

This document is intended to serve as a SUMMARY for the actions and alternatives in Coral Amendment 8. It also provides background information and includes a summary of the expected biological and socio-economic effects from these proposed management measures.

NOTE: Items the Committee/Council needs to address are highlighted in yellow

Why is the South Atlantic Council taking Action?

Discoveries of previously uncharacterized areas of deepwater coral resources have been brought forward by the South Atlantic Council's Coral Advisory Panel (AP). Recent scientific exploration has identified areas of high relief features and hardbottom habitat outside of the boundaries of existing Coral Habitat Areas of Particular Concern (CHAPCs) (**Appendices J-L**). During their 2011 October meeting, the Coral Advisory Panel came forward with recommendations to the South Atlantic Council to revisit the boundaries of the Oculina Bank HAPC, Stetson-Miami Terrace CHAPC, and the Cape Lookout CHAPC to incorporate areas of additional deepwater coral habitat that were previously uncharacterized. The South Atlantic Council reviewed the recommendations and associated Vessel Monitoring System (VMS) analyses of rock shrimp fishing activity for expansion of these areas, and approved the measures for public scoping through Comprehensive Ecosystem-Based Amendment 3 (CE-BA 3). The Coral, Habitat, Deepwater Shrimp and Law Enforcement APs have been working collectively to refine the recommendations since the public scoping process and provide input to the South Atlantic Council on these proposed management measures.

Coral Amendment 8 consists of regulatory actions that focus on deepwater coral ecosystem conservation.

Purpose for Action

The *purpose* of Coral Amendment 8 is to increase protections for deepwater coral based on new information of deepwater coral resources in the South Atlantic.

Need for Action

The *need* for action in Coral Amendment 8 is to address recent discoveries of deepwater coral resources and protect deepwater coral ecosystems in the South Atlantic Council's jurisdiction from future activities that could compromise their condition.

What Are the Proposed Actions?

There are 4 actions being proposed in Coral Amendment 8. Each action has a range of alternatives, including a 'no action alternative' and a 'preferred alternative'.



Proposed Actions in Coral Amendment 8

- 1. Expand Boundaries of the Oculina Bank HAPC
- 2. Implement a Transit Provision through Oculina Bank HAPC
- 3. Expand Boundaries of the Stetson-Miami Terrace CHAPC
- 4. Expand Boundaries of the Cape Lookout CHAPC

What Are the Alternatives?

Action 1. Expand boundaries of the Oculina Bank HAPC

Alternative 1 (No Action). Do not modify the boundaries of the Oculina Bank HAPC

The existing Oculina Bank HAPC is delineated by the following boundaries: on the north by $28^{\circ}30'$ N, on the south by $27^{\circ}30'$ N., on the east by the 100-fathom (183-m) contour, and on the west by $80^{\circ}00'$ W.; and two adjacent satellite sites: the first bounded on the north by $28^{\circ}30'$ N., on the south by $28^{\circ}29'$ N., on the east by $80^{\circ}00'$ W., and on the west by

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 $80^{\circ}03'$ W.; and the second bounded on the north by $28^{\circ}17'$ N., on the south by $28^{\circ}16'$ N., on the east by $80^{\circ}00$ W., and on the west by $80^{\circ}03'$ W.

Alternative 2. Modify the northern boundary of the Oculina Bank HAPC

Sub-Alternative 2a. Modify the northern boundary of the Oculina Bank HAPC: from the current northern boundary of the Oculina HAPC ($28^{\circ} 30^{\circ}$ N) to $29^{\circ} 43.5^{\circ}$ W. The west and east boundaries would follow the 60 meter and 100 meter depth contour lines, respectively, as represented in the simplified polygon (**Figures 1&2**). Sub-Alternative 2a = 430 square miles

Sub-Alternative 2b. Modify the northern boundary of the Oculina Bank HAPC from the current northern boundary of the Oculina HAPC ($28^{\circ} 30$ 'N) to $29^{\circ} 43.5$ 'W. The west and east boundaries would follow close to the 70 meter and 100 meter depth contour lines, respectively, while annexing hard bottom features, as represented in the simplified polygon (**Figures 3&4**). Sub-alternative 2b = 329 square miles

NOTE: The Coral AP and Habitat AP endorse Sub-Alternative 2b as a preferred alternative.

NOTE: The Deepwater Shrimp AP has revised their recommendation for consideration of a northern extension. Their recommendation is a modification of Sub-Alternative 2b, depicted in **Figure 6**.

Alternative 3. Modify the western boundary of the Oculina Bank HAPC from $28^{\circ} 4.5$ 'N to the north boundary of the current Oculina HAPC ($28^{\circ} 30$ 'N). The east boundary would coincide with the current western boundary of the Oculina HAPC (80° W). The west boundary could either use the 60 meter contour line, or the $80^{\circ} 03$ 'W longitude (**Figure 5**). Alternative 3 = 76 square miles

CORAL AMENDMENT 8/ EA

DECISION DOCUMENT

NOTE: The Coral AP and Habitat AP endorse Alternative 3 as a preferred alternative.

NOTE: The Deepwater Shrimp AP has revised their recommendation for consideration of a western extension. The recommendation is a modification of Alternative 3, depicted in **Figure 8**.

DECISION: Select a preferred alternative for both the northern extension of the Oculina Bank HAPC and the western extension of the Oculina Bank HAPC proposed in Action 1.



Prepared by Roger Pugliese SAFMC 4/15/13

Figure 1. Action 1, Sub-Alternative 2a. Proposed Northern Extension of Oculina Bank HAPC and Associated Habitat Mapping and Bathymetry

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Figure 2.Action 1, Sub-Alternative 2a.Proposed Northern Extension of Oculina Bank
HAPC and Rock Shrimp VMS (2003-2013)CORAL AMENDMENT 8/ EADECISION DOCUMENT

Alternative 2a Oculina CHAPC Proposed						
Northern Extension	Points	Longitude*		Latitude*		
SW Corner	1	80	6.035	28	30	
	2	80	9.739	28	53	
	3	80	10.829	28	59.482	
	4	80	13.126	29	9.377	
	5	80	15.117	29	20.016	
	6	80	16.014	29	26.527	
	7	80	16.816	29	34.761	
	8	80	16.509	29	39.125	
	9	80	17.382	29	39.502	
NW Corner	10	80	17.146	29	43.5	
NE Corner	11	80	14.622	29	43.5	
	12	80	12.405	29	30.113	
	13	80	10.989	29	21.904	
	14	80	8.96	29	13.387	
	15	80	3.747	28	48.145	
SE Corner	16	80	0.42	28	30	
*(Degrees Decimal Minu	tes)					
Approx. Area=	430 Square Mile	25				

Table 1. List of Coordinates for Alternative 2a, Proposed Northern Extension of Oculina Bank HAPC



Prepared by Roger Pugliese SAFMC 4/15/13

Figure 3. Action 1, Sub-Alternative 2b. Proposed Northern Extension of Oculina Bank HAPC and Associated Habitat Mapping and Bathymetry

CORAL AMENDMENT 8/ EA

DECISION DOCUMENT



Figure 4. Action 1, Sub-Alternative 2b. Proposed Northern Extension of Oculina Bank HAPC and Rock Shrimp VMS (2003-2013)

Alternative 2b Oculina CHAPC Proposed					
Northern Extension	Points	Longitude*		Latitude*	
SW Corner	1	80	3.955	28	30
	2	80	5.248	28	32.492
	3	80	5.498	28	33.238
	4	80	5.238	28	35.096
	5	80	5.979	28	41.272
	6	80	7.265	28	46.228
	7	80	7.124	28	47.476
	8	80	8.884	28	52.74
	9	80	8.894	28	56.031
	10	80	10.2	29	4.753
	11	80	12.287	29	9.542
	12	80	15.263	29	29.415
	13	80	15.861	29	34.123
	14	80	15.013	29	34.861
NW Corner	15	80	15.804	29	43.5
NE Corner	16	80	14.622	29	43.5
	17	80	12.405	29	30.113
	18	80	10.989	29	21.904
	19	80	8.96	29	13.387
	20	80	3.747	28	48.145
SE Corner	21	80	0.42	28	30
*(Degrees Decimal Minut	es)				
Approx. Area=	329 Square Mil	es			

Table 2. List of Coordinates for Alternative 2b Proposed Northern Extension of

 Oculina Bank HAPC

Table 3. Fishing Associated with Alternatives 2a and 2b, Proposed Northern Extensions of Oculina Bank HAPC (Rock Shrimp VMS: 2003-2013)

	Total VMS	Total Rock	Rock Shrimp Fishing	Total Points in	Fishing in	% Fishing in
Rock Shrimp Fishery	Points	Shrimp	(2-4 knots)	Alternative 2a	Alternative 2a	Alternative 2a
2003 -2007	649,666	133,877	55,222	17,588	7,696	13.9%
2007 -2011	313,379	73,452	22,808	6,887	2,153	9.4%
2011-2013	315,603	11,052	3,226	819	174	5.4%
Total (2003-2013)	1,278,648	218,381	81,256	25,294	10,023	12.3%
Rock Shrimp Fishery	Total VMS Points	Total Rock Shrimp	Rock Shrimp Fishing (2-4 knots)	Total Points in Alternative 2b	Fishing in Alternative 2b	% Fishing in Alternative 2b
2003 - 2007	649,666	133,877	55,222	9,815	3,522	6.4%
2007 -2011	313,379	73,452	22,808	3,454	816	3.6%
2011-2013	315,603	11,052	3,226	648	137	4.2%
Total (2003-2013)	1,278,648	218,381	81,256	13,917	4,475	5.5%



Figure 5. Action 1, Alternative 3. Proposed Western Extension of Oculina Bank HAPC and Rock Shrimp VMS (2003-2013)

CORAL AMENDMENT 8/ EA

DECISION DOCUMENT

Table 4. List of Coordinates for Alternative 3, Proposed Western Extension ofOculina Bank HAPC

Oculina CHAPC Proposed Western					
Extension Alternative 3	Points	Longitude*		Latitude*	
SW Corner	1	80	1.168	28	4.5
	2	80	3	28	16
NW Corner	3	80	3	28	30
NE Corner	4	80	0	28	30
SE Corner	5	80	0	28	4.5
*(Degrees Decimal Minut	es)				
Approx. Area= 76.42 Squa	are Miles				

Table 5.	Fishing Associated with Alternative 3 Proposed Western Extension of Oculina Bank
HAPC (I	Rock Shrimp VMS: 2003-2013)

Rock Shrimp Fishery	Total VMS Points	Total Rock Shrimp	Rock Shrimp Fishing (2-4 knots)	Total Points in West Extension Alternative 3	Fishing in West Extension Alternative 3	% Fishing in Alternative 2b
2003 -2007	649,666	133,877	55222	974	490	0.9%
2007 -2011	313,379	73,452	22808	211	104	0.5%
2011-2013	315,603	11,052	3226	183	90	2.8%
Total (2003-2013)	1,278,648	218,381	81256	1368	684	0.8%

Summary of Effects

Biological: Under Alternative 1 (No Action) gear prohibitions that are currently restricted in the existing Oculina Bank HAPC would continue to be prohibited. Prohibited gear within the Oculina HAPC includes bottom longline, bottom trawl, dredge, pot or trap as well as the use of an anchor, anchor and chain, or grapple and chain. Within Oculina Bank HAPC fishing for or possessing rock shrimp or *Oculina* coral is also prohibited. Alternative 2 and associated subalternatives and Alternative 3 propose increasing the size of the Oculina Bank HAPC and extending the prohibitions to a larger area. As the size of the Oculina HAPC is increased, the biological benefit increases for the coral in the area, including *Oculina*; the species that use the bottom substrate as habitat; and for the rock shrimp populations in the HAPC. Increasing the size of the Oculina Bank HAPC may provide refuge for other important species in the area, such as snapper grouper populations.

Economic: Under Alternative 1 (No Action), the additional areas proposed in Alternatives 2 and 3 would not be protected from bottom longlines; trawls (mid-water and bottom); dredge, pots, or traps; or use of anchor and chain, or use of grapple and chain by all fishing vessels. As a result, the commercial fishery could experience long-term negative impacts from potential loss of habitat for commercial species due to lack of protection of these areas. The various subalternatives under Alternative 2 and Alternative 3 could have negative short-term impacts on the rock shrimp and snapper grouper fisheries.

CORAL AMENDMENT 8/ EA

With regard to recreational fisheries, the anchoring prohibition that would be effect in **Action 1**, **Alternatives 2** and **3** (including sub-alternatives) would not impact fishing activities for the fisheries that do not anchor (e.g., troll fishery for billfish, dolphin, wahoo, tuna, etc.) and impacts on these recreational activities would be minimal. Most fishing vessels would not be able to anchor effectively in the depths proposed under **Alternatives 2** and **3**. Thus, the action of expanding the CHAPCs and prohibiting anchoring of fishing vessels within them would have only a small negative impact on recreational fisheries.

Social: Alternative 1 (No Action) would have minimal social effects because the fleet is already harvesting in open areas and prohibited from working in the closed areas. Alternative 2 and Alternative 3 would impact the rock shrimp fleet and possibly other commercial fisheries by closing some historic, present and potential future fishing grounds. Additionally, if a transit provision is not established (as considered under Action 2), travel costs could negatively affect some operations. If the cost to travel to or from the fishing grounds is too high due to new closed areas under Alternatives 2 and 3, a business may choose to no longer participate in the fishery. The size and location of the closed areas are the two most significant factors that would be expected to negatively impact fishermen.

Administrative: Administrative impacts would be incurred through the rule making process, outreach and enforcement. The impacts associated with enforcement would differ between the alternatives based on the size of the closed area. It is expected the larger the expansion of the HAPC the more enforcement will be needed. Most of the administrative impacts associated with these alternatives relate to at-sea enforcement.

Recommendations for Action 1:

Coral and Habitat Advisory Panel (APs):

The APs reaffirmed their recommendations for preferred alternatives during their joint AP session in May 2013. The Coral and Habitat APs recommend Alternative 2b as preferred for Action 1. The Coral AP noted that establishing a northern extension along the 70-100 meter boundaries would incorporate most of the known deepwater coral habitat presumed to occur in the region. This alternative was developed during the joint Coral and Deepwater Shrimp AP meeting in October 2012.

The APs also reaffirmed their original recommendation for a preferred alternative for a western extension of Oculina Bank HAPC during their May 2013 meeting. The APs recommend Alternative 3 as a preferred under Action 1. The recommendation has been based on recent discoveries that indicate *Oculina* coral mounds and hard-bottom habitat exist to the west of the current boundary, primarily between the two satellite areas.

Deepwater Shrimp AP:

The Deepwater Shrimp AP developed new recommendations for Action 1 during their May 2013 meeting that tweak the northern extension identified in Sub-Alternative 2b and also the western extension of the HAPC identified in Alternative 3. The recent AP recommendations revise recommendations developed during their joint AP meeting (with Coral AP) in October 2012. The revised recommendation for a northern extension was developed to further reduce fishery impacts along the eastern southern boundary where traditional fishing activity occurs. The recommendation follows more closely the rock shrimp trawl track data and not a depth contour.



Figure 6. May 2013 Deepwater Shrimp AP recommendation for additional modifications to the proposed northern extension of the Oculina Bank HAPC.

Note: The Deepwater Shrimp AP recommendation is to adjust the southern portion of the eastern boundary line of the proposed Oculina Bank HAPC northern extension identified in Alternative 2b. The adjustments are to move the boundary west to further reduce fishing tracks impacted. The revised polygon, above, would reduce the rock shrimp VMS points (2-4 knots) for the available time series (2003-2013) to 4.2% from 5.5% in Alternative 2b.

Option 1. Adopt Deepwater Shrimp AP recommendation that modifies the eastern boundary of Sub-Alternative 2b (for a northern extension of Oculina Bank HAPC). Include the recommendation as a new alternative under Action 1. See Figure 6.

Option 2. No Action.

Following the May AP meeting, an informal recommendation was developed and submitted from the AP Chairman to Council staff that would modify the southwestern boundary of the northern extension (identified in Sub-Alternative 2b). The Deepwater Shrimp AP chairman communicated that the modification along the southwest boundary would shave off a concentration of VMS points, and would exclude a productive rock shrimp location utilized in the past 2 years from a proposed HAPC extension.



Figure 7. Informal recommendation to modify the southwest boundary of proposed northern extension of the Oculina Bank HAPC.

Note: On May 24, 2013, Mike Merrifield submitted to Council staff an additional proposed modification of the Deepwater Shrimp AP's recommendation for a northern extension of Oculina Bank HAPC as modified from Alternative 2b. The replacement of two coordinates, as depicted above, would further modify the western boundary and result in a slight reduction (0.09%) in the number of rock shrimp VMS points (2003-2013) (2-4 knots).

Option 1. Adopt the informal recommendation that further modifies the southwestern boundary of Sub-Alternative 2b (for a northern extension of Oculina Bank HAPC). See Figure 7.

Option 2. No Action.

After a review of the more recent VMS data, the Deepwater Shrimp AP also discussed that rock shrimp fishing activity occurred in more recent years (2012) within the proposed western extension of Oculina Bank HAPC. Previously, the AP did not provide a recommendation for Alternative 3, however taking the completed VMS analysis into consideration, a modification of Alternative 3 was developed during the May 2013 AP meeting to preserve rock shrimp fishing grounds in the proposed western extension.



Figure 8. Deepwater Shrimp AP recommendation for modification of the proposed western extension of the Oculina Bank HAPC.

Note: The Deepwater Shrimp AP recommendation is to adjust the southern portion of the western boundary line of Alternative 3 proposed Oculina Bank HAPC western extension east to further reduce rock shrimp fishing tracks impacted. The revised polygon would result in a slight reduction of rock shrimp VMS points (2-4 knots) for the entire time series (2003-2013) to 0.5% from 0.8% for Alternative 3.

Option 1. Adopt Deepwater Shrimp AP recommendation for a western extension of Oculina Bank HAPC. Include the recommendation as an additional alternative under Action 1. See Figure 8.

Option 2. No Action.

SSC:

At their April 2013 meeting, the SSC reviewed Coral Amendment 8. The SSC has offered to be of any assistance in reviewing additional analyses (such as the Socio-Economic analysis) via email or other practical means prior to the Council's final approval. By consensus, the SSC agreed that the proposed actions that modify the CHAPCs succeed in addressing the purpose and need of Coral Amendment 8 and, therefore, actions in Coral Amendment 8 are warranted to protect coral in these areas.

Action 2. Implement a Transit Provision through Oculina Bank HAPC

Alternative 1 (No Action). Do not implement a transit provision through Oculina Bank HAPC. Currently, possession of rock shrimp in or from the area on board a fishing vessel is prohibited.

Alternative 2. Allow for transit through the Oculina Bank HAPC. When transiting the Oculina Bank, gear must be stowed in accordance with CFR Section 622.35 (i)(2). Vessels must maintain a minimum speed of 5 knots while in transit through the Oculina HAPC. In the event minimal speed is not sustainable, vessel must communicate to appropriate contact.

Proposed Actions in Coral Amendment 8

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- 2. Implement a Transit Provision through Oculina Bank HAPC
- 3. Expand Boundaries of the Stetson-Miami Terrace CHAPC
- 4. Expand Boundaries of the Cape Lookout CHAPC

Alternative 3. Allow for transit through the Oculina Bank HAPC with possession of rock shrimp on board. When transiting through the Oculina Bank HAPC, vessels must maintain a speed of not less than 6 knots, determined by ping rate that is acceptable by law enforcement (i.e. 5 minutes), with gear appropriately stowed (stowed is defined as doors and nets out of water). The transit provision includes a call-in specification in case of mechanical failure or emergency.

NOTE: The Deepwater Shrimp AP has revised their recommendation for consideration of a transit provision based on discussions during their May 2013 AP meeting. The recommendation revises Alternative 3 and is their preferred alternative.

DECISION: The Committee needs to select a preferred alternative.

Summary of Effects

Biological: The establishment of a transit provision would not result in biological effects within the Oculina Bank HAPC. A transit provision has been established in the South Atlantic for other fisheries through closed areas to allow for easier access to traditional fishing grounds. Establishing a transit provision through Oculina Bank HAPC may have negative biological benefits for the shrimp stocks that are on the eastern side of Oculina Bank HAPC as fishing vessels will have easier access to them. Without a transit provision, the trip to those fishing grounds would be long and would not be cost effective to fishermen, providing an indirect protection to those shrimp populations.

Economic: Moving the northern boundary further north would increase the direct economic costs in terms of increased expenses (fuel) and lost opportunity, not only due to the loss of fishing grounds in the additional closed area, but also due to fishing time lost by having to transit around the closed area. While the exact extent of the economic effects of Action 1, Sub-

Alternatives 2a and 2b combined with Action 2, Alternative 1 (No Action) cannot be determined, the overall range of economic effects of the sub-alternatives would be characterized best in terms of the total additional area closed. Rock shrimp fishermen would receive some relief from the expected negative economic effects should Action 2, Alternative 2 be selected as the preferred. This alternative would allow fishermen to transit the Oculina Bank HAPC with gear stowed and transiting at a minimum speed of 5 knots.

Social: If additional closed areas are established under **Action 1**, some negative impacts on the fishing vessels and crew may be reduced with a transit provision. The transit provision in **Alternative 2** would be beneficial to the shrimp and snapper grouper vessels by reducing the risk of negative impacts due to increased travel time and costs when traveling around a closed area to outer fishing grounds. Establishment of a transit provision under **Alternative 2** would not be expected to reduce the long-term social benefits of coral protection while reducing some of the negative impacts on the fishing fleet.

Administrative: There would be minor administrative impacts associated with the transit provision. Administrative impacts associated with enforcement would be greatest for these action alternatives. If modifications are made to the transit regulations, administrative impacts would increase on the agency during the development and implementation phase. Alternative 3 would require the vessel to maintain a speed of 6 knots as indicated by an increased ping rate on the vessel monitoring system (VMS). Depending on the frequency of transit, this might lead to a slight increase in the impacts associated with monitoring of VMS by law enforcement. If modifications are not made to the transit provisions to suit the shrimp fishery, impacts on the fishery participants will increase as they will need to modify fishing behavior.

Recommendations for Action 2:

Coral and Habitat APs:

During the joint meeting with the Coral and Deepwater Shrimp APs in October 2012, the Coral AP did not have objections to the transit provision recommendation developed by the Deepwater Shrimp AP. At their November 2012 meeting, the Habitat AP followed suit with no objections to such a provision. The APs noted in their discussion that it was outside of the purview of their charge to the Council to discuss specifications identified in a transit provision.

Deepwater Shrimp AP:

The Deepwater Shrimp AP developed a new recommendation during their May 2013 meeting for a transit provision through Oculina Bank HAPC. Revisions to Alternative 3 were made during the meeting to reduce the minimum speed requirement to from 6 to 5 knots and eliminate the call-in specification in the event of mechanical failure or emergency. The AP discussed removing the call-in specification as a result of guidance from Otha Easley with NOAA's Office of Law Enforcement (participating in the AP meeting), because the practice of vessels communicating to the appropriate contact when necessary currently exists in the regulations and an additional requirement stipulating this provision is not necessary. The AP and the NOAA

Office of Law Enforcement representative discussed that if a procedure already exists in the regulations for a call-in specification in the event of emergency, and law enforcement representatives continue to receive phone calls and respond accordingly, then the call-in specification clause should be removed from the alternative language. The AP recommends the following to replacement language in Alternative 3:

Alternative 3. Allow for transit through the Oculina Bank HAPC with possession of rock shrimp on board. When transiting through the HAPC, vessels must maintain a minimum speed of not less than 5 knots, determined by a ping rage acceptable by law enforcement (i.e. 5 minutes), with gear appropriately stowed (stowed is defined as doors and nets out of water).

Option 1. Adopt Deepwater Shrimp AP recommendation for a revised Alternative 3 (transit provision through Oculina Bank HAPC.) The recommendation would replace the current language of Alternative 3.

Option 2. No Action.

Action 3. Expand boundaries of the Stetson-Miami Terrace CHAPC

Alternative 1. (No Action) Do not expand the boundaries of the Stetson-Miami CHAPC.

The existing Stetson-Miami Terrace CHAPC is delineated by the coordinates identified in CFR §633.35 (n)(iii).

Alternative 2. Modify the southern southeast boundary of the Stetson-Miami Terrace CHAPC western extension in a manner that releases the flatbottom region to the extent possible while maintaining protection of coral habitat (**Figure 9**).

Proposed Actions in Coral Amendment 8

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- 2. Implement a Transit Provision through Oculina Bank HAPC
- 3. Expand Boundaries of the Stetson-Miami Terrace CHAPC
- 4. Expand Boundaries of the Cape Lookout CHAPC

NOTE: The Coral and Habitat APs recommend Alternative 2 as preferred.

Alternative 3. Modify the Coral AP recommendation for expanding the Stetson-Miami Terrace CHAPC to include area of mapped habitat within the expansion, and exclude areas of royal red fishery activity based on VMS data (Figure 10).

NOTE: The Deepwater Shrimp AP has revised their recommendation for Action 3. The AP recommends Alternative 3 as preferred.

DECISION: The Committee needs to select a preferred alternative.



Figure 9. Action 3, Alternative 2. Proposed Modification to the Southeast Boundary of a Western Extension of Stetson-Miami Terrace CHAPC (Deepwater Shrimp VMS 2003-2013)

Stetson-Miami CHAPC Proposed Extension					
Alternative 2	Points	Longitude*		Latitude*	
SE Corner	1	80	2.76	30	4
	2	80	6	30	3
	3	80	9.5	30	3
	4	80	9.5	30	0
SW Corner	5	80	13	30	0
	6	80	12.327	30	7.928
	7	80	11.254	30	13.293
	8	80	9.376	30	19.381
	9	80	8.143	30	23.888
	10	80	7.687	30	26.999
	11	80	5.916	30	34.107
NW Corner	12	80	5	30	37
NE Corner	13	79	52.62	30	37
Point 13 to point 1 follow	IAPC				
*(Degrees Decimal Minut					
Approx. Area= 490 Squar	re Miles				

Table 6. List of Coordinates for Alternative 2 Proposed Western Extension of Stetson-Miami Terrace CHAPC



Prepared by Roger Pugliese SAFMC 4/15/13

Figure 10. Action 3, Alternative 3. Proposed Modification to Western Boundary of Stetson-Miami Terrace CHAPC (Deepwater Shrimp VMS 2003-2013)

Stetson-Miami CHAPC Proposed Extension						
Alternative 3	Points	Longitude*		Latitude*		
SE Corner	1	80	1.839	30	11.952	
	2	80	9.779	30	5.649	
	3	80	11.281	29	52	
SW Corner	4	80	13.105	29	52	
	5	80	13.158	29	57.119	
	6	80	12.327	30	7.928	
	7	80	11.254	30	13.293	
	8	80	9.376	30	19.381	
	9	80	8.143	30	23.888	
	10	80	7.687	30	26.999	
	11	80	5.916	30	34.107	
	12	80	2.429	30	40.034	
NW Corner	13	80	0.901	30	44.996	
NE Corner	14	79	50.11	30	44.996	
Point 14 to point 1 follow	v western bound	ary of Stetson	Miami CH	IAPC		
*(Degrees Decimal Minut	*(Degrees Decimal Minutes)					
Approx. Area= 653 Squar	e Miles					

Table 7. List of Coordinates for Alternative 3, Proposed Extension of Stetson-Miami

 Terrace CHAPC

Table 8. Fishing Associated with Alternatives 2 and 3, Proposed Western Extensions of Stetson-Miami Terrace CHAPC (Deepwater Shrimp VMS: 2003-2013)

Royal Red Fishery	Total VMS Points	Total Red Shrimp	Royal Red Shrimp Fishing (2-4 knots)	Total Points in Stetson-Miami Alternative 2	Fishing in Stetson- Miami Alternative 2	% Fishing in Alternative 2
2003 -2007	649,666	8,778	6,418	245	108	1.7%
2007 -2011	313,379	12,516	8,560	0	0	0.0%
2011-2013	315,603	6,192	4,325	47	22	0.5%
Total (2003-2013)	1,278,648	27,486	19,303	292	130	0.7%
Royal Red Fishery	Total VMS Points	Total Red Shrimp	Royal Red Shrimp Fishing (2-4 knots)	Total Points in Stetson-Miami Alternative 3	Fishing in Stetson- Miami Alternative 3	% Fishing in Alternative 3
2003 - 2007	649,666	8,778	6,418	84	13	0.2%
2007 -2011	313,379	12,516	8,560	7	3	0.0%
2011-2013	315,603	6,192	4,325	15	4	0.1%
Total (2003-2013)	1,278,648	27,486	19,303	106	20	0.1%

Summary of Effects

Biological: Alternative 1 (No Action) would not modify coordinates for the Stetson-Miami Terrace CHAPC. Within the CHAPCs, the use of bottom longline, bottom trawl, mid-water trawl, dredge, anchor, pot or trap, anchor and chain and grapple and chain is prohibited.

Alternative 2 and Alternative 3 would be expected to result in positive biological impacts to the deepwater coral habitat in these areas as it would extend the prohibitions on bottom damaging gear. Given the slow growth of deepwater corals, any impacts would be expected to result in long-term biological losses of deepwater coral habitat as well as the species that utilize this habitat. Under these alternatives, habitats within the Stetson-Miami Terrace proposed CHAPC expansion would be protected from damaging fishing gear such as bottom longline, which would have positive biological impacts on the species in the area.

Economic: Alternative 1 (No Action) would likely have minimal social effects because this would maintain access to harvest areas. The proposed extension of the Stetson-Miami Terrace CHAPC under Alternative 2 could have negative social effects on the royal red shrimp and snapper grouper fishing fleet if historic fishing grounds are no longer available. Alternative 3 would likely have minimal social impacts on the deepwater shrimp fleet because this would maintain access to harvest areas.

Social: Alternative 1 (No Action) would likely have minimal social effects because this would maintain access to shrimp and snapper grouper harvest areas that would be reduced under Alternative 2. The proposed extension of the Stetson-Miami Terrace CHAPC under Alternative 2 could have negative social effects on the royal red and rock shrimp fleet, and possibly other fisheries, if historic fishing grounds are no longer available, but Alternative 3 would likely reduce the potential impacts on the deepwater shrimp fleet because this would maintain access to harvest areas.

Administrative: The expansion of the Stetson Miami Terrace CHAPC (Alternative 2 and Alternative 3) would have minimal administrative impacts. Administrative impacts would be incurred through the rule making process, outreach and enforcement. The administrative impacts would differ between the alternatives in the amount of area they cover. It is expected the larger the expansion of the CHAPC, the more enforcement will be needed. Most of the administrative impacts associated with these alternatives relate to at-sea enforcement.

Recommendations for Action 3:

Coral and Habitat APs:

During their May 2013 joint AP session, the Coral and Habitat APs reaffirmed their recommendation for Alternative 2 as preferred. This alternative was developed after discussions during the joint Coral and Deepwater Shrimp AP meeting in October 2012. During the joint AP meeting, the Coral and Deepwater Shrimp APs discussed the Coral AP's original recommendation for extending the western boundary of the Stetson-Miami Terrace CHAPC. The Deepwater Shrimp AP noted that a portion of the proposed southern extension is productive sand bottom for royal red shrimp. As a result of this discussion, the Coral AP recommended modifying their preferred option for this area to minimize this portion of the southern boundary that is productive royal red sandy bottom within their previously recommended extension. The Habitat AP reviewed the revised Alternative 2 during their November 2012 AP meeting and also endorsed this as a preferred alternative at that time.

Deepwater Shrimp AP:

During their May 2013 meeting, the Deepwater Shrimp AP revised their recommendation for a preferred alternative for Action 3. Previously, the AP recommended Alternative 2 as their preferred. As a result of discussions during their May 2013 meeting, the AP has recommended the following for Action 3:

Alternative 3 is the AP's preferred recommendation. The AP developed a back-up recommendation should Alternative 3 not be considered as preferred (**see Figure 11**). A modification of Alternative 2 is the AP's secondary preferred recommendation with the inclusion of a shrimp fishery access area where the VMS points are concentrated in the proposed southern extension (the access area would allow vessels the capability to drift into the CHAPC, haul-back their gear and turn around).



Figure 11. Deepwater Shrimp AP back-up recommendation for inclusion of a Shrimp Fishery Access Area in the southeast corner of the proposed extension of the Stetson-Miami Terrace CHAPC.

Note: The recommendation is a back-up preferred Alternative for the proposed extension of the Stetson-Miami Terrace CHAPC. The back-up recommendation includes Alternative 2 as proposed with inclusion of a new Shrimp Fishery Access Area for drift-haul back as represented in the tan polygon above. With the inclusion of a new Shrimp Fishery Access Area in Alternative 2, royal red shrimp fishing, or VMS points (2-4 knots) (2003-2013) would be further reduced to 0.1% from 0.7% for Alternative 2 alone.

Option 1. Select the Deepwater Shrimp AP's recommendation for an additional alternative, similar to Alternative 2 and with inclusion of a Shrimp Fishery Access Area, as an alternative for further analysis. See Figure 11.

Option 2. No Action.

Action 4. Expand boundaries of the Cape Lookout CHAPC

Alternative 1. (No Action) Do not modify the boundaries of the Cape Lookout CHAPC.

The existing Cape Lookout CHAPC is identified by the following coordinates:

Latitude	Longitude
34°24'37"	75°45'11"
34°10'26"	75°58'44"
34°05'47"	75°54'54"
34°21'02"	75°41'25"

Proposed Actions in Coral Amendment 8

- 1. Expand Boundaries of the Oculina Bank HAPC
- 2. Implement a Transit Provision through Oculina Bank HAPC
- 3. Expand Boundaries of Stetson-Miami Terrace CHAPC
- 4. Expand Boundaries of Cape Lookout CHAPC

Alternative 2. Extend the northern boundary to encompass the area identified by the following coordinates (Figure 12):

Latitude	Longitude
34°24.6166'	75°45.1833'
34°23.4833'	75°43.9667'
34°27.9'	75°42.75'
34°27.0'	75°41.5'

NOTE: The Coral and Habitat APs recommend Alternative 2 as a preferred.

DECISION: The Committee needs to select a preferred alternative for Action 4.



Figure 12. Action 4, Alternative 2. Cape Lookout CHAPC proposed extension and habitat mapping.

Cape Lookout CHAPC Proposed Extension Alternative 2	Points	Longitude*		Latitude*	
SE Corner	1	75	45.183	34	24.6166
SW Corner	2	75	43.967	34	23.4833
NW Corner	3	75	42.75	34	27.9
NE Corner	4	75	41.75	34	27
*(Degrees Decimal Minutes)					
Approx. Area= 10 Square					

Table 9. List of Coordinates for Alternative 2, Proposed Extension of Cape Lookout

 CHAPC

Summary of Effects

Biological: Under Alternative 1 (No Action), the same prohibitions currently restricted within the CHAPC would apply. Within the CHAPCs, the use of bottom longline, bottom trawl, midwater trawl, dredge, anchor, pot or trap, anchor and chain and grapple and chain is prohibited. Alternative 2 proposes to expand the original Cape Lookout CHAPC along the northern boundary. This would increase the size of the Cape Lookout CHAPC from 316 square kilometers to 324 square kilometers. This expansion would benefit deepwater coral ecosystems and has been proposed based on new information of occurrence of deepwater *Lophelia* corals in the area.

Economic: Alternative 1 (No Action) would likely have minimal economic effects because this would maintain access to current harvest areas. The proposed extension of the Cape Lookout CHAPC under Alternative 2 could have negative economic effects particularly on the snapper grouper fleet if historic fishing grounds are no longer available.

Social: Alternative 1 (No Action) would likely have minimal negative social effects because no current or potential fishing grounds would be closed. The proposed extension of the Cape Lookout CHAPC under Alternative 2 could have negative social effects on the royal red and rock shrimp fleet if historic fishing grounds are no longer available, or if the closed area affected travel to and from harvest areas. The small size of the expansion proposed under Alternative 2 would also be expected to result in less social impact than a larger area.

Administrative: The expansion of the Cape Lookout CHAPC (Alternative 2) would have a minimal administrative impact. Administrative impacts would be felt through the rule making process, outreach and enforcement. The administrative impacts would differ between the alternatives in the amount of area they cover. It is expected the larger the expansion of the Cape Lookout CHAPC the more enforcement will be needed. Most of the administrative impacts associated with these alternatives relate to at-sea enforcement.

Recommendations for Action 4:

Coral and Habitat APs:

The Coral and Habitat APs have recommended Alternative 2 as preferred. During their May 2013 joint AP meeting, they reaffirmed their recommendation for this alternative as preferred. This recommendation was developed during the Coral AP meeting in October 2011 as a result of recent multibeam data and observations of *Lophelia* habitat in an area north of the existing CHAPC.

Deepwater Shrimp AP:

The AP does not have a recommendation for the region identified in Action 4.

Other Items to Address

Did you consider selection of preferred alternatives?

Does the Committee want to approve Coral Amendment 8 for public hearings? Public hearings would be held in August and the Council would consider final approval during the September 2013 meeting.

Option 1. Approve Coral Amendment 8 for public hearings.

Option 2. Do not approve Coral Amendment 8 for public hearings.