

Public Hearing Summary 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



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South Atlantic Fishery Management Council
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NOTE: The following amendment and analyses are in development and subject to change.

This Public Hearing Summary includes the actions and alternatives, a brief discussion for each action, and a summary of the preliminary analysis.

Why is the South Atlantic Fishery Management Council considering 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.

The OHAPC was established through the original Coral FMP in 1982. Anchoring within the area by all fishing vessels was prohibited in 1996 and the area was later expanded to include newly discovered *Oculina* coral habitat. 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 S-1 and S-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 received public comment when it was finalizing Coral Amendment 8 that the area now proposed in Coral Amendment 10 was important fishing grounds for the rock shrimp fishery. The rock shrimp industry provided coordinates for the narrow area along the eastern boundary of the proposed Northern Extension of the OHAPC in March 2013 and further refined the coordinates in March 2014. The South Atlantic Council continued discussing whether to allow rock shrimp fishing in the area along the eastern boundary of the proposed Northern Extension of the OHAPC, and in June 2015, approved a motion to develop an amendment to consider establishing a SFAA for the rock shrimp fishery along the eastern boundary of the northern extension of the OHAPC.

In June 2018, the South Atlantic Council reviewed an options paper for cold-water shrimp transit, golden crab access areas, and shrimp fishery access areas for the rock shrimp fleet. In September 2019, the South Atlantic Council decided to separate the consideration of the cold-water shrimp transit, golden crab access areas, and SFAA actions into separate fishery management plan amendments. The South Atlantic Council revisited the SFAA action in June 2020 and recommended moving forward with the action in response to the Presidential Executive Order (EO) 13921 on Seafood Competitiveness and Economic Growth. 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. It is essential that this takes place through the rigorous scientific process carried out under the purview of the South Atlantic Council in a manner that does not compromise the broader objectives of spatially protected areas. Coral Amendment 10 began development following South Atlantic Council’s guidance at the September 2020 meeting. The Council is at this point in the process where public hearings are being conducted for this amendment (**Figure S-3.**)

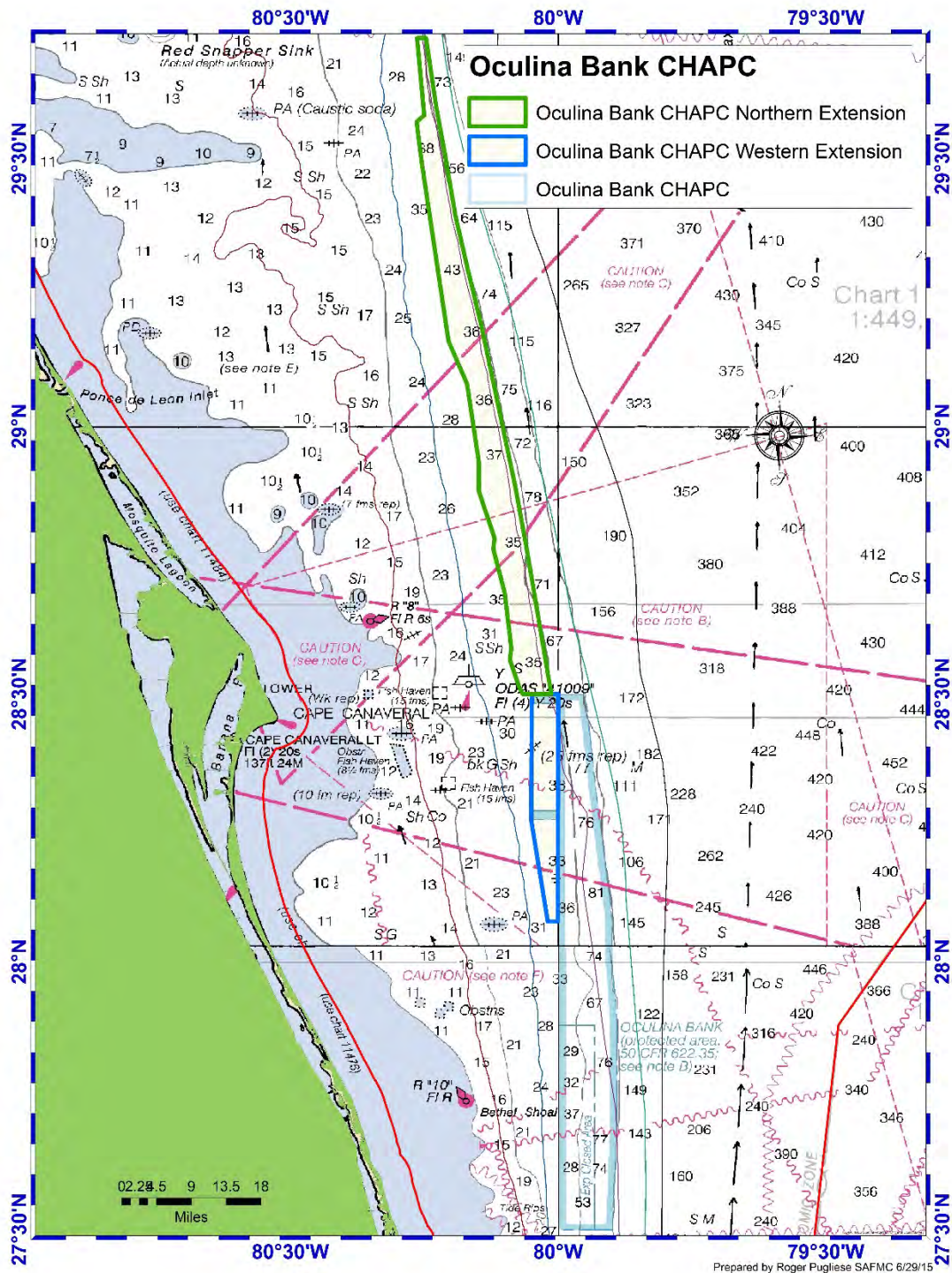


Figure S-1. Map of *Oculina Bank CHAPC* Highlighting Coral Amendment 8 Expansions North and West. Source: Roger Pugliese SAFMC Staff.

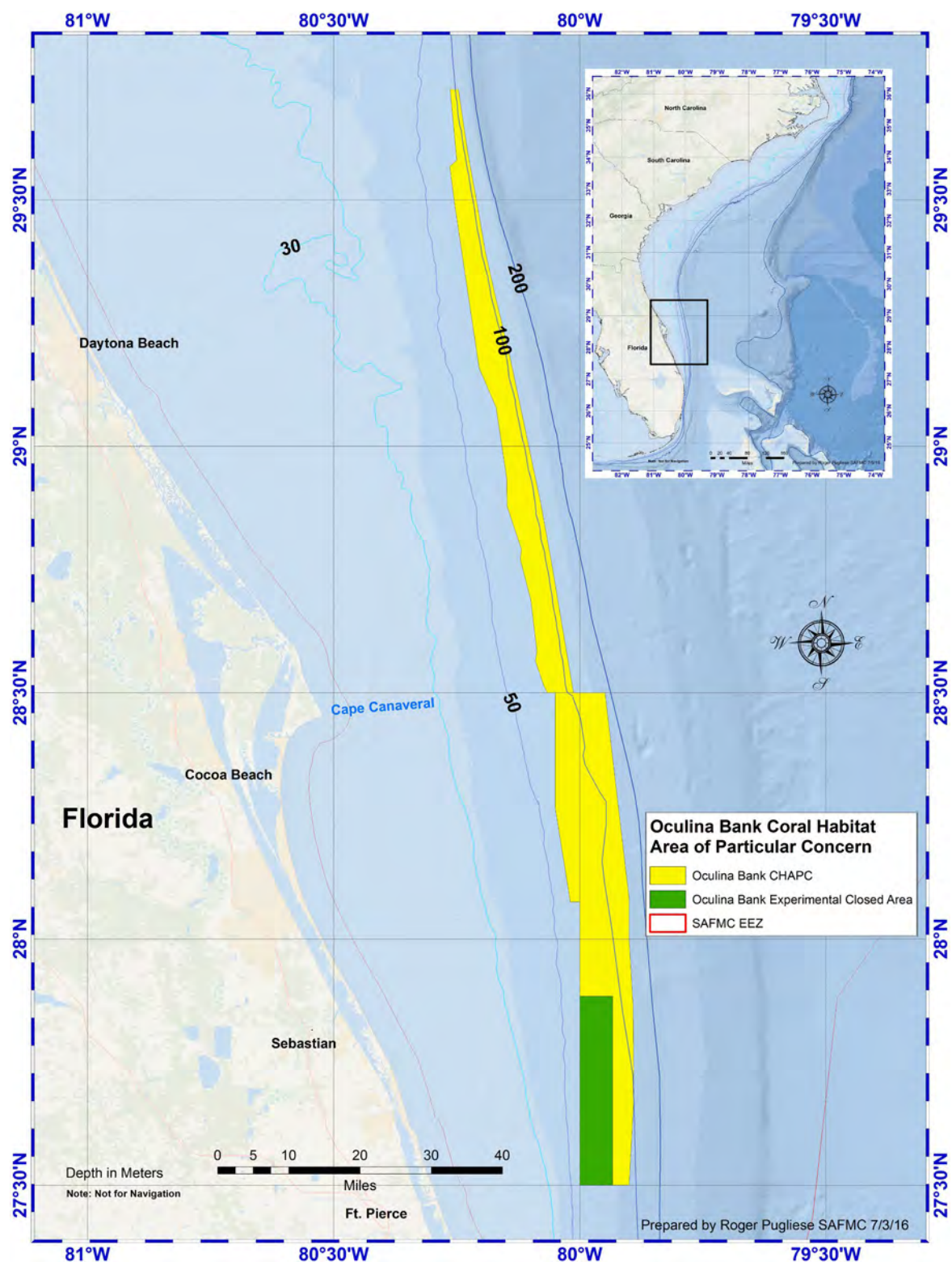


Figure S-2. Map of the OHAPC with implementation of Coral Amendment 8.
Source: Roger Pugliese, SAFMC Staff.

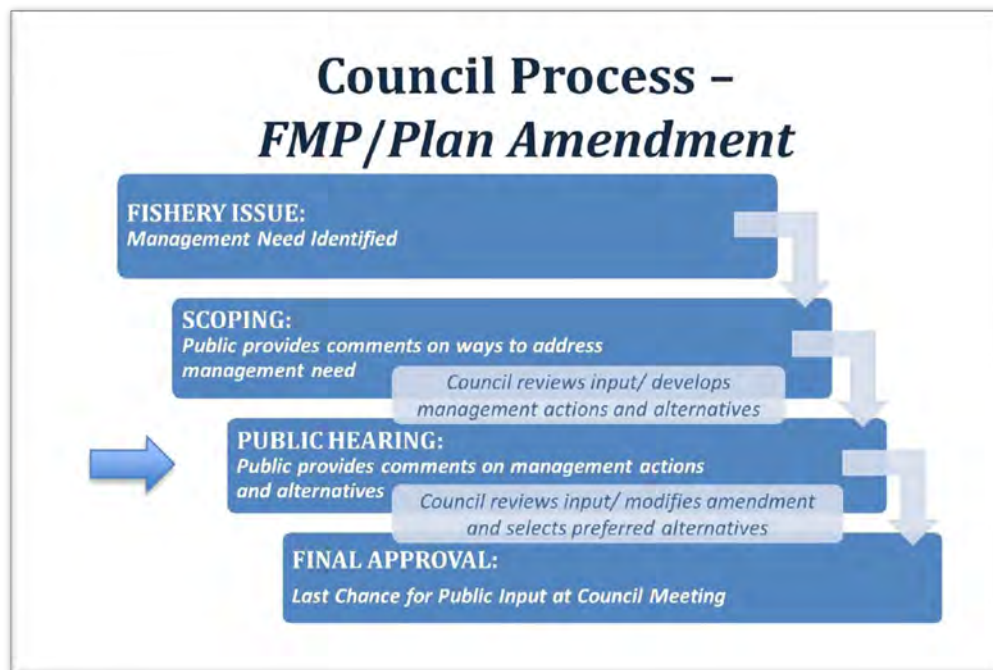


Figure S-3. Council process to develop a Fishery Management Plan or Amendment to a Fishery Management Plan depicting when the public can offer comment.

What would this amendment do?

This amendment would:

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

This amendment *WOULD NOT*

- Change the established OHAPC boundary
- Allow use of bottom longline, dredge, pot, or trap or if aboard a fishing vessel, anchoring, use an anchor and chain, or use a grapple and chain in the proposed SFAA.

The proposed action is further explained below, including a discussion of preliminary biological, economic, and social effects.

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 in the Oculina Bank Habitat Area of Particular Concern.

Preferred Alternative 2. Establish a shrimp fishery access area that is 22 mi² 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 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 mi² 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 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 S-4) encompasses approximately 22 square miles 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 in subsequent meetings of the deep-water shrimp advisors (Deepwater Shrimp Advisory Panel, November 10, 2020). The depth of the western boundary of **Preferred Alternative 2** ranges from 92 to 95 m. On the eastern boundary, along the edge of the existing OHAPC, the average depth is 98 m.

Alternative 3 (Figure S-5) encompasses approximately 32 square miles and is based on coordinates presented by rock shrimp fishermen as part of March 2013 public comment for Coral Amendment 8. The depth of the western boundary of **Alternative 3** ranges from 88 to 90 m. On the eastern boundary, along the edge of the existing OHAPC, the average depth is 98 m.

Figure S-6 presents the two alternatives overlapped for comparison. **Preferred Alternative 2**, at various points along the proposed western boundary, has a width between 500 m to 250 m narrower than **Alternative 3**.

Vessels are required to carry a Vessel Monitoring System (VMS) to fish in the deep-water shrimp fishery. 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. Fishing along the eastern boundary of the northern extension of the OHAPC predominately occurs east of the existing boundary. Rock shrimp fishing inside the edge of the boundary accounted for 1.76% of all fishing points during 2003-2014, 2.20% of points during 2013, and 8.50% of points during 2014, based on historic trawling operations as represented by VMS data (**Table S-1, Figure S-7**). Fishing points essentially were the same for 2013 and 2014

but the percentage increased in 2014 due to the decreased total number of rock shrimp fishing points. No information on fishing activity from VMS data exists from within the OHAPC from 2015 to present since trawling was prohibited through implementation of Coral Amendment 8. The final rule for Coral Amendment 8 requires rock shrimp vessels transiting through the OHAPC to maintain a minimum speed of no less than 5 knots as determined by a VMS system which transmits vessel location at a rate acceptable to law enforcement (i.e., every 5 minutes). These VMS requirements allow transit through the OHAPC with possession of rock shrimp on board while enhancing enforceability of OHAPC regulations including those proposed in this amendment.

Table S-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

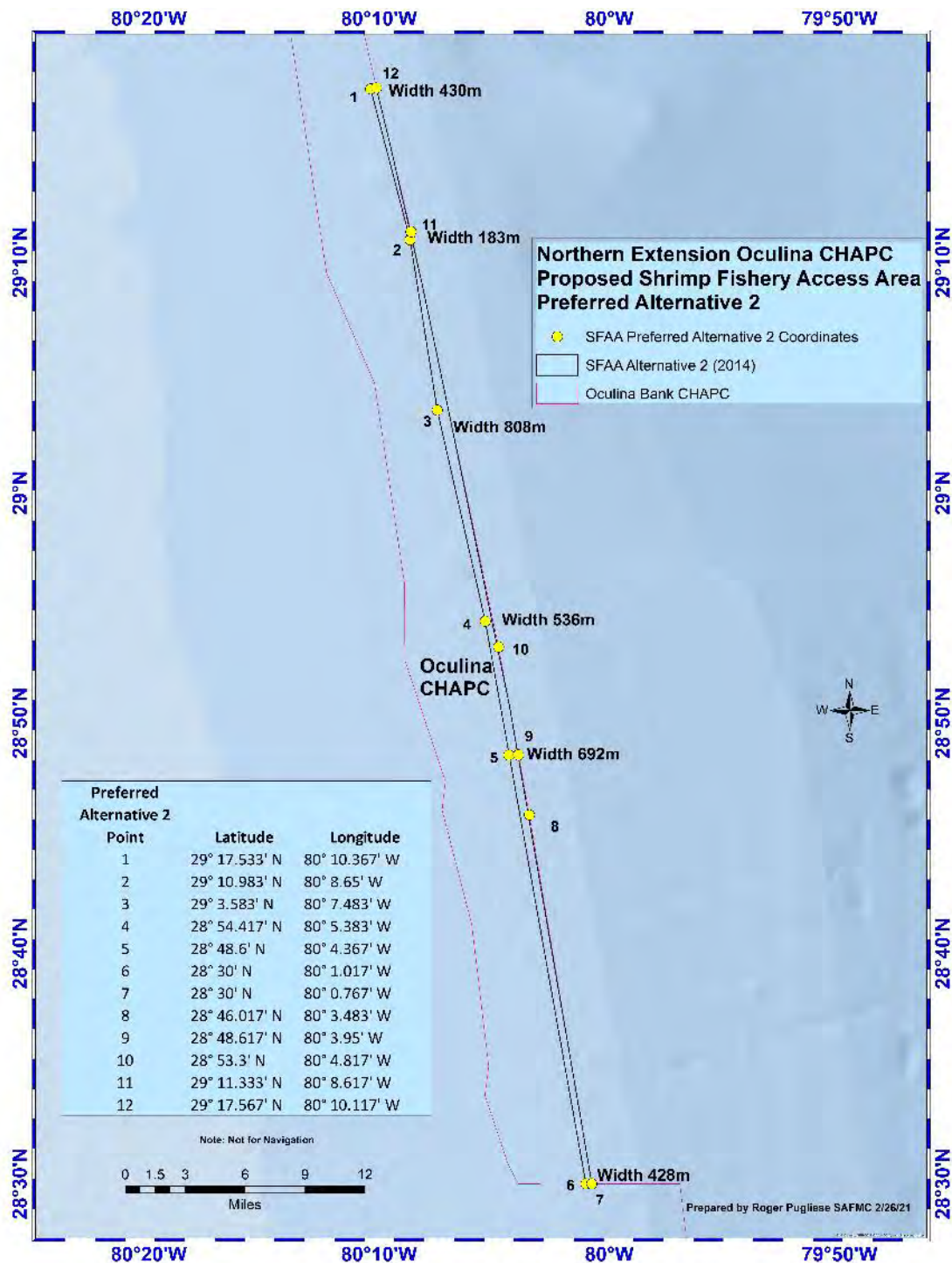


Figure S-4. Coordinates and approximate widths for the proposed SFAA (**Preferred Alternative 2**).

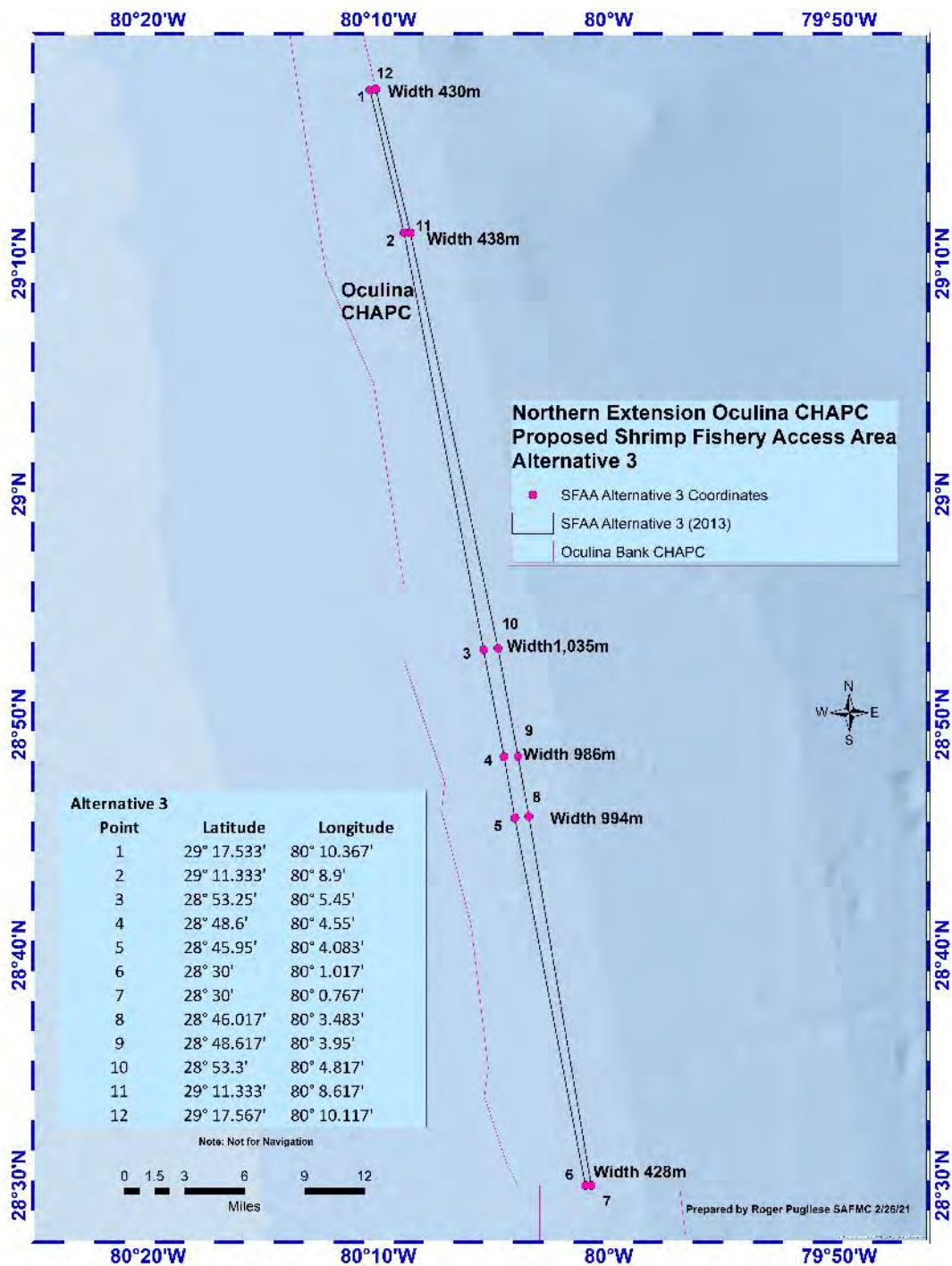


Figure S-5. Coordinates and approximate widths for the proposed SFAA (Alternative 3).

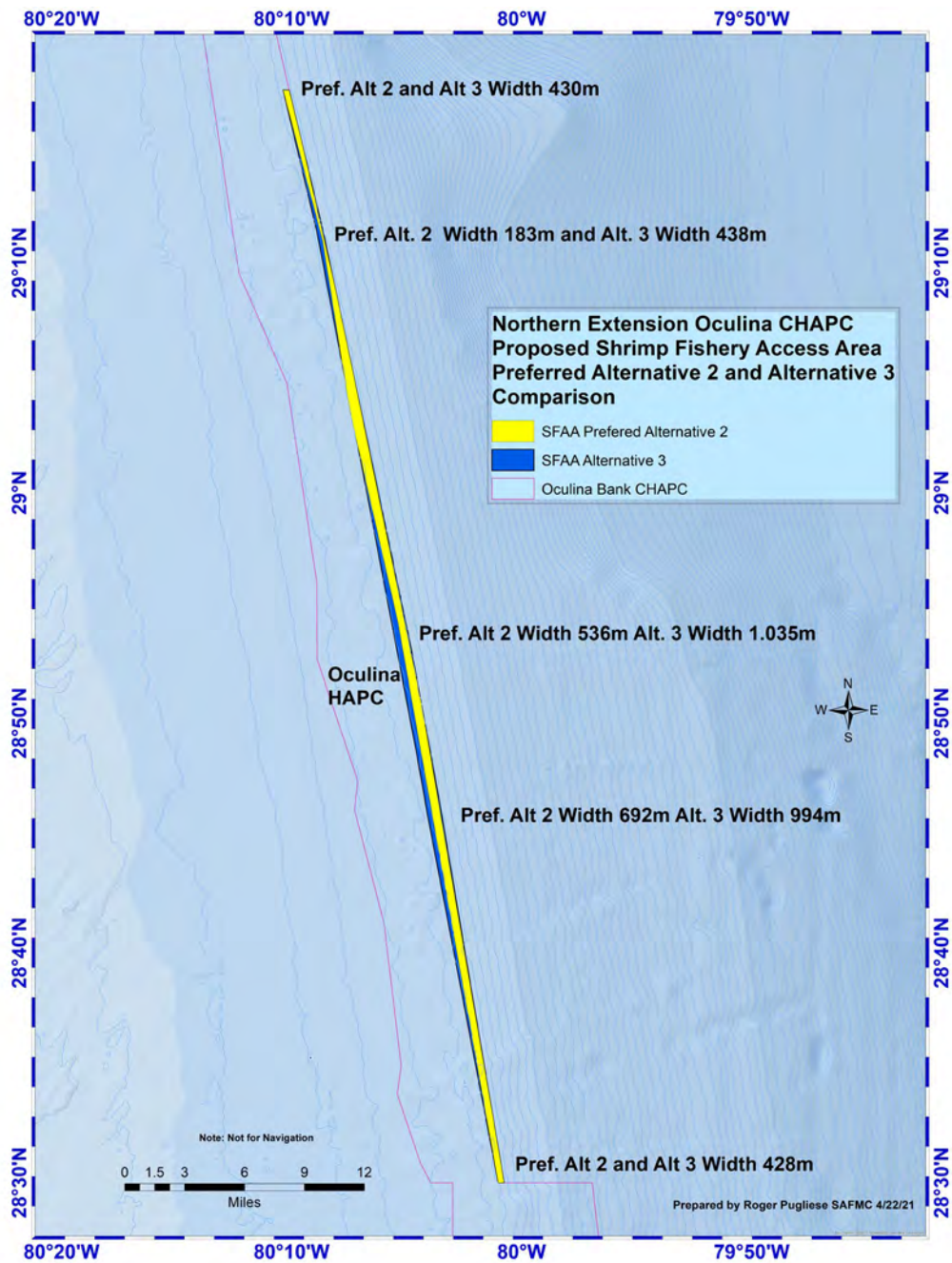


Figure S-6. Comparison of SFAA Preferred Alternative 2 and Alternative 3 layout and widths.

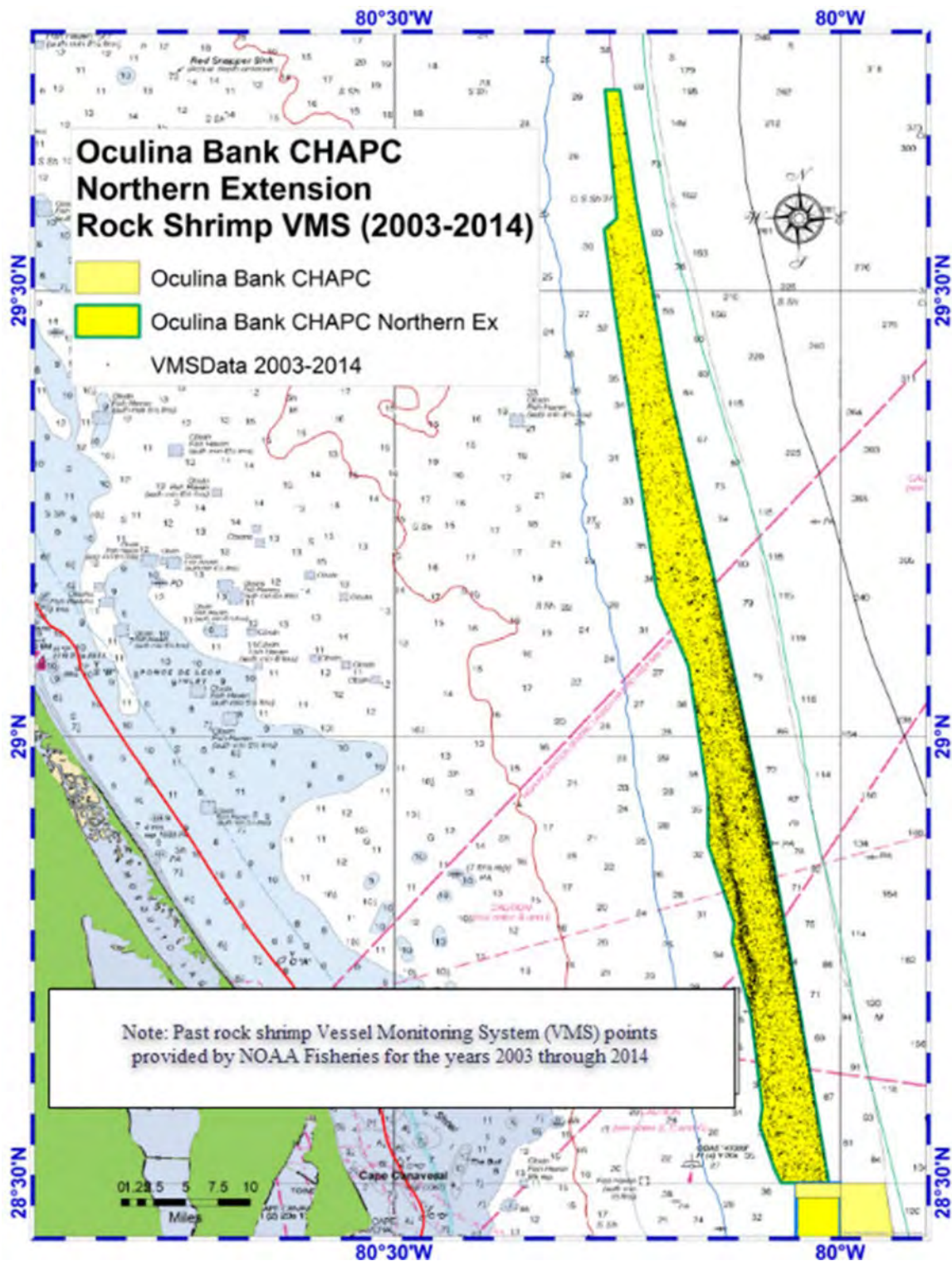


Figure S-7. Rock shrimp VMS points in the northern extension of the OHAPC (2003-2013).
Source: Roger Pugliese SAFMC Staff.

Possible Effects

Biological: Not establishing a SFAA would have no negative biological impacts.

Preferred Alternative 2 and **Alternative 3** could result in negative biological impacts to the deep-water coral habitat within the proposed SFAA as they would allow intermittent bottom trawling for rock shrimp. Habitat mapping data for the proposed areas shows only low relief (probably sand or mud bottom) with no higher relief habitat in either **Preferred Alternative 2** (Figures S-8 and S-9) or **Alternative 3** (Figures S-12 and S-13).

Given the narrow width of the proposed SFAAs, figures were created to split the areas into a northern and southern extents (Figures S-8 and S-9 Figures S-12 and S-13) with zoomed in versions (Figures S-10 and S-11 Figures S-14 and S-15) 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 S-10 and S-11). 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 S-14 and S-15).

Direct biological impacts from trawling over coral habitat as a result of **Preferred Alternative 2** and **Alternative 3** are expected to be low considering:

- mapping in area shows no high relief coral habitat
- rock shrimp occurrence and fishing in area is variable
- fishermen are expected to target rock shrimp in productive areas of previously trawled and impacted

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 AP, indicate establishing a substantial (possibly 1,000 m) buffer between known coral habitat and fishing grounds would be prudent to prevent adverse impacts to coral colonies. However, work has not been done to know exactly what the optimal distance should be.

Potential negative biological impacts would be greatest under **Alternative 3** (largest proposed allowable fishing area) followed by **Preferred Alternative 2**.

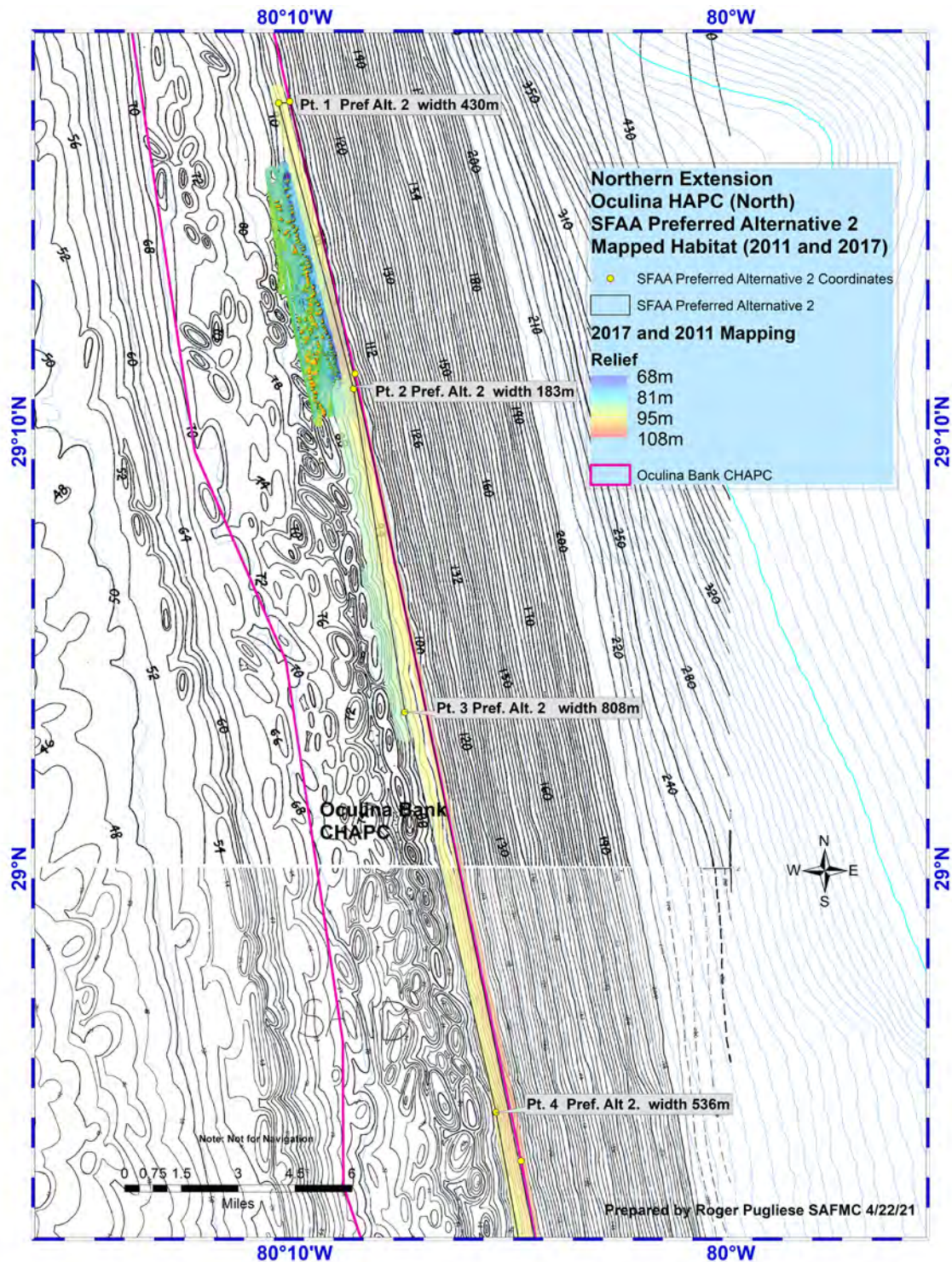


Figure S-8. Northern extension of the OHAPC (North) including the proposed SFAA (Preferred Alternative 2) and habitat mapped in 2017 during the Southeast Deep Coral Initiative (SEDCI) expedition and during the 2011 Pisces expedition.

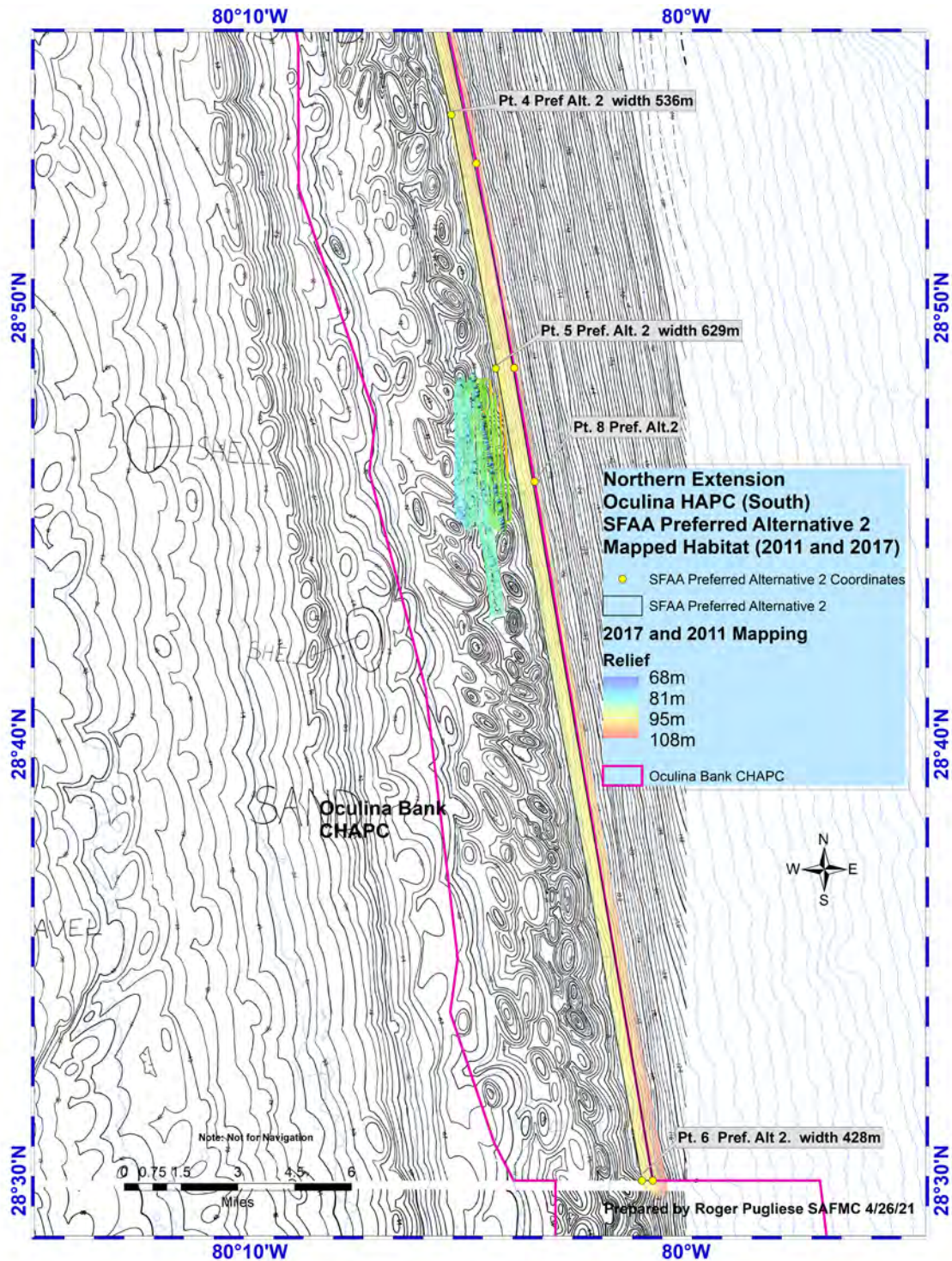


Figure S-9. Northern extension of the OHAPC (South) including the proposed SFAA (Preferred Alternative 2) and habitat mapped in 2017 during the SEDCI expedition and during the 2011 Pisces expedition.

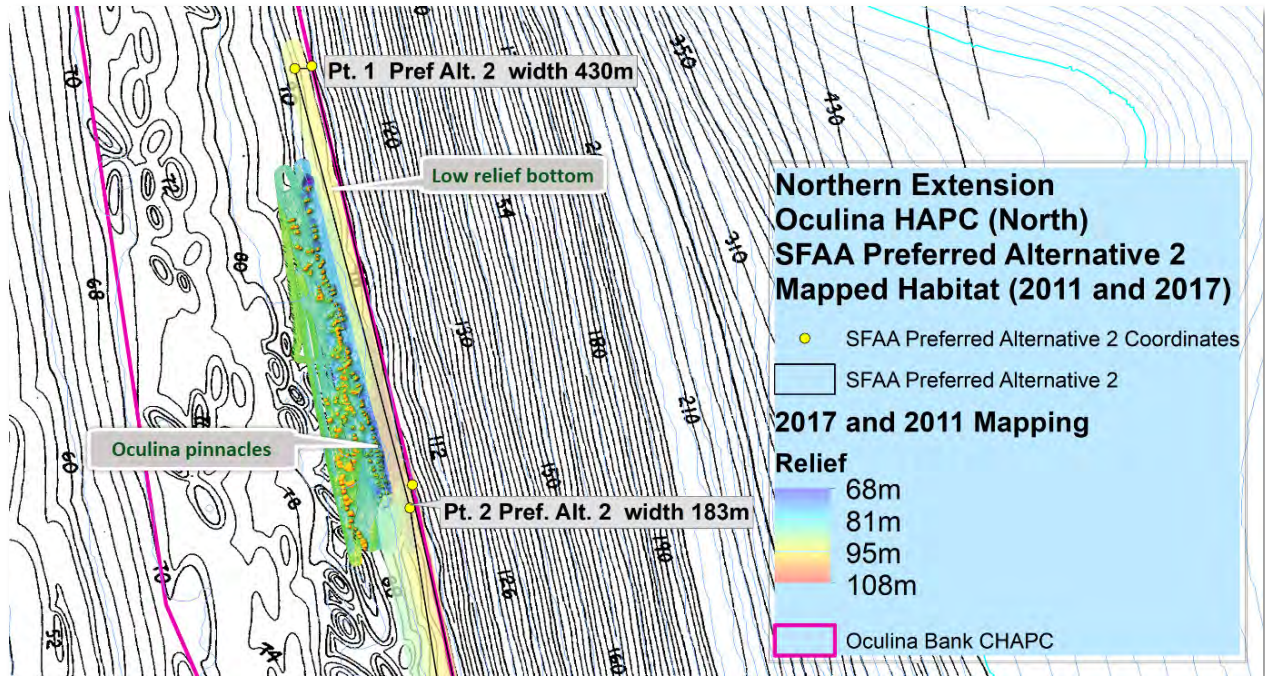


Figure S-10. Zoom in of northern portion of **Preferred Alternative 2** on mapped low relief bottom in relationship to mapped high relief Oculina pinnacle habitat distributed west.

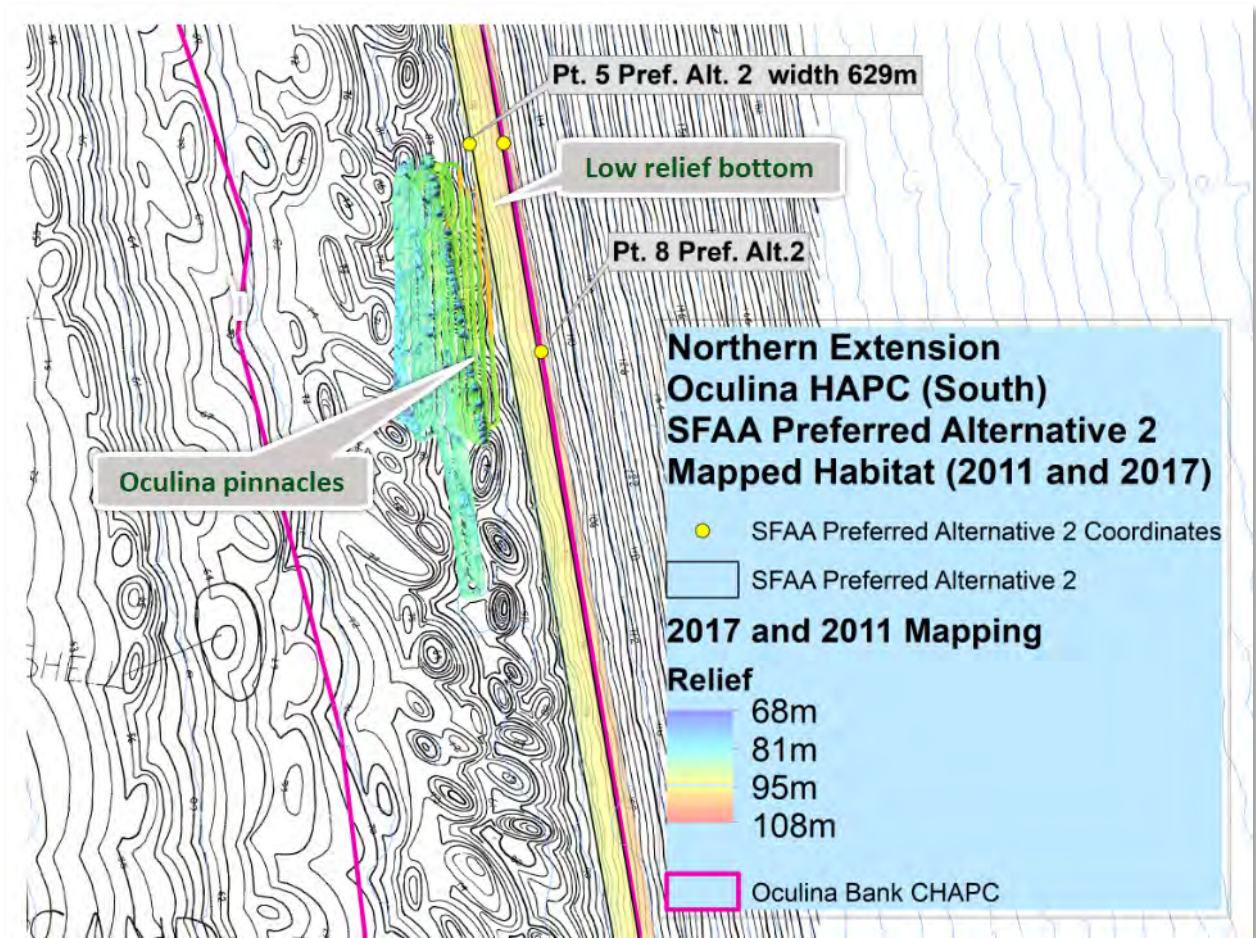


Figure S-11. Zoom in of southern portion of **Preferred Alternative 2** on mapped low relief bottom in relationship to mapped high relief Oculina pinnacle habitat distributed inshore.

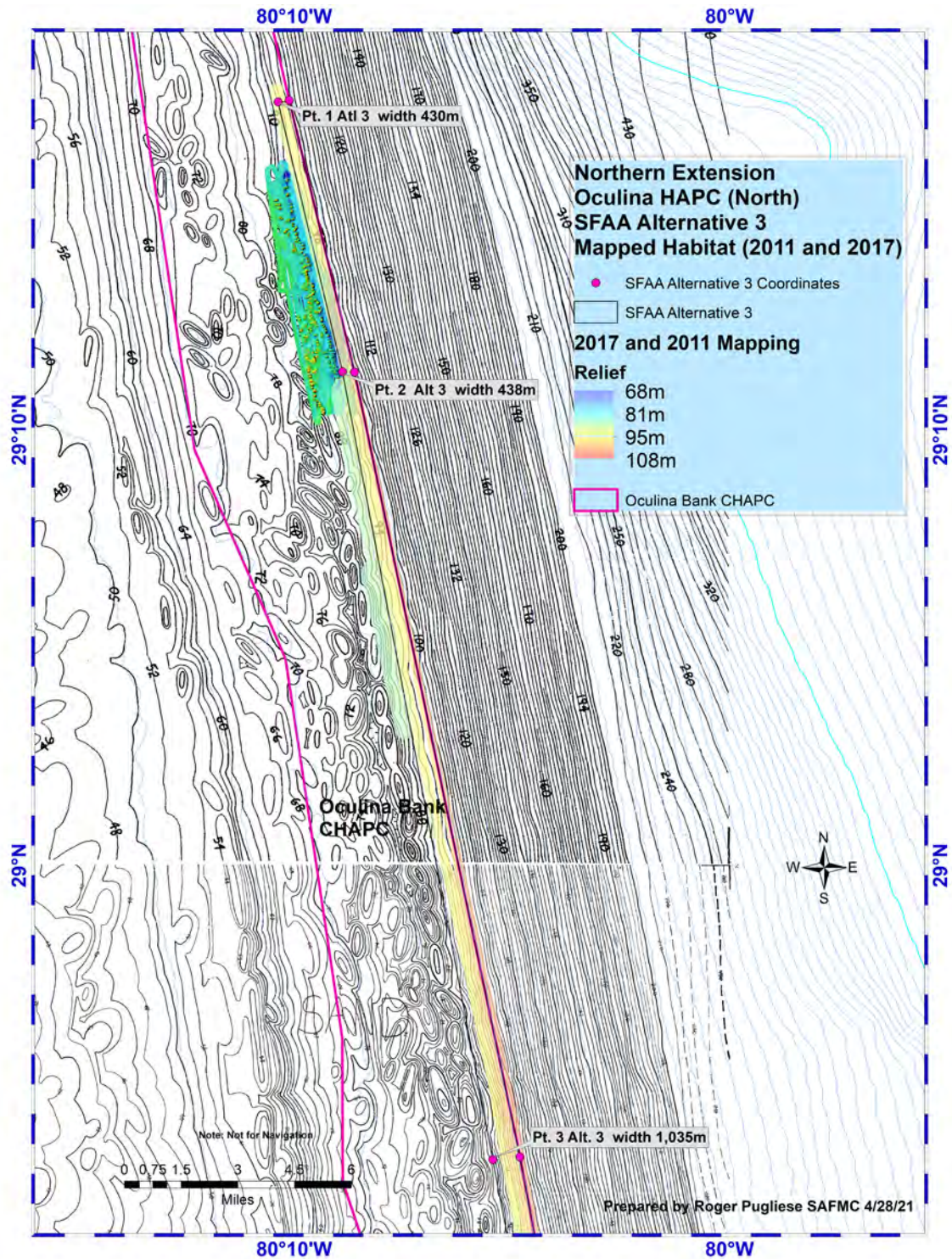


Figure S-12. Northern extension of the OHAPC (North) including the proposed SFAA (Alternative 3) and habitat mapped in 2017 during the SEDCI expedition and during the 2011 Pisces expedition.

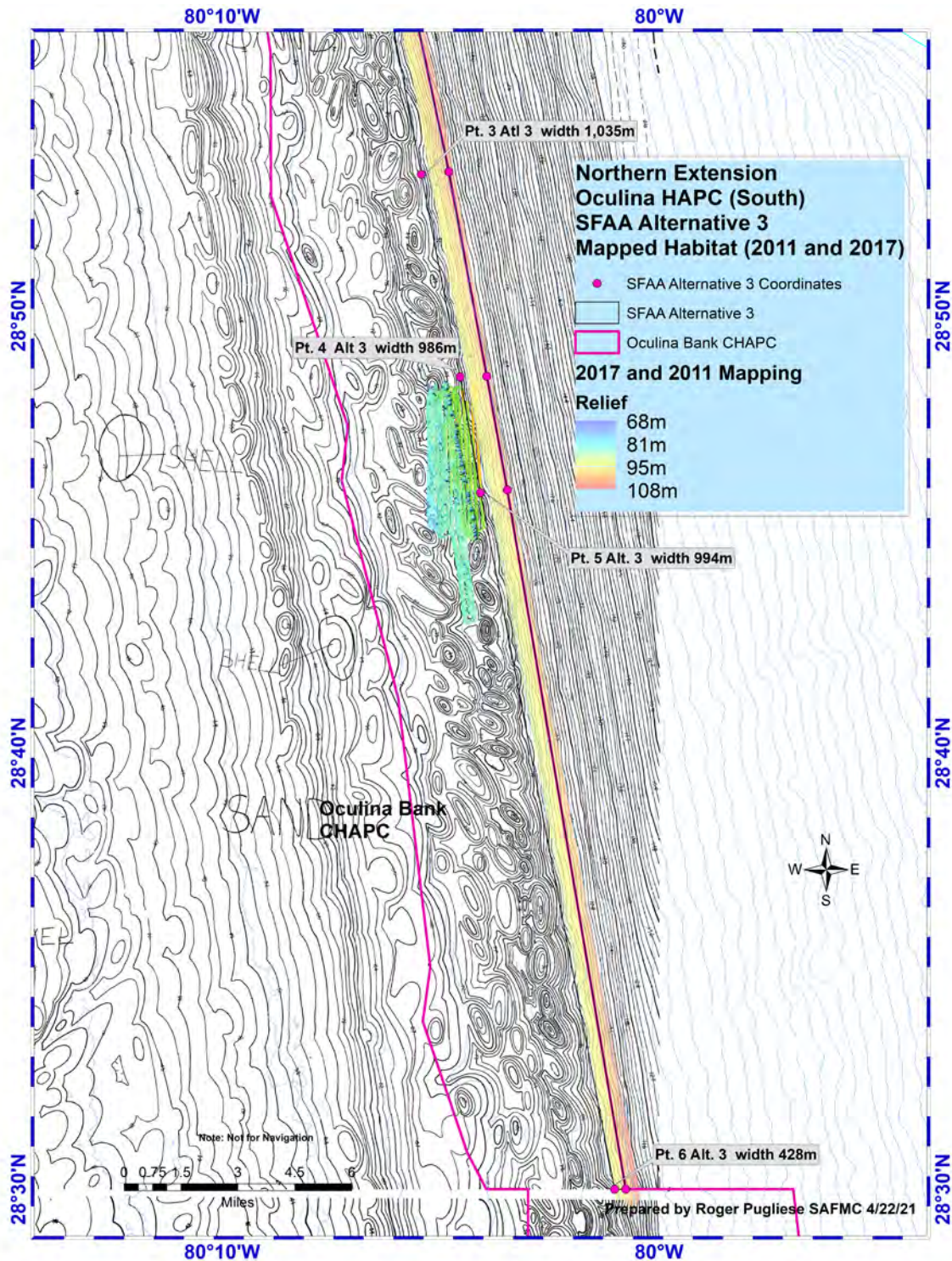


Figure S-13. Northern extension of the OHAPC (South) including the proposed SFAA (Alternative 3) and habitat mapped in 2017 during the SEDCI expedition and during the 2011 Pisces expedition.

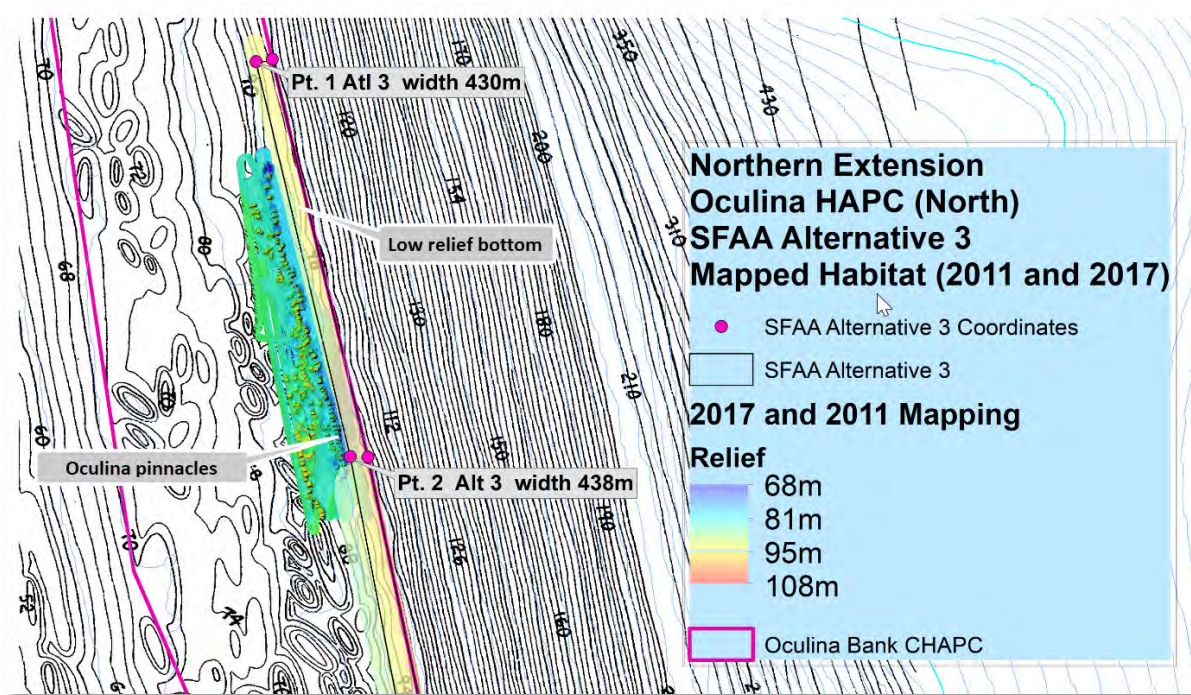


Figure S-14. Zoom in of northern portion of **Alternative 3** on mapped low relief bottom in relationship to mapped high relief Oculina pinnacle habitat distributed inshore.

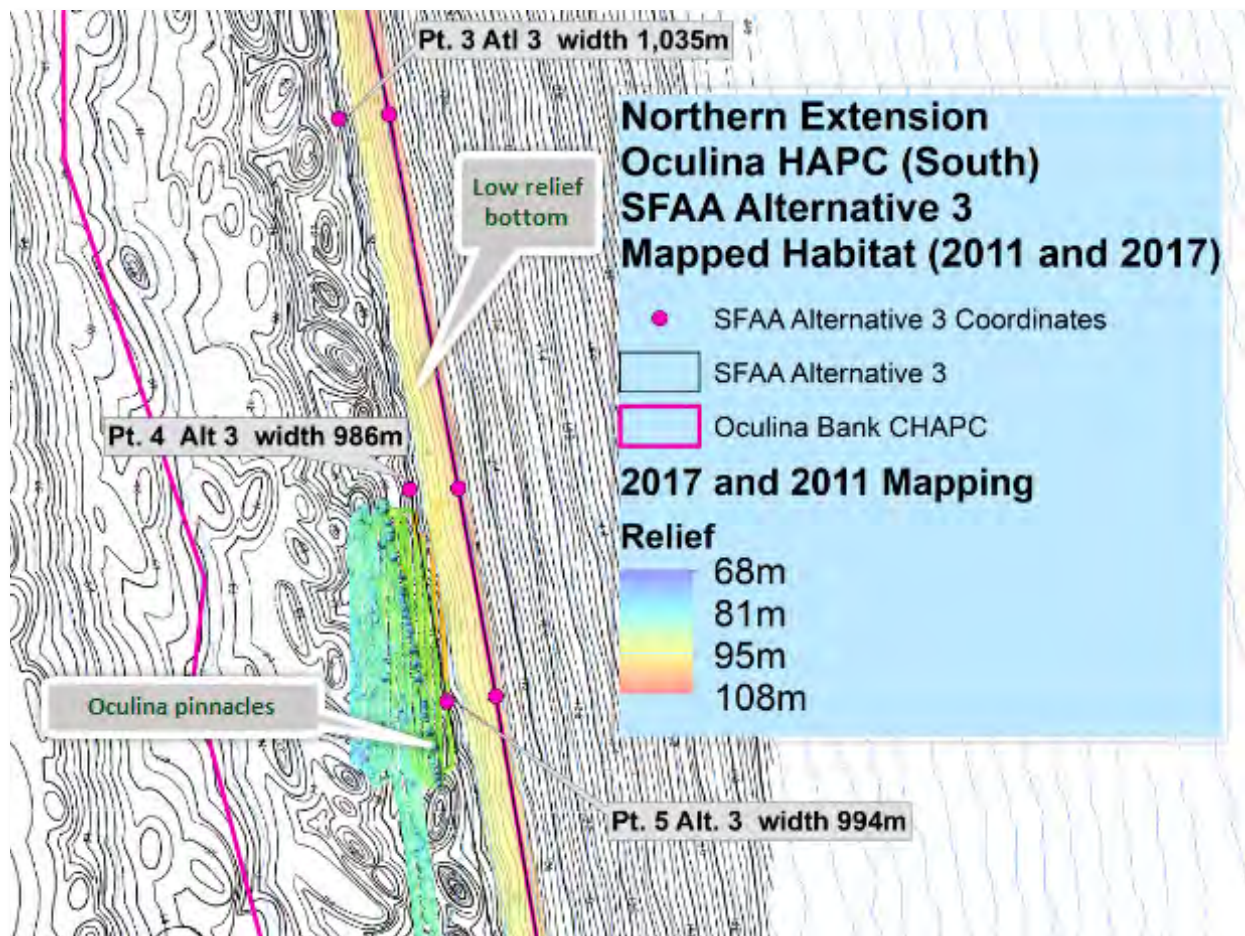


Figure S-15. Zoom in of southern portion of **Alternative 3** on mapped low relief bottom in relationship to mapped high relief Oculina pinnacle habitat distributed inshore.

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 mi² 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 mi² 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. 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

Overall, 19 vessels with an RSLA permit harvested rock shrimp from the South Atlantic on average annually from 2015 through 2019.

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

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** address stakeholder concerns regarding access to historically important fishing grounds along the eastern edge of the northern extension of the OHAPC and may improve stakeholder perceptions of the management process. 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.

Proposed Amendment Timing

	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	May 2021
	Council reviews public input, modifies the document as necessary, and approves actions.	June 2021
	Council approves amendment for formal review.	September 2021
	Regulations effective	Early 2022

How Do I Comment?

Verbal Public Comment will be accepted during the webinars on May 12 & 13, 2021 following the presentation and questions.

Other comments must be received by May 14, 2021 at 5 PM to be included in the public hearing record for the amendment.

- **Written Comments:** Use the online form to submit written comment electronically:
 - [Submit Comment](#)
 - [Read Public Comment](#)
- **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).