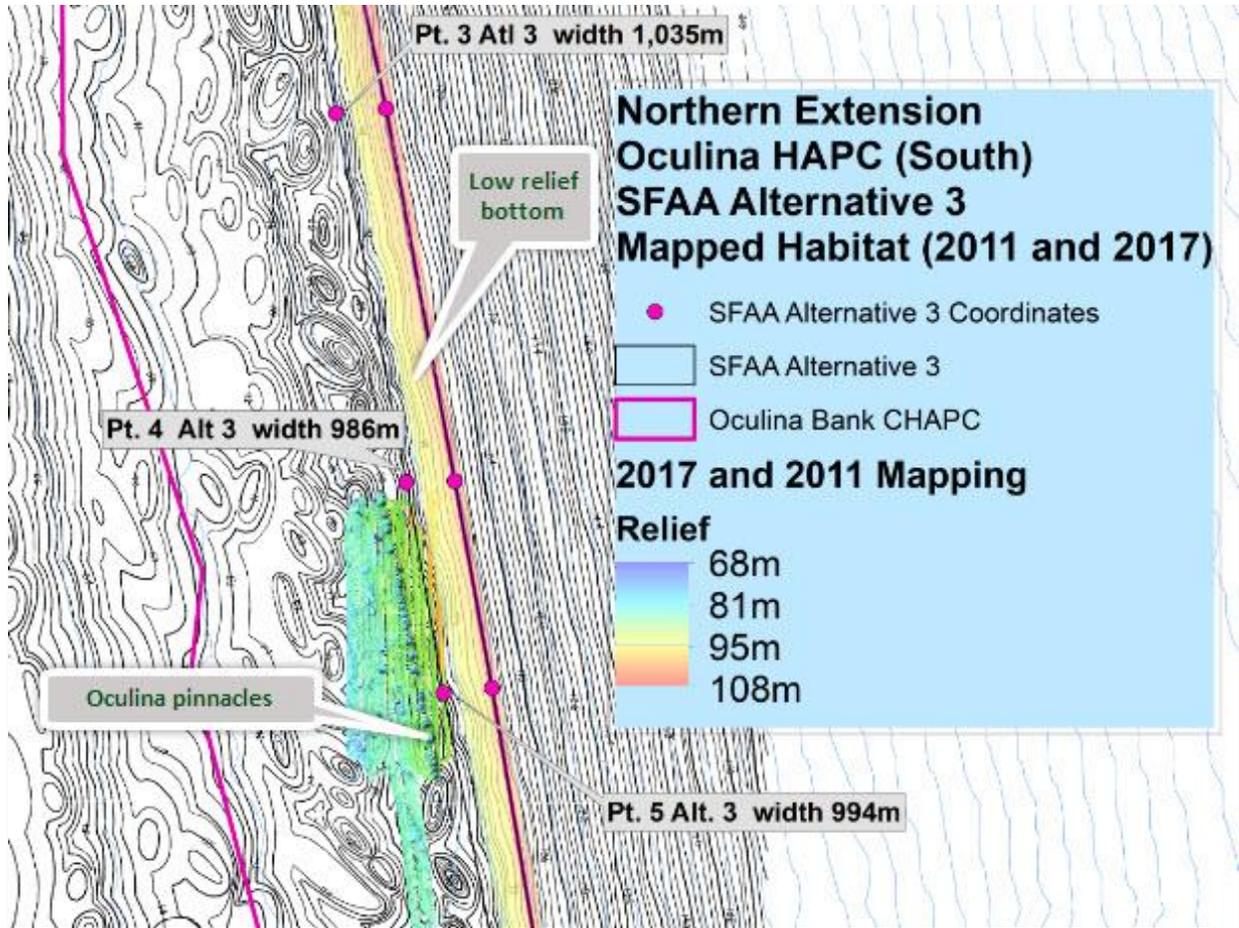
**Figure 9a.** Northern extension of the OHAPC (North) including the proposed SFAA (Alternative 3) and habitat mapped in 2017 during the SEDCI expedition and during the 2011 *Pisces* expedition.



**Figure 9b.** Northern extension of the OHAPC (South) including the proposed SFAA (Alternative 3) and habitat mapped in 2017 during the SEDCI expedition and during the 2011 *Pisces* expedition.



**Figure 10a.** Zoom in of northern portion of **Alternative 3** on mapped low relief bottom in relationship to mapped high relief *Oculina* pinnacle habitat distributed to the west of the proposed SFAA.



**Figure 10b.** Zoom in of southern portion of **Alternative 3** on mapped low relief bottom in relationship to mapped high relief *Oculina* pinnacle habitat distributed to the west of the proposed SFAA.

***Economic Effects:***

- Not establishing a SFAA would continue to disallow additional fishing access to rock shrimp vessels within the northern extension of the OHAPC and would result in no change in economic benefits.
- Not establishing a SFAA would result in foregone landings of rock shrimp and thus foregone economic benefits associated with these landings compared to **Preferred Alternative 2** and **Alternative 3**. **Preferred Alternative 2** would result in net economic benefits by potentially increasing landings of rock shrimp through access to an approximate 22 mi<sup>2</sup> area.
- The use of this area will likely vary from year to year, however, participants in the fishery have indicated that rock shrimp have historically been caught in the proposed area and will migrate into this area at times.

- Increases in catches of rock shrimp would be expected to increase direct net economic benefits.
- Given the likely variability in usage of the area, as well as the exhibited variability in overall participation in the regional rock shrimp fishery, these economic effects cannot be quantified.
- The economic effects of **Alternative 3** would likely be similar to those of **Preferred Alternative 2**, but economic benefits under preferred **Alternative 3** would be comparatively higher since this alternative would allow access to an additional 10 mi<sup>2</sup> of fishing grounds.
- Economic benefits for commercial rock shrimp vessels would be highest under **Alternative 3**, followed by **Preferred Alternative 2**, and not establishing a SFAA (**Alternative 1 (No Action)**).
- The economic effects on individual vessel owners cannot be determined with available models but from **Preferred Alternative 2** and **Alternative 3** would depend on:
  - Each vessel owner's profit maximization strategy.
  - Their dependence on rock shrimp and seasonal fishing behavior.
  - Their propensity to fish for rock shrimp in the new area compared to existing open areas.

On average, 19 vessels with a valid limited access Commercial Vessel Permit for Rock Shrimp (South Atlantic Exclusive Economic Zone) harvested rock shrimp from the South Atlantic annually from 2015 through 2019 (Table 1).

Rock shrimp dealers are indirectly affected with increases in gross revenues expected to indirectly benefit dealers. On average, 8 dealers purchased rock shrimp from the South Atlantic annually from 2015 through 2019 (Table 1).

Participation in the South Atlantic rock shrimp fishery by vessels with RSLA permits was highly variable from 2015 through 2019, ranging from a high of 26 vessels in 2017 to a low of 12 vessels in 2018 (Table 1). Thus, only 12-25% of the vessels with RSLA permits have been active in the fishery in recent years. Further, the average number of active permitted vessels during these years (19) is considerably below the average number of active vessels from 2003-2007 (126) as reported in South Atlantic Shrimp Amendment 7 and even further below the maximum number of vessels (150) the Council determined could sustainably operate, both biologically and economically, in the fishery as reported in South Atlantic Shrimp Amendment 5.

**Table 1.** Landings and revenue statistics for active vessels harvesting South Atlantic rock shrimp with an RSLA permit, 2015-2019.

Year	Number of Active Permitted Vessels	Statistic	South Atlantic rock shrimp landings (lbs ww)	South Atlantic rock shrimp revenue	Other Atlantic revenue	Gulf revenue	Total revenue	Percent of total revenue is rock shrimp
2015	22	Maximum	158,221	\$266,170	\$803,973	\$572,646	\$1,013,092	54.0
		Total	1,057,109	\$1,714,878	\$7,466,726	\$3,231,558	\$12,413,162	N/A
		Mean	48,050	\$77,949	\$339,397	\$146,889	\$564,235	14.0
2016	17	Maximum	77,500	\$235,602	\$819,012	\$414,873	\$950,212	45.6
		Total	298,228	\$858,685	\$6,520,753	\$1,055,134	\$8,434,572	N/A
		Mean	17,543	\$50,511	\$383,574	\$62,067	\$496,151	9.9
2017	26	Maximum	392,387	\$775,263	\$716,209	\$590,559	\$1,213,936	85.1
		Total	3,104,624	\$5,730,705	\$8,702,959	\$4,113,093	\$18,546,757	N/A
		Mean	119,409	\$220,412	\$334,729	\$158,196	\$713,337	30.0
2018	12	Maximum	240,316	\$379,146	\$765,643	\$312,500	\$1,050,590	56.5
		Total	955,478	\$1,538,819	\$4,256,076	\$1,013,015	\$6,807,910	N/A
		Mean	79,623	\$128,235	\$354,673	\$84,418	\$567,326	23.0
2019	20	Maximum	170,338	\$352,543	\$982,153	\$318,965	\$983,395	100.0
		Total	941,112	\$1,897,856	\$8,438,659	\$862,157	\$11,198,671	N/A
		Mean	47,056	\$94,893	\$421,933	\$43,108	\$559,934	22.4

\*Maximum values are not always with respect to the same vessel. Source: personal communication, Atlantic Coastal Cooperative Statistics Program (ACCSP, March 17, 2021 and personal communication, SEFSC, Feb, 22, 2021).

**Social Effects:**

- Not establishing a SFAA would likely result in minimal social effects because the fleet is already harvesting in open areas and prohibited from working in the closed areas.
- **Preferred Alternative 2** and **Alternative 3** directly address stakeholder concerns regarding access to historically important fishing grounds and may improve stakeholder perceptions of the management process.
- **Preferred Alternative 2** and **Alternative 3** are expected to have greater social benefit than **Alternative 1 (No Action)**.
- As such, **Preferred Alternative 2** the most recent recommendation by the South Atlantic Council’s Deep-Water Shrimp Advisory Panel is expected to have the greatest social benefit, followed by **Alternative 3**, and not establishing a SFAA.

### **Deep-Water Shrimp Advisory Panel Comments and Recommendations:**

The South Atlantic Fishery Management Council's (South Atlantic Council) Deep-water Shrimp Advisory Panel (AP) discussed this amendment at their November 10, 2020, meeting via webinar and had the following (predominately individual) comments:

- The proposed shrimp fishery access area (SFAA) includes an area rock shrimp fishermen historically fished, and since they are using vessel monitoring systems (VMS), the buffer between the high relief coral habitat and proposed SFAA boundary could be reduced to give them access to this area.
- An industry representative provided coordinates used in the proposed SFAA indicating it was an important area.
- The eastern boundary of the northern extension of the Oculina Bank Habitat Area of Particular Concern (OHAPC) was important fishing grounds 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 therefore, it is hard to assign a monetary value or productivity value.
- Multiple AP members stated their support for re-opening the proposed SFAA.
- Fishermen responded to a question from Coral AP members on the positioning of the boat versus the trawl indicating they always know precisely where the rigs are relative to the vessel. Fishermen are requesting additional allowable fishing area stating their intent is not to destroy any habitat and they acknowledge its benefit to harvesting rock shrimp.
- According to fishermen, fishing in 300 feet (ft) of water results in 1,000 ft of cable out, and the rigs are approximately 500 ft straight down behind the boat.
- Fishermen indicate they 1) often drag very close to obstructions; 2) know how to keep equipment safe and not damage bottom habitat; and 3) 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 cause any detriment to habitat.

**MOTION<sup>1</sup>:** To adopt the 2014 coordinates eastern boundary of the northern extension of the OHAPC developed by industry and staff as a SFAA as represented in Alternative 2a. SFAA boundaries based on coordinates presented by fishermen as part of March 2014 public comment.

### **Coral AP Comments and Recommendations:**

The South Atlantic Council's Coral AP discussed this amendment at their November 10, 2020, meeting via webinar and had the following (predominately individual) comments:

- Additional public comments were received prior to the meeting articulating the need for an adequate buffer.

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<sup>1</sup> This motion recommends the current **Preferred Alternative 2** as the preferred.  
**Coral, Coral Reefs and Live Hard Bottom Habitat  
Amendment 10**

- 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 km.
- Allowing fishing gear interactions within 100 to 2,000 m would be putting corals at risk.
- Low relief could include hard bottom communities that are providing essential fish habitat for deep-water species managed under the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region.
- It was recommended that the protective buffer would help protect the coral pinnacles and also low relief hard bottom.
- Fishing less than 1,000 m from the coral habitat is too close, however work has not been done to know exactly what the optimal distance should be.
- A margin of error is needed to account for uncertain current flow and intensity to prevent indirect sediment plume impacts.
- Mapping is limited and funding is scarce to map the *Oculina* banks.
- 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.
- It is important to protect the whole *Oculina* coral ecosystem from the impact of fishing and having a substantial buffer around that ecosystem would accomplish that goal.
- Creating marine protected areas that are too small results in fishing right up to the edge and not providing protections to fish populations.
- 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 SFAA boundary and where the reef resources are, horizontal lines shouldn't be drawn from the pinnacle base where we know there is still living habitat important for snowy grouper and other important snapper grouper 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 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.
- Concern was raised over the distance between the location of the boat versus the rig. If there were 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 AP indicated the present boundary provided a buffer and approved a motion supporting the no action alternative.

**MOTION<sup>2</sup>:** Consider Option 1 status quo. (Do not develop an action to address the issue).

### **Habitat and Ecosystem AP Comments and Recommendations:**

The South Atlantic Council's Habitat and Ecosystem AP discussed this amendment at their October 22, 2020, meeting via webinar and had the following (predominately individual) comments:

- Generally 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.
- Need to define low relief and to put the area in proper context.
- Some members advocated supporting the fishing industry given the historical extent of fishing in the area, narrow width of the proposal and the desire to provide a buffer zone adjacent to coral pinnacles.
- Secure VMS data for before and after the establishment of the OHAPC. If the area was reopened, and therefore represented "new" ground for fishing, it could be heavily used.
- Look at the effort data, 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 South Atlantic 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.

### **Summary of Public Hearing Comments:**

Public hearings for Amendment 10 were held via webinar on May 12 and May 13, 2021. No public comment was received on May 12.

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<sup>2</sup> This motion recommends **Alternative 1 (No Action)** as the preferred.

Comments received during the Public Hearing Webinar on May 13:

- One commenter supported the action in the amendment and felt the Council had done a good job developing the amendment.
- One commenter indicated the preferred alternative included traditional bottom which has been fished and is verified by the many VMS fishing points occurring in the area over the years.
- Area under consideration has been fished and was just something that came up late when Coral Amendment 8 was first put into place.
- One commenter noted fishermen requested the Council revisit the area and appreciate the fact that we are revisiting it with a good, preferred alternative.
- One commenter noted opening up an area for a shrimp fishery only defeats the purpose of conservation and your role to protect environment and fishery.
- A commenter was concerned that the Council was playing into the hands of the commercial industry and will set a precedent and did not support the action.

**Additional Public Comments:**

Comments were received during Council meetings in 2021 and online:

<https://safmc.wufoo.com/reports/2021-june-council-meeting-public-comment-report/>

- Several commenters noted currents are strong and variable affecting sediment movement given the high percentage of bottom mud suspension and transport.
- Most commenters do not support trawling access to portions of OHAPC.
- Commenters indicated *Oculina* was slow growing delicate coral susceptible to trawling.
- Several commenters commended the Council for previous conservation action.
- Some commenters indicated most mapping in *Oculina* is low resolution and no visual survey in area.
- Many commenters view bottom trawling as the primary threat and has significantly impacted the *Oculina* coral habitat used by Council managed snapper and grouper species.
- Some commenters supported preserving the remaining *Oculina* coral reefs only existing off Florida noting the short-term value to Florida commercial fishery was outweighed by value of coral reef systems over time.
- Many commenters noted *Oculina* habitat is important as a nursery, for spawning, juvenile fish and for feeding by managed species.
- One commenter thought fish could return if there was additional surveillance and enforcement.
- One commenter noted the southeast edge of northern *Oculina* expansion in Coral Amendment 8 took away important rock shrimp fishing grounds that were historically used.
- A commenter felt the importance of the area to the rock shrimp fishery was inaccurately portrayed as it was considered insignificant. He maintained this is not true and the area at times is a very valuable asset to the shrimp fishery.
- One commenter thought the action may impact coral or sponges with potential drug value.

- A commenter stated *Oculina* habitat harbors many species yet to be studied.
- A few commenters expressed concern that the action could set a bad precedent.
- Several commenters indicated corals and reefs contain numerous other potential marine sources of bioactive molecules with therapeutic potential.
- A commenter stated fishermen demonstrated from their records traditional historic trawl areas existed along the eastern edge of the northern extension of the OHAPC before VMS was implemented and verified by VMS for later years.
- Some commenters stated the ecosystem is various habitats not just high relief mounds.
- Several commenters indicated reefs are hotspots for biodiversity.
- A commenter stated the area was important to sustaining seafood supplies.
- One commenter supported creating buffers around marine protected areas because accidents happen.
- A commenter noted the action would impact fishing tourism in Florida.
- Some commenters felt the action would add to other stressors climate change and ocean acidification.
- Several commenters supported providing a buffer to reduce sedimentation from offshore trawling, bycatch of foraging fish and limit mistakes in trawl deployment and tracking.
- A few commenters indicated recovery probably will happen on marginal edges on coral rubble.
- Several commenters were concerned the area was narrow with limited margin for mistake.
- One commenter supported creating artificial reefs for commercial use only.
- A commenter recommended there be help developing commercial fisheries for alternative species and live rock.

## **DRAFT South Atlantic Council's Rationale**

The Council recommended moving forward with the action in response to the Presidential Executive Order 13921 on Seafood Competitiveness and Economic Growth.

- Some Council members view the action as a technical correction to establishment of the eastern boundary of the northern extension of the OHAPC because information on the economic impact and value to the shrimp fishery in various years was discussed late in the development of the Coral Amendment 8.
- Council members, during the June 2014 meeting, determined that after hearing from industry the monetary value of shrimping in the proposed SFAA was greater than they had thought it was. Rock shrimpers working through the AP Chair, verified they had been using this area claiming that the highest amount of revenue from shrimping in that particular area was the year before (2013) and the year of the effective date of the regulations that implemented the closure (2014).
- Coral Amendment 10 will 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, while maintaining protection of the *Oculina* deep water coral ecosystems.

- Trawling would likely occur where rock shrimp were previously caught in low relief bottom areas already impacted by past fishing activities. Fishing effort in the area, as established through analysis of VMS data, was historically low and the economic impact of continuing to prohibit shrimp trawling in his area is not expected to be large.

**Committee Action:**

- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

**Committee Action:**

- CONSIDER RECOMMENDING AMENDMENT 10 FOR FORMAL REVIEW.

**DRAFT MOTION:** APPROVE AMENDMENT 10 TO THE FISHERY MANAGEMENT PLAN FOR CORAL, CORAL REEFS, AND LIVE HARBOTTOM HABITAT OF THE SOUTH ATLANTIC FOR FORMAL SECRETARIAL REVIEW AND DEEM THE CODIFIED TEXT AS NECESSARY AND APPROPRIATE. GIVE STAFF EDITORIAL LICENSE TO MAKE ANY NECESSARY EDITORIAL CHANGES TO THE DOCUMENT/CODIFIED TEXT AND GIVE THE COUNCIL CHAIR AUTHORITY TO APPROVE THE REVISIONS AND RE-DEEM THE CODIFIED TEXT.