# Draft Options Paper Modifications to Shrimp and Golden Crab Access Areas





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

Amendment 11 to the Fishery Management Plan for the Shrimp Fishery of the Atlantic

Amendment 10 the Fishery Management Plan for the Golden Crab Fishery of the Atlantic

5/22/2018



### PURPOSE FOR ACTION

The purpose of Coral Amendment 10, Golden Crab Amendment 10, and Shrimp Amendment 11 is to modify the access areas for the golden crab and rock shrimp fisheries while maintaining protection of deep-water coral, develop an appropriate monitoring system for the golden crab fishery to ensure protection of deep-water coral, and modify transit provisions in the shrimp trawl fishery to make the regulations compatible with vessels.

### **NEED FOR ACTION**

The need for Coral Amendment 10, Golden Crab Amendment 10, and Shrimp Amendment 11 is to increase access in the golden crab fishery and better achieve optimal yield, modify access in the rock shrimp fishery, revise transit provisions for shrimp trawlers to reflect how vessels are designed, and provide protection to essential fish habitat and coral.

### **BACKGROUND**

Coral Habitat Areas of Particular Concern (CHAPC) were first developed in Comprehensive Ecosystem Amendment 1 (SAFMC 1999) and were designed to protect known or likely areas of deep-water coral pinnacles. Some of the corals in the South Atlantic region are reef forming and some deep-water corals reefs are greater than 800 years old. Other corals in the region are non-reef forming and form bush- or tree-like structures. Non-reef forming black coral, for example, can live to be greater than 2,000 years old (Prouty et al. 2011). Coral Amendment 1 prohibited the use of bottom longlines, traps, pots, and bottom trawls within the CHAPCs to protect deep-water coral ecosystems. The CHAPCs were expanded in 2010 and 2015 after new coral areas were discovered (SAFMC 2009, SAFMC 2014). Access areas were created within the CHAPCs to allow for the golden crab and rock shrimp fisheries to operate in historic fishing areas and areas where their gear would not damage or become entangled in coral.

### **Golden Crab**

The golden crab fishery is a limited entry fishery that typically operates off Florida but there are fishing zones throughout the South Atlantic region. The three fishing zones are: Northern Zone (north of 28° N lat), Middle Zone (25 to 28° N lat) and Southern Zone (south of 25° N lat) (**Figure 1.1**). In the Northern Zone, golden crab traps cannot be fished in less than 900 feet, and in the Middle and Southern zones, golden crab traps cannot be fished in less than 700 feet. The Southern Zone includes a sub-zone called the small-vessel sub-zone. Within this sub-zone, fishing vessels must be less than 65 feet and be permitted to fish in the southern zone.

When the Stetson Miami Terrace CHAPC was created, it restricted access for the golden crab fishermen in the Northern Zone. Golden crab fishermen requested that historic access to the fishery be reestablished in the Northern Zone at an advisory meeting in January 2013. There was some concern that new closed areas had limited fishable areas for the fishery. Specially, the fishermen wanted historic information from a South Carolina Department of Natural Resource

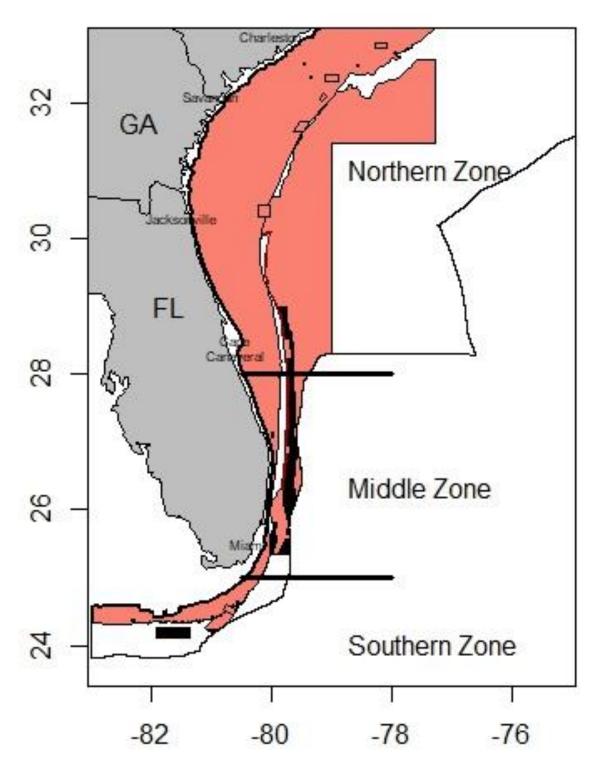
study be plotted, landings from areas north of the Florida/Georgia border be analyzed, and a description of information used to close the area.

Wenner and Ulrich (1987 and 1988) conducted a two-year investigation into potential fishing areas for golden crab off Georgia and South Carolina (**Figure 1.2**). In general, the study caught higher densities of golden crab in areas with silt-clay or foraminiferan tests substrate compared to areas with coral rubble substrate. The highest catch rates occurred from 1,200 to 1,800 feet. In this depth and shallower, male golden crab outnumber female golden crab. When deeper areas were fished, more female golden crab were caught than male.

The researchers indicated that coral mounds were reported to occur in depths from 1,500 to 1,800 feet and reported one large mound in slightly deeper water than most of the golden crab. The study also reported that exploration off Onslow Bay indicated there were very few golden crab.

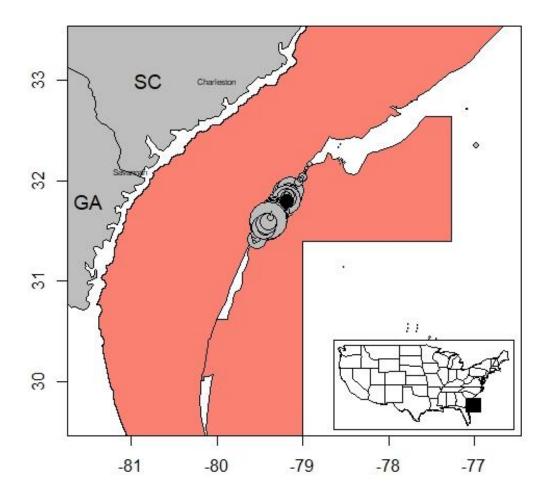
The study described the fishing vessel Heavy Duty II as a vessel that was operating in the fishery in 1984 and 1985 off Georgia and South Carolina. The fishery did not take off mainly due to a lack of capital and lack of suitable marketing outlets. A new fishing vessel moved into the Charleston area in 1987 and began fishing.

Landings data for the trips that occurred in 1984 and 1985 have not been found. Searches were done in the Accumulated Landings System, Atlantic Coast Cooperative Statistic Program, and South Carolina Department of Natural Resources. South Carolina landings of golden crab were reported in 1987, 1995, and 1996; however, these data are confidential.



**Figure 1.1.** Map of the fishing zones for the golden crab fishery in the South Atlantic region. Areas in black are access areas inside Coral Habitat Areas of Particular Concern except for the

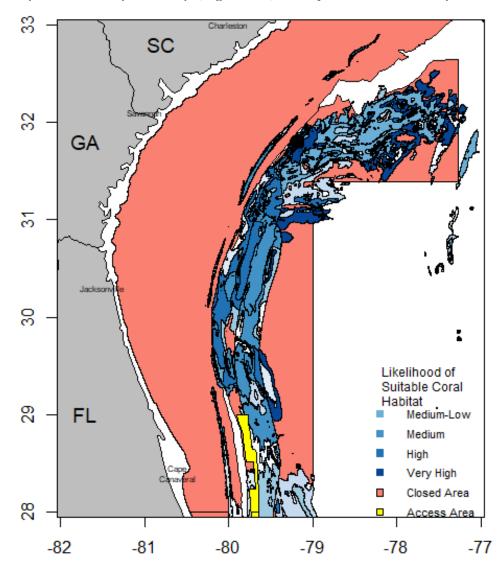
area shaded in black in the Southern Zone (Small-Vessel Sub-Zone). Other shaded areas are closed to golden crab fishing based on depth or other regulation.



**Figure 1.2**. Map of catch per trap for golden crab (gray circle) by location from Wenner and Ulrich (1986) and (1987). Larger circles indicate more crab caught per trap. The black circle in the center is the location of a coral mound identified during the study. Shaded areas are closed to golden crab fishing.

The final selection of the 2009 CHAPCs and access areas were based on reports provided to the Council on coral resources in the South Atlantic region (Appendix A-D in CEBA 1 [SAFMC 2009]) and discussions of the Coral, Habitat Protection, Deep-water Shrimp, Golden Crab, and Law Enforcement Advisory Panels (SAFMC 2009). The Council wanted to provide historic access to the fishery using location of fishing effort (SAFMC 2009). There was limited information on where the golden crab fishery operated off Georgia and South Carolina and there were only three years with South Carolina landings compared to off Florida, which had landings every year.

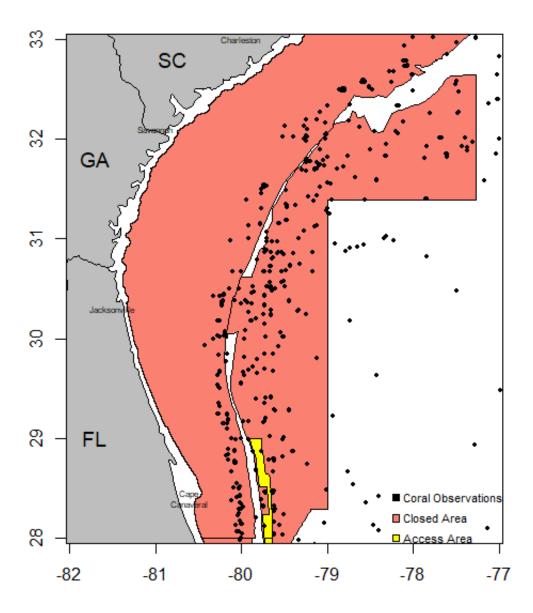
Since the development of these CHAPCs, a predictive model (Kinlan et al. 2012) and the Deep-Sea Coral Research and Technology Program Data Portal<sup>1</sup> were developed (**Figure 1.3**). (NOTE: There are more recent models developed in Hourigan et al. 2017). The predictive model indicates deep-water coral in the location of the Stetson/Miami Terrace. Observed locations of coral habitat from the Deep-Sea Coral Research and Technology Program Data Portal were plotted on a separate map (**Figure 1.4**). Many of these observed points were used in



**Figure 1.3**. Map of predicted coral areas for framework forming scleractinia and *Oculina varicosa* from Kinlan et al (2012). Darker blues indicate higher probability of coral. Areas colored in salmon are closed areas to golden crab fishing and yellow are access areas in the CHAPC.

 $<sup>^{1}\</sup> https://deepseacoral data.noaa.gov/website/AGSViewers/DeepSeaCorals/mapSites.htm$ 

the creation of the predictive model, but observed locations are useful when investigating the potential impact of opening an area to bottom-disturbing gear. The map be informative to assist in siting access areas; however, there is limited information for the region and the maps should be reviewed before use in management.



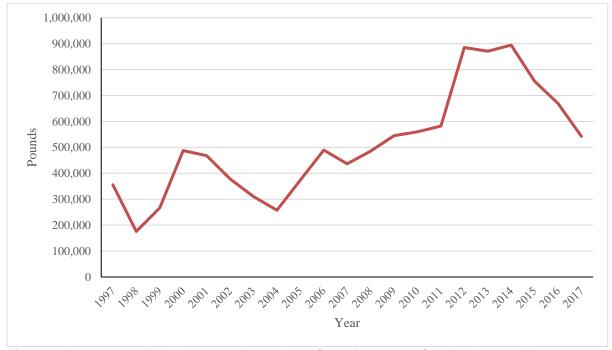
**Figure 1.4**. This is same map from of **Figure 1.3** with observed locations of coral (black squares), closed areas to golden crab fishing (salmon squares), and access area (yellow square). The black squares are reported locations of coral from the Deep-Sea Coral Research and Technology Program Data Portal.

Adding this new area should not risk exceeding the annual catch limit for golden crab as the current catches are below their annual catch limit (**Table 1, Figure 1.5**). The golden crab fishery

is limited entry, and the number of fishermen in each zone are limited to reduce competition for space.

**Table 1**. Commercial landings of golden crab in the South Atlantic region from 2008 to 2017. The annual catch limit (ACL) was put in place in 2012. Source: Atlantic Coast Cooperative Statistics Program Non-Confidential Data Warehouse.

			Landings
Species	Year	ACL (lbs)	(lbs)
Golden Crab	2008		485,273
Golden Crab	2009		545,307
Golden Crab	2010		560,122
Golden Crab	2011		582,284
Golden Crab	2012	2,000,000	884,841
Golden Crab	2013	2,000,000	871,051
Golden Crab	2014	2,000,000	894,352
Golden Crab	2015	2,000,000	755,583
Golden Crab	2016	2,000,000	668,880
Golden Crab	2017	2,000,000	542,829



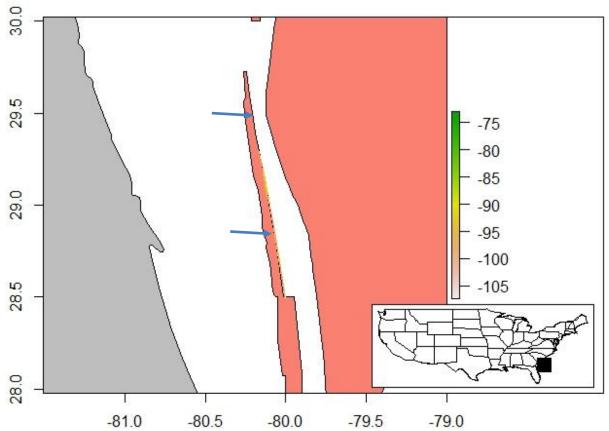
**Figure 1.5**. Landings of golden crab off the Atlantic Coast from North Carolina through Florida, 1997-2017. Source: Atlantic Coast Cooperative Statistics Program Non-Confidential Data Warehouse.

A separate action is considering if vessels engage in the golden crab fishery should be required to have a vessel monitoring system or other type of location reporting device. If vessels are required to have vessel monitoring systems, this will help law enforcement monitor the fishery. However, vessel monitoring systems only monitor where the vessel is located and not where the

traps are located. There was discussion of requiring vessel monitoring systems for golden crab vessels in Golden Crab Amendment 6.

# **Rock Shrimp**

In 2015, the CHAPC was expanded due to the discovery of additional coral mounds. The expansion of these areas had little impact on the golden crab fishermen. However, rock shrimp fishermen were very concerned with the northern expansion of the Oculina Bank, particularly the eastern edge. The Council worked with the Coral and Deep-water Shrimp Advisory Panels to best protect coral and allow for the fishery to operate in historic fishing areas. During and after approval of Coral Amendment 8, the Deep-water Shrimp Advisory Panel requested the line move westward because there was no coral in the area. The eastern edge of the Oculina Bank was mapped in 2017 to provide better resolution into where the coral habitat and soft bottom sediment occurred (**Figure 1.6**).



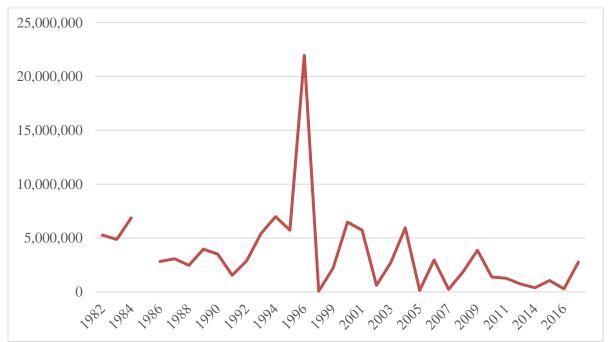
**Figure 1.6**. Map of Oculina Bank and Stetson-Miami Terrace along with the new NOAA mapping data from 2017. The arrows indicate the beginning of the mapping. Due to the resolution of the data, an online <u>map</u> is available to look at mapping data and several other data layers.

The catches of rock shrimp have been variable over the past decade (**Table 2**, **Figure 1.7**). Storms, abundance of other shrimp, regulations, and other factors have likely impacted rock

shrimp landings. Historically (1980s and 1990s), rock shrimp catches were much higher than they are today. But, the fishery had its best year since 2009 in 2017.

**Table 2**. Commercial landings of rock shrimp in the South Atlantic region from 2008 to 2017. Source: Atlantic Coast Cooperative Statistics Program Non-Confidential Data Warehouse.

Species	Year	Landings
Rock Shrimp	2008	1,875,108
Rock Shrimp	2009	3,853,240
Rock Shrimp	2010	1,382,142
Rock Shrimp	2011	1,260,309
Rock Shrimp	2012	238,649
Rock Shrimp	2013	740,806
Rock Shrimp	2014	380,012
Rock Shrimp	2015	1,054,522
Rock Shrimp	2016	285,646
Rock Shrimp	2017	2,768,126



**Figure 1.6**. Landings of rock shrimp off the Atlantic Coast from North Carolina through Florida, 1982-2017. Source: Atlantic Coast Cooperative Statistics Program Non-Confidential Data Warehouse.

# **Shrimp Transit Provisions**

At the March Council meeting, it was pointed out the transit provisions for vessels possessing shrimp through closed areas were not consistent and the cold-water area closure transit provision was not possible for some vessels. Transit provisions in the South Atlantic region have been established for cold-water area closure, marine protected areas, spawning special management

zones, and Oculina Bank Habitat Area of Particular Concern. Each area has a different transit provision and some difference may be warranted. The transit provision for the cold-water closure, which requires gear stowage below deck, may not be possible for some vessels and transit within the Intracoastal Waterway may not be possible. Transit provisions for different closed areas in the region as well as options developed for the Gulf of Mexico and Mid-Atlantic/New England regions.

### POSSIBLE MANAGEMENT APPROACHES

Typical management approaches for protecting deep-water coral has been to prohibit the use of anchor, anchor and chain, or grapple and chain by all fishing vessels and prohibit the use of bottom-disturbing fishing gear. Bottom-disturbing fishing gear include bottom longlines, trawls, dredge, and pots. Unlike other habitats, coral cannot recover quickly after the area has been impacted.

# POSSIBLE ACTIONS AND ALTERNATIVES

# Action 1. Adjust the golden crab access areas Stetson Miami Coral Habitat Area of Particular Concern (CHAPC)

**Alternative 1** (No Action). Do not modify "Allowable Golden Crab Fishing Areas" within the CHAPC boundaries of the northern zone.

**Alternative 2.** Create new "Allowable Golden Crab Fishing Areas" in the northern zone within the Stetson-Miami CHAPC boundaries north of 29 N.

**Sub-Alternative 2a**: Create the allowable fishing areas in areas based on low probability of coral and regulate known areas of high concentration of coral.

**Sub-Alternative 2b**: Create the allowable fishing areas in areas based on low and low-medium probability of coral and regulate known areas of high concentration of coral.

**Sub-Alternative 2c**: Create the allowable fishing areas in areas based on low, low-medium, and medium probability of coral and regulate known areas of high concentration of coral.

**Sub-Alternative 2d**: Create the allowable fishing areas in areas based on low, low-medium, medium, and high probability of coral and regulate known areas of high concentration of coral.

**Sub-Alternative 2e**: Create the allowable fishing areas in areas based on low, low-medium, medium, high, and very high probability of coral and regulate known areas of high concentration of coral.

**Alternative 3.** Create a new "Allowable Golden Crab Fishing Areas" in the northern zone with the Stetson-Miami Terrace CHAPC boundaries north of 29 N following the depth contours from the Allowable Golden Crab Fishing Area in the northern zone (approximately 1,600 ft to 1,900 ft).

#### **Discussion**

Fishermen generally fish from 1,00 to 2,400 feet for golden crab on muddy bottom avoiding areas with high relief or coral. Densities of golden crab tend to be higher in mud and silty areas (Wenner and Ulrich 1987, Reed et al. 2017). The location of potential access areas should focus on areas where deep-sea corals do not exist and high catches of crab can occur. Coral can be impacted by golden crab traps and lines. The Stetson-Miami Terrace CHAPC was created to protect deep-sea coral and the connectivity of the habitats. Alternative 1 would maintain current level of protection for coral. Likelihood of suitable coral habitat models have been developed to predict the likelihood coral exists in a location. The first models were developed by Kinlan et al. 2012 and have been expanded to incorporate information for several different coral taxa (Hourigan et al. 2017). Alternative 2 includes a series of sub-alternatives that would incorporate the information from the most recent likelihood of suitable coral habitat modes. Alternative 3 includes an option to follow the northern end of the access area in the Northern Zone throughout the Stetson-Miami Terrace based on depth. Some of these areas are located within CHAPCs and designated as fishing access areas and some of the areas are outside of the current CHAPCs (Reed et al. 2017). To prevent from fishing gear impacts to coral, coral areas could be considered for designation as CHAPC or redesign the allowable access areas.

# Action 2. Requirements for Golden Crab Vessels or Gear.

**Alternative 1 (No Action).** There is no requirement for fishing vessel or gear engaged in the golden crab fishery to be equipped with a monitoring device or report fishing location.

**Alternative 2.** Require all fishing vessels engaged in the golden crab fishery to be equipped with vessel monitoring system. The purchase, installation, and maintenance of vessel monitoring system equipment must conform to the protocol established by NMFS in the Federal Register.

- **Sub-alternative 2a.** The purchase, installation, and maintenance of the vessel monitoring system equipment and communications costs will be paid for or arranged by the permit holder.
- **Sub-alternative 2b.** The purchase of the vessel monitoring system equipment will be paid for by NMFS, if funding is available, and the installation, maintenance, and communications costs of the vessel monitoring system equipment will be paid for or arranged by the permit holder.
- **Alternative 3.** Require all fishing vessels with a Northern Zone permit engaged in the golden crab fishery to be equipped with vessel monitoring system. The purchase, installation, and maintenance of vessel monitoring system equipment must conform to the protocol established by NMFS in the Federal Register.
  - **Sub-alternative 3a.** The purchase, installation, and maintenance of the vessel monitoring system equipment and communications costs will be paid for or arranged by the permit holder.
  - **Sub-alternative 3b.** The purchase of the vessel monitoring system equipment will be paid for by NMFS, if funding is available, and the installation, maintenance,

and communications costs of the vessel monitoring system equipment will be paid for or arranged by the permit holder.

**Alternative 4**. Require all golden crab trawl lines be equipped with an approved pinger/pingers that function up to a depth of 2,500 feet. The purchase of the pingers will be paid for by the permit holder:

**Sub-alternative 4a.** When fishing in Golden Crab Access Areas north of 29 N.

**Sub-alternative 4b.** When fishing in Golden Crab Access Areas.

**Sub-alternative 4c.** When fishing for golden crab.

**Alternative 5**. Require vessel operators to submit fishing records via NMFS approved hardware/software with GPS capabilities that, at a minimum, archive vessel position data to NMFS. The GPS portion of the hardware is permanently affixed to the vessel.

Sub-alternative 5a. When fishing in Golden Crab Access Areas north of 29 N.

**Sub-alternative 5b.** When fishing in Golden Crab Access Areas.

**Sub-alternative 5c.** When fishing for golden crab.

### **Discussion**

During development of Golden Crab Amendment 6, the Council considered requiring vessel monitoring systems for vessels operating in the golden crab fishery. The majority of actions in Amendment 6 were for the establishment of a catch shares program. The Council ultimately decided not to pursue a catch shares program for golden crab and all actions in the amendment were put on hold.

Pot gear can damage coral and coral habitat. Although fishermen try to avoid these areas, protection of coral and coral habitats is needed because of sensitivity of coral and coral mounds to fishing gear interactions. Since access areas in coral habitat areas of particular concern (CHAPC) are provided for fishermen targeting golden crab and rock shrimp based on historic fishing areas, vessel monitoring systems may be useful to assist for law enforcement in monitoring these offshore fisheries around sensitive habitats. The rock shrimp fishery has a requirement for vessels to be equipped with vessel monitoring systems. The golden crab fishery does not have a requirement for vessels to have vessel monitoring systems (Alternative 1 [No **Action**]). A requirement for all golden crab vessels to have vessel monitoring systems would assist law enforcement in monitoring the golden crab fishery and potential provide information on how the fishery operates (Alternative 2). Since the Council is considering an additional access area in the Stetson-Miami CHAPC based on historic fishing information, the Council could consider just fishermen with a Northern Zone permit to fish within this proposed area (Action 1) to have vessel monitoring system (Alternative 3). Coral mounds have been identified around the proposed access area and requiring vessel monitoring will enable law enforcement to better track the fishing location to ensure incursions into protected areas do not occur. An issue that arises for the golden crab fishery is that vessel monitoring systems are on the vessel and not where the traps are fishing. Due to currents, it may appear a golden crab vessel is fishing in a closed area when they are fishing in an open area. Fishermen indicated that confining the vessel into access areas based on vessel location may lead to safety issues while retrieving gear during inclement weather.

Instead of monitoring the fishing vessel, the golden crab fishermen could be required to have a monitoring device or pinger installed on their trawl lines (**Alternative 4**). This will enable law enforcement to monitor the location of the traps, but law enforcement will need to be in the vicinity of the gear to detect the gear's location. Gears such as pingers do not have the capability to archive location information. Pingers are required in the New England Small Mesh Gillnet Fishery as part of the Harbor Porpoise Take Reduction Plan. The pingers may decrease the potential for lost gear as they have been used to locate displaced gear.

Another option could be to require fishermen to archive GPS locations and map the location of the initial trap, middle, and last trap in the trawl line (**Alternative 5**). Law enforcement would not have real-time data on fishing location, but this could provide information on bottom bathymetry and fishing location.

# Action 3. Adjust the Oculina Bank Habitat Area of Particular Concern (OHAPC) boundary.

**Alternative 1** (**No Action**). Do not modify the Oculina Bank OHAPC boundary to allow additional access for the rock shrimp fishery.

**Alternative 2.** Adjust the boundary on the eastern edge of the Oculina Bank OHAPC expanded in Coral Amendment 8 to follow the 94-meter contour.

**Alternative 3.** Adjust the boundary on the eastern edge of the Oculina Bank OHAPC expanded in Coral Amendment 8 to follow contour line:

Sub-Alternative 3a. Presented by fishermen as part of November 2013 public comment.

Easter	'n		
Edge		Latitude	Longitude
	1	29.725	-80.2634
	2	29.58102	-80.2502
	3	29.56872	-80.2644
	4	29.49025	-80.2544
	5	29.29213	-80.1728
	6	29.18887	-80.1482
	7	28.88742	-80.0907
	8	28.81005	-80.0759
	9	28.7659	-80.0681
	10	28.5	-80.017

Sub-Alternative 3b. Presented by fishermen as part of March 2014 public comment.

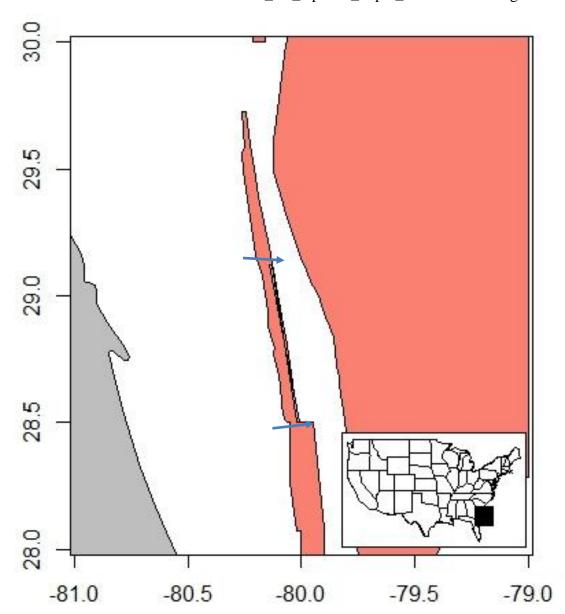
Eastern		
Edge	Latitude	Longitude

1	29.725	-80.2634
2	29.58102	-80.2502
3	29.56872	-80.2644
4	29.49025	-80.2544
5	29.29213	-80.1728
6	29.183	-80.1442
7	29.05973	-80.1246
8	28.90697	-80.0898
9	28.81013	-80.0728
10	28.5	-80.017

**Alternative 4.** Adjust the eastern edge of the Oculina Bank OHAPC south of 28.5 N to follow: **Sub-Alternative 4a.** 100-meter (328 feet) contour. **Sub-Alternative 4b.** 94-meter (308 feet) contour.

### **Discussion**

Fishermen have requested to review the eastern edge of the Oculina Bank to determine if areas of based on past trawling could be reopened to fishing that closed in the Coral Amendment 8 and previously during the development of the Oculina Bank. Fishermen have indicated they have trawled with the eastern boundary (**Alternatives 2** and **3**). Mapping was done in July 2017, which can be considered for the area north of 28.5 N. The area south of 28.5 N was requested based on depth contour (**Alternative 4**) indicating very little relief changes, which may indicate the bottom is not suitable habitat for coral. An online map tool was created to look at the available data for the area and incorporate information on the proposed areas, observed coral locations, and current mapping data. There is concern of sedimentation of coral habitats due to the plum from the fishing gear. A buffer between the coral habitat and fishing area could be considered in the development of the boundaries.



**Figure 1.8**. This is same map as **Figure 1.6** with an example of a fishing access area in the Northern Zone (gray box). Areas colored in salmon are closed areas to trawling.

# **Action 4. Transit Provisions for the Shrimp Trawl Fishery.**

NOTE: The alternatives are repeated for each of the sub-actions. There are sub-actions for coldwater closed area, marine protected areas, spawning special management zones, and Oculina Bank HAPC.

**Alternative 1** (**No Action**). Do not modify transit provisions for the South Atlantic shrimp fishery. Transit provisions for the South Atlantic shrimp fishery vary based on where or when the transit occurs.

Cold Weather Closure: Brown shrimp, pink shrimp, or white shrimp may be possessed on board a fishing vessel in a closed area, provided the vessel is in transit and all trawl nets with a mesh size less than 4 inches (10.2 cm), as measured between the centers of opposite knots when pulled taut, are stowed below deck while transiting the closed area. For the purpose of this paragraph, a vessel is in transit when it is on a direct and continuous course through a closed area.

*Marine Protected Areas:* Transit means direct, non-stop progression through the area. Fishing gear appropriately stowed mean a trawl or try net may remain on deck, but trawl doors must be disconnected from such net and must be secured.

Spawning Special Management Zones: Transit means direct, non-stop progression through the area. Fishing gear appropriately stowed means trawl doors and nets must be out of the water, but the doors are not required to be on deck or secured on or below deck.

Oculina Bank HAPC: Fishing for or possession of rock shrimp in or from the area is prohibited, except for a shrimp vessel with a valid commercial vessel permit for rock shrimp that possesses rock shrimp may transit through the area if fishing gear is appropriately stowed. For the purpose of this paragraph, transit means a direct and non-stop continuous course through the area, maintaining a minimum speed of five knots as determined by an operating VMS and a VMS minimum ping rate of 1 ping per 5 minutes; fishing gear appropriately stowed means that doors and nets are out of the water.

**Sub-alternative a.** Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in a Oculina Bank Habitat Area of Particular Concern

**Alternative 2.** A vessel may transit with direct, non-stop progression through the area. Fishing gear must be appropriately stowed. Trawl or try nets may remain on deck, but trawl doors must be disconnected from such net and must be secured.

This alternative is currently in place as transit provisions for marine protected areas.

**Sub-alternative a**. Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in Oculina Bank Habitat Area of Particular Concern

**Alternative 3.** A vessel may transit with direct, non-stop progression through the area. Fishing gear must be appropriately stowed with trawl doors and nets must be out of the water, but the doors are not required to be on deck or secured on or below deck.

This alternative is currently in place as transit provisions for SMZs.

**Sub-alternative a**. Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in a Oculina Bank Habitat Area of Particular Concern

**Alternative 4.** A vessel may transit the area with a direct and non-stop continuous course through the area, maintaining a minimum speed of five knots as determined by an operating VMS and a VMS minimum ping rate of 1 ping per 5 minutes. Fishing gear must be appropriately stowed with doors and nets out of the water but the doors are not required to be on deck or secured on or below deck.

This alternative is currently in place as transit provisions for Oculina Bank HAPC.

**Sub-alternative a**. Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in a Oculina Bank Habitat Area of Particular Concern

**Alternative 5.** A vessel may transit the area with non-stop progression through the area and fishing great appropriately stowed. A trawl net may remain on deck, but trawl doors must be disconnected from the trawl gear and must be secured.

This is currently in place as transit provisions for Gulf of Mexico Protected Areas.

**Sub-alternative a**. Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in a Oculina Bank Habitat Area of Particular Concern

**Alternative 6.** A vessel may transit with non-stop progression through the South Atlantic EEZ with fishing gear appropriately stowed with trawl doors and nets out of the water and the bag straps must be removed from the net.

This is currently in place as transit provisions for Gulf Shrimp.

**Sub-alternative a**. Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in a Oculina Bank Habitat Area of Particular Concern

**Alternative 7.** Vessels may transit the area provided bottom-tending trawl nets are out of the water and stowed on the reel and any other fishing gear that is prohibited in these areas is

onboard, out of the water, and not deployed. Fishing gear is not required to meet the definition of "not available for immediate use" below<sup>2</sup>, when a vessel transits the area.

This is currently in place in the Northeast Coral Zones.

**Sub-alternative a**. Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in an Oculina Bank Habitat Area of Particular Concern

**Alternative 8.** A vessel may transit the area, unless otherwise restricted, provided that its gear is stowed and not available for immediate use as defined in below. A vessel may transit the area, provided there is a compelling safety reason to enter the area and all gear is stowed and not available for immediate use as defined below.

This is currently in place for NE Protected Areas.

**Sub-alternative a.** Applies to Vessels Possessing Shrimp in Closed Areas Due to Cold Weather Closures

**Sub-Alternative b.** Applies to Vessels Possessing Shrimp in a Marine Protected Areas

**Sub-Alternative c.** Applies to Vessels Possessing Shrimp in a Spawning Special Management Zones.

**Sub-Alternative d.** Applies to Vessels Possessing Shrimp in Oculina Bank Habitat Area of Particular Concern

<sup>&</sup>lt;sup>2</sup> Not available for immediate use means that the gear is not being used for fishing and is stowed in conformance with one of the following methods:

<sup>(1)</sup> *Nets*—(i) *Below-deck stowage*. (A) The net is stored below the main working deck from which it is deployed and retrieved;

<sup>(</sup>B) The net is fan-folded (flaked) and bound around its circumference.

<sup>(</sup>ii) On-deck stowage. (A) The net is fan-folded (flaked) and bound around its circumference;

<sup>(</sup>B) The net is securely fastened to the deck or rail of the vessel; and

<sup>(</sup>C) The towing wires, including the leg wires, are detached from the net.

#### Discussion

The Council requested staff begin working on options to consider regulations for the transit provisions for vessels possessing shrimp. It was pointed out that many vessels may not be able to store their gear below deck as required during a coldwater closure. The Council then discussed whether or not all transit provisions for vessels possessing shrimp should be similar. The four sub-actions were designed to enable discussion of the different transit provisions. There might be instances when transiting a closed area should require different provisions.

Vessels possessing shrimp transiting a closed area due to the coldwater closure are likely vessels targeting Penaeid shrimp. This closed area is in much shallower water when retrieval time is reduced. Since retrieval time is shortened, it might be necessary to have more restrictive gear stowage requirements compared to areas in deeper waters.

Vessels transiting marine protected areas and spawning special management zones have a similar regulation to those created in the Gulf of Mexico when transiting a protected area. These areas vary in size and depth and are designed to protect snapper grouper species and their habitats from fishing impacts. The marine protected areas and spawning special management zones were created in the Snapper Grouper Fishery Management Plan (FMP). The Snapper Grouper FMP would need to be added to the list of amended plans if these are considered for changes.

The Oculina Bank HAPC transit provision was revised in Coral Amendment 8. The Oculina Bank has been designed to protective sensitive Oculina coral pinnacles. The transit provision requires vessels with rock shrimp to have a VMS operating at a specified minimum ping rate, maintain at a minimum speed of five knots, and have doors and gear out of the water. Although stowage requirements are less strict for the Oculina Bank, the VMS and ping rate allow enforcement of the protected area without a direct observation of the infraction.

# DRAFT TIMELINE

Draft options paper reviewed – March 2018 Scoping draft paper presented to Council – June 2018 Scoping hearings – August 2018 Review scoping comments and revise actions/alternations/

Review scoping comments and revise actions/alternatives – September 2018 Review effects analysis and approve for public hearings – December 2018

Public hearings – January/February 2019

Review public hearings comments and approve all actions and alternatives – March 2019

Final action to approve for Secretarial review – June 2019