Appendix C. Fishery Impact Statement

1 Fishery Impact Statement – Social Impact Assessment

This Comprehensive Ecosystem-Based Amendment 2 (CE-BA 2) consists of regulatory actions that focus on management of the octocoral fishery, modification of management of Special Management Zones (SMZs) off South Carolina, modification of sea turtle and smalltooth sawfish release gear requirements for the snapper grouper fishery and non-regulatory actions that designate new essential fish habitat (EFH) and EFH-habitat areas of particular concern (EFH-HAPCs).

1.1 Summary of Biological Effects

The proposed management measures are summarized in **Section 2.0** of the amendment/EA. The South Atlantic Council has selected **Preferred Alternative 3** under **Action 1** which would revise the fishery management unit to include octocorals off of Georgia, North Carolina and South Carolina (**Figure 4-1**). Octocorals off Florida would be removed from the FMP and would result in no federal management. As explained in the description of the no action alternative, although octocoral harvest is managed under the South Atlantic Council's Coral FMP and subsequent amendments, the Florida Fish and Wildlife Conservation Commission (FWC) is responsible for most of the management, implementation and enforcement of regulations because the majority of the harvest occurs in state waters. In a letter dated, April 11, 2011, the State of Florida describes management measures it will implement with regards to octocorals if the South Atlantic Council proceeds with **Preferred Alternative 3** (**Appendix M**). FWC intends to extend Florida octocoral regulations into federal waters off of Florida, establish an annual quota for allowable octocoral harvest in state and federal waters off of Florida, and prohibit harvest of octocorals north of Cape Canaveral, Florida and in the Coral HAPCs adjacent to Florida waters. **Action 1, Preferred Alternative 3** combined with **Action 3, Preferred Alternative 3** will result in the same biological protection to the resource as is currently implemented.

The South Atlantic Council has selected **Alternative 1, No Action** as the preferred alternative under **Action 2**, which would allow the South Atlantic Council to continue to manage octocorals in the South Atlantic, but management of octocorals in the Gulf of Mexico would fall under the state of Florida. This could provide difficulties in monitoring and enforcing the joint South Atlantic and Gulf of Mexico Federal quota. Under **Preferred Alternative 1**, harvest in any of the other Gulf states could not be controlled if a fishery were to develop leaving populations vulnerable to overexploitation. Therefore, adoption of **Preferred Alternative 1 (No Action)** could have negative biological effects on the octocoral resource.

The South Atlantic Council has selected **Alternative 3** under **Action 3** as preferred. If **Preferred Alternative 3**, under Action 1 is selected, the ACL=0 would only apply to octocoral harvest north of Florida. Currently, there is a prohibition of harvest north of Florida and this would continue under this alternative. The biological impacts to the resource would remain the

same as the status quo. It is expected the State of Florida would continue to manage octocorals in Florida and would continue to implement the 50,000 colony quota in State waters.
The South Atlantic Council has selected **Alternative 2** and **Alternative 3** as Preferred under **Action 4**. The major species targeted in the SMZs include Atlantic spadefish, black sea bass, flounder, king mackerel, sharks, and Spanish mackerel. However, little information exists on commercial fishing in Special Management Zones off South Carolina and therefore the biological impacts of **Preferred Alternative 2** and **Preferred Alternative 3** are difficult to quantify at this time due to minimal data. It is expected that modifying management of the SMZs to restrict commercial fishing effort to the bag limit could possibly reduce the amount of harvest in the area and have a positive biological impact on the species regularly targeted. However, there is little information on the amount of commercial harvest occurring in the SMZs and any commercial effort is expected to be small.

The South Atlantic Council has selected **sub-Alternatives 4a** and **4b** as preferred alternatives under **Action 5** which would modify the sea turtle release gear requirements for the snapper grouper fishery. The biological benefits of **Preferred Alternative 4** are likely to be very similar to **Alternative 1 (No Action). Preferred Alternative 4** and its sub-alternatives reference the updated release gear design specifications that now include a wider range of gear design parameters. These new parameters should be appropriate for the lighter tackle used in the snapper grouper fishery. The alternative and its sub-alternatives would also change the sea turtle release gear requirements based on the size of the vessel. For the safety of the crew and the animal, all incidentally caught sea turtles are recommended to be brought on board when working to disentangle/dehook them, regardless of a vessel's freeboard height. Since vessels with freeboard heights of greater than four feet would still be required to carry long-handled equipment, **Preferred sub-Alternative 4b** is also unlikely to have negative biological effects.

The South Atlantic Council has selected **Alternative 2** and **sub-alternatives 2a** and **2b** and **Alternative 3** under Action 6 as preferred. **Preferred Alternative 2** addresses an oversight in the initial designation of Snapper Grouper EFH through the Comprehensive EFH Amendment (SAFMC 1998b) where the habitat plan describes in detail tilefish habitat and proposes the general distribution between 100 and 300 meters as an area considered to be EFH-HAPC for tilefish. While considered EFH, the area was not included in the proposed list of EFH-HAPCs. **Alternative 2a** for golden tilefish and **Alternative 2b** for blueline tilefish propose respective detailed descriptions for EFH-HAPCs. The additional specification of the MPAs for deepwater species as EFH-HAPCs (**Preferred Alternative 3**) is intended to protect the entire area as a unique habitat complex and enhance EFH consultations pertaining to non-fishing activities that could potentially impact these protected habitats.

In Action 7, the South Atlantic Council has selected **Alternative 2** as preferred. **Preferred Alternative 2** proposes to further emphasize the importance of these protected deepwater ecosystems by designating them as EFH-HAPCs (**Figure 4-7**). While habitats within the boundaries of the coral HAPCs are essential fish habitat for other managed species, designation

of the entire area as an EFH-HAPC would in policy and permit review, support consideration of conservation of the contiguous habitats found in this unique deepwater ecosystem.

Under **Action 8, Preferred Alternative 3** limits the EFH designation to the upper 10 meters of the surface as bounded by the Gulf Stream, an alternative developed by NMFS in the development of the FEIS (NMFS 2002) for the Pelagic *Sargassum* Habitat FMP. The action alternatives proposed in Action 8 would not result in direct impacts to the biological resources of the west-central Atlantic Ocean. Rather, EFH designation under this option would provide a future opportunity for the South Atlantic Council to establish regulations to protect EFH from fishing activities in the EEZ and to review and recommend EFH conservation measures to protect surface waters from non-fishing activities which are undertaken, authorized, or funded by Federal agencies.

1.2 Summary of Economic Effects

Under the South Atlantic Council's selected **Action 1**, **Preferred Alternative 3**, octocorals will be partially removed from the South Atlantic FMP and would therefore not be protected in federal waters off of Florida (**Figure 4-1**) while harvest of octocorals in waters off of the other South Atlantic states would remain within the South Atlantic Coral FMP. If the State of Florida extends their jurisdiction to cover both state and federal waters, as they are expected to do, no short or long-term changes would be expected with regard to economic effects resulting from this action since Florida would take over management of these areas. Management measures would be expected to be equivalent to or exceed current management measures in place.

Given the **Preferred Alternative 3** under **Action 1** to shorten the management unit to encompass North Carolina, South Carolina, and Georgia federal waters only, **Alternative 1 (Preferred)** under Action 2 has been chosen as preferred, which allows Florida to manage Atlantic and Gulf federal waters off of Florida. There are no expected changes to long-term economic effects as a result **Preferred Alternative 1**. **Preferred Alternative 1** refers only to who manages the fishery and would not change the quota or the management mechanism currently in place.

The South Atlantic Council has selected **Alternative 3** under **Action 3** as preferred. Because there are no landings of octocorals occurring in federal waters north of Florida, and harvest of octocorals is prohibited north of Cape Canaveral, FL, the **Preferred Alternative 3** (ACL = 0) is not expected to result in any negative economic effects.

The South Atlantic Council has selected both **Alternative 2** and **Alternative 3** as preferred under **Action 4**. Both **Preferred Alternative 2** and **Preferred Alternative 3** would be expected to result in reductions in ex-vessel revenues to commercial fishermen, though some mitigation of these reductions could occur as a result of fishing in other areas. At the same time, **Preferred Alternative 2** and **Preferred Alternative 3** would be expected to result in increased economic benefits to recreational fishermen as a result of allocation of the harvest that would otherwise be

taken by commercial fishermen to recreational fishermen. Additional economic benefits would be expected to result in healthier and sustainable populations at these sites.

The South Atlantic Council has selected **Alternative 4** and **sub-alternative 4a** and **4b** under **Action 5** as preferred. Out-of-pocket release gear expenses per *new entrant* for **Preferred Alternatives 4a and 4b** are estimated to range from $324-$490 for vessels with less than 4 feet freeboard and from $564-$987 for vessels with more than 4 feet freeboard. There are no release gear expenses for those already participating in the fishery since all of the gear required under **Preferred Alternatives 4a and 4b** is already required under **Alternative 1 (No Action)**. However, under **Preferred Alternatives 4a and 4b**, vessels will be required to carry less gear. This will free up more space onboard the vessels.

For **Actions 6-8**, designation of EFH or EFH-HAPCs for various species the economic impacts are expected to be similar. A healthy, sustainable resource is presumed to result in increased long-term economic benefits relative to less protection. Assuming the areas are appropriate to the resource, the Council's preferred alternatives for these actions would be expected to result in greater protection of the resource than **Alternative 1 (No Action)** and provide for increased long-term economic benefits.

1.3 Summary of Social Effects

The social effects from modifying management of octocorals through measures within the CE-BA 2 are mostly indirect, and pertain to the potential costs and benefits of shortening the management unit for octocorals under the South Atlantic Coral FMP. Most social effects relating to the octocoral fishery are contingent upon Florida Fish and Wildlife Conservation Commission (FWC) assuming management of the fishery in Florida state and federal waters. The beneficial social effects would include more local management and streamlined decision-making. The CE-BA 2 would also address user conflicts on Special Management Zones off South Carolina, and would "level the playing field" for both recreational and commercial fishermen utilizing these areas. Actions taken within the CE-BA 2 would be expected to result in positive social benefits for commercial snapper grouper fishermen by minimizing costs for gear designed to effectively release sea turtle and smalltooth sawfish. Long-term benefits to society are expected with increased protection to areas deemed essential fish habitat (EFH).

1.4 Summary of Administrative Effects

All proposed actions in the CE-BA 2 would require coordination between NOAA Fisheries Service, Office of Law Enforcement, Office of Sustainable Fisheries, and the Office of General Counsel. Public outreach would need to be conducted in order to inform South Atlantic octocoral fishery participants of the annual catch limits and revised management area for the octocoral fishery. However, because the action will be change the way the fishery operates this impact is expected to be minimal. **Action 5** would require education and outreach to the snapper grouper fishermen to explain the revision of the sea turtle handling tools. Regulatory text would need to be developed to include the specifications of the management measures in this document.

The cumulative administrative burden for all actions contained within this amendment is expected to be minimal.