Regulatory Amendment 34

Designation of Special Management Zones (SMZ) in North and South Carolina

> Options Paper September 2019

Background

In March 2019, the North Carolina Division of Marine Fisheries (NCDMF) and the South Carolina Marine Resources Division (SCMRD) requested that the South Atlantic Fishery Management Council (Council) designate artificial reef sites in the exclusive economic zone (EEZ) off those states as special management zones (SMZ). Regulatory Amendment 8 to the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2000) was the last amendment to the FMP to address SMZ designation. That framework amendment established new and expanded existing SMZs off Georgia (Final Rule: 65 FR 61114). In June 2019, the Council directed staff to begin development of an amendment to address the states' requests.

The process to designate SMZs around artificial reefs (permitted through the Army Corps of Engineers) was established in the Snapper Grouper FMP in 1983 (see **Appendix A**) with the main intent being to *create incentive to create artificial reefs and fish attraction devices that will increase biological production and/or create fishing opportunities that would not otherwise exist.* As described in the FMP, a monitoring team, comprised of staffs from the South Atlantic Council, the National Marine Fisheries Southeast Regional Office (SERO), and the Southeast Fisheries Science Center (SEFSC) is charged with evaluating each SMZ request based on the following criteria: (1) fairness and equity; (2) promoting conservation; (3) excessive shares; (4) ensure SMZs are consistent with the objectives of the FMP, the Magnuson Act and other

applicable law; (5) consider the natural bottom in and around surrounding potential SMZs and impacts on historical uses; and (6) cumulative impacts.

The evaluation will be included as an appendix to the regulatory amendment. The Interdisciplinary Plan Team (IPT) will focus on the effects analysis of the requested action(s) to satisfy the regulatory requirements.

Proposed management changes in this framework amendment

- Establish 30 SMZs in the EEZ off North Carolina at artificial reef sites and, within the SMZs, eliminate the use of efficient gear and restrict allowable harvest by spear.
- Establish four SMZs in the EEZ off South Carolina at artificial reef sites and, within the SMZs, eliminate the use of efficient gear and restrict allowable harvest to the recreational bag limit.

Expected framework amendment timing

June 2019 Guidance to begin work on a framework amendment

September 2019 Review options and approve for public hearings.

Fall 2019 Conduct public hearings

December 2019 Review public comment and draft framework amendment and submit for

formal review

COMMITTEE ACTION: CONSIDER IPT COMMENTS BELOW AND REVISE TIMING AS APPROPRIATE

Council Guidance for Purpose and Need Statements

Purpose: Eliminate the use of efficient gear (powerheads, bandit gear, pots, longlines) to harvest snapper grouper species at all artificial reef sites in the exclusive economic zone off North Carolina (south of Cape Hatteras) and South Carolina by designating the sites as special management zones. Restrict allowable harvest of snapper grouper species by spear at artificial reef sites off North Carolina and restrict all harvest of snapper grouper species to the recreational bag limit at artificial reef sites off South Carolina.

Need: Reduce the adverse effects to snapper grouper species and habitat by efficient gear and increase fishing opportunities to meet the original intent of artificial reef sites.

The following rationale from North Carolina's request letter may help the Council revise the purpose and need. This rationale will also be included in Chapter 1 of the document that provides details of why the Council is proposing the action.

- The catch per unit effort of black sea bass pots, sink nets, and bandit gear is high and
 these types of gear have the potential to remove large amounts of aggregated snapper and
 grouper species from artificial reef sites, disproportionately affecting access to other
 anglers.
- SMZ designation would ensure equitable access to the fishery resource around artificial reefs to all user groups.
- SMZ designation will increase opportunities for anglers by reducing the potential impact restricted gear can have on the relative abundance of snapper and grouper species.
- By limiting allowable gear to handline, rod and reel, and spearfishing, fishery removals will be moderated and allow for greater access by anglers if increasing effort occurs.
- Limiting spearfishing gear to the lower recreational limits of snapper grouper species may mitigate some of the biological concerns for the resource that arise when species with complex and social life histories are selectively harvested.
- Spearfishing gear has the potential to selectively remove large individuals from a reef and by limiting removals to the recreational limits lessens the chance that the complex community structure on the site is affected.

IPT Comments:

The IPT recognizes that a monitoring team will evaluate the proposed SMZs in terms of fairness and equity, promoting conservation, and excessive shares. The IPT had the following comments when they discussed these items and the states' requests.

• Promoting conservation—Although artificial reefs may concentrate fish in one area increasing their vulnerability to exploitation, limiting efficient gear would protect habitat and control local exploitation. In addition, artificial reefs constitute essential fish habitat (EFH) and EFH Habitat Areas of Particular Concern (EFH HAPC) in the South Atlantic.

- Are there data to indicate conflict among users exists?
- Commercial interests may not perceive restricted use of artificial reefs as being fair and equitable.
- Excessive shares this is one of the three criteria in the original SMZ designation protocol. Request Council definition.
- Consider that black sea bass and scup are managed north of Cape Hatteras by the Mid-Atlantic Council. Hence, prohibition of fishing gear affecting those fisheries would not be under the purview of the SAFMC. This would affect three of the proposed artificial reefs.

COMMITTEE ACTION:

- REVIEW PURPOSE STATEMENT AND MODIFY AS NEEDED
- PROVIDE GUIDANCE AS APPROPRIATE

Options for Proposed Actions

1. Establish Special Management Zones in the Exclusive Economic Zone off North Carolina

Option 1 (No Action). There are currently no special management zones in the exclusive economic zone off North Carolina at permitted artificial reef sites. Do not establish new special management zones in the exclusive economic zone off North Carolina at permitted artificial reef sites. The allowable gear for the snapper grouper fishery management plan for the commercial and recreational sectors are handline, rod and reel, spear, bandit gear, powerhead, pot, and longline (the last two are commercial sector only). Do not implement new restrictions on fishing gear used to harvest snapper grouper species on designated artificial reefs in federal waters off North Carolina.

Option 2. Establish 30 special management zones at state permitted artificial reef sites in the exclusive economic zone off North Carolina (**Table 1 and Figures 1-3**). Within the special management zones, harvest of snapper grouper species would be allowed with handline, rod and reel, and spear. All harvest by spear would be limited to the applicable recreational bag limit.

Others?

Discussion:

The NCDMF requested designation of 30 artificial reef sites in the EEZ off North Carolina as SMZs. The sites were originally created through the Army Corps of Engineers permitting process. NCDMF requested fishing be allowed in the SMZs using handline, rod and reel, and spear. Further, NCDMF requested that harvest of snapper grouper species with spearfishing gear would be limited to the recreational bag limit. NCDMF's rationale for the proposed restrictions is to increase opportunities for anglers by reducing the potential impact restricted gears can have on the relative abundance of snapper and grouper species. By limiting allowable gears to handline, rod and reel, and spearfishing gear, fishery removals will be moderated and allow for greater access by anglers if increasing effort occurs. Additionally, limiting spearfishing gear to the lower recreational limits of snapper grouper species may mitigate some of the biological concerns for the resource that arise when species with complex social life histories are selectively harvested. Numerous snapper and grouper species have reproductive strategies that include complex social structures predicated on large individuals.

IPT Comments:

• Some IPT members requested discussion of SMZ designation approach: designation for all requested areas in one option or consideration of individual areas in separate options. In addition, discussion of why North Carolina choose these particular 30 sites would be helpful. Are there other artificial reef sites that were not included in their request?

- Consider that North Carolina's request would only allow the use of three gear types.
 Does the Council want to discuss other reasonable alternatives that should be analyzed
 and included for public comment? Consider that black sea bass and scup are managed
 north of Cape Hatteras by the Mid-Atlantic Council. Hence, prohibition of fishing gear
 affecting those fisheries would not be under the purview of the SAFMC. This would
 affect three of the proposed artificial reefs.
- Consider that North Carolina's request would limit harvest to the applicable bag limits only for spearfishing gear. Does the Council also want to consider limiting harvest to the applicable bag limit by all gear types?
- Discuss whether to structure framework amendment with separate actions for 1) area, and 2) gear restrictions (four actions overall, two for each state). This may be appropriate if the Council intends to include other sub-options for sites and allowable gears.
- Discuss whether scoping should be conducted to refine site selection.
- Clarify the Council's intent regarding development of System Management Plans for all managed areas, including SMZs. Note: System management plans (SMP) have been developed and adopted for the Spawning SMZs and Deepwater Marine Protected Areas (MPA).

COMMITTEE ACTION:

- CONSIDER IPT COMMENTS/QUESTIONS AND PROVIDE GUIDANCE AS APPROPRIATE
- APPROVE ACTION 1, AS MODIFIED, FOR INCLUSION IN REGULATORY AMENDMENT 34
- OTHERS?

2. Establish Additional Special Management Zones in the Exclusive Economic Zone off South Carolina

Option 1 (No Action). There are currently 29 special management zones at permitted artificial reef sites in the exclusive economic zone off South Carolina. Do not establish additional special management zones in the exclusive economic zone off South Carolina at permitted artificial reef sites. Allowable gear within the special management zones includes handline, rod and reel, and spear (without powerheads), and all harvest of snapper grouper species is limited to the recreational bag limit. Do not implement new restrictions on fishing gear used to harvest snapper grouper species on designated artificial reefs in federal waters off South Carolina.

Option 2. Establish four additional Special Management Zones at permitted artificial reef sites in the exclusive economic zone off South Carolina (**Table 2 and Figures 4-5**). Within the special management zones, harvest of snapper grouper species would only be allowed with handline, rod and reel, and spear and harvest would be limited to the applicable recreational bag limit.

Discussion:

Twenty-nine artificial reef sites in the EEZ off South Carolina have been designated as SMZs. Four additional artificial reef sites have been established in recent years, and the South Carolina Marine Resources Division (SCMRD) requested the sites be designated as SMZs with the same restrictions on fishing gear as existing SMZs off South Carolina. SCMRD requested to limit angling activities to handheld hook-and-line gear and spearfishing gear (excluding powerheads). In addition, SCMRD requested that the use of fish traps, longlines, gill nets, and trawls be prohibited, and harvest of snapper grouper species be limited to the federal recreational bag limits.

IPT Comments:

- Note that current harvest restrictions in SC SMZs also apply to CMP species.
- For the SMZs in federal waters off South Carolina, including 622.182(a)(1)(i) through (xi) and (xxii 22) through (xxix 39), the following gear restrictions apply to harvest of South Atlantic snapper-grouper species:
 - o Harvest and possession is limited to the bag limits specified §622.187(b)
 - o Fishing may only be conducted with handline, rod and reel, and spearfishing gear
 - o Use of a sea bass pot or bottom longline is prohibited
 - Use of a powerhead to take is prohibited

The powerhead prohibition is complicated by the table at 622.182(a)(2) and paragraph (c). The former table excludes Hilton Head Reef/Artificial Reef-T from the powerhead prohibition but the later paragraph prohibits powerheads in all SMZs off South Carolina, which includes Hilton Head Reef. Council should clarify restrictions regarding use of powerheads to harvest snapper grouper species in the Hilton Head Reef SMZ.

COMMITTEE ACTION:

- CONSIDER IPT COMMENTS/QUESTIONS AND PROVIDE GUIDANCE AS APPROPRIATE
- APPROVE ACTION 2, AS MODIFIED, FOR INCLUSION IN REGULATORY AMENDMENT 34
- OTHERS?

Table 1. North Carolina artificial reefs proposed as special management zones based on permitted

ocations including centroids and radius (Source: NC DMF August 2019).			
Reef Name	Centroid Latitude DDM	Centroid Longitude DDM	Radius (ft)
AR-130	36° 0.192' N	75° 31.800' W	1500
AR-140	35° 56.740' N	75° 31.781' W	1500
AR-145	35° 54.017' N	75° 23.883' W	1500
AR-220	35° 8.117' N	75° 40.633' W	3000
AR-225	35° 6.768' N	75° 39.322' W	1500
AR-230	35° 6.133' N	75° 42.933' W	1500
AR-250	34° 56.900' N	75° 54.860' W	1500
AR-255	34° 55.483' N	75° 57.910' W	1500
AR-285	34° 33.383' N	76° 26.350' W	1500
AR-300	34° 18.517' N	76° 24.133' W	1500
AR-302	34° 10.265' N	76° 13.703' W	1500
AR-305	34° 16.683' N	76° 38.650' W	3000
AR-330	34° 33.634' N	76° 51.267' W	1500
AR-340	34° 34.319' N	76° 58.345' W	1500
AR-345	34° 32.300' N	76° 58.467' W	1500
AR-355	34° 21.183' N	77° 20.000' W	1500
AR-362	34° 15.717' N	77° 30.420' W	1500
AR-366	34° 12.950' N	77° 25.250' W	1500
AR-368	34° 9.567' N	77° 25.833' W	1500
AR-372	34° 6.273' N	77° 44.914' W	1500
AR-376	34° 3.283' N	77° 39.633' W	1500
AR-382	33° 58.581' N	77° 41.172' W	1500
AR-386	33° 57.517' N	77° 33.400' W	1500
AR-400	33° 29.302' N	77° 35.262' W	1500
AR-420	33° 51.050' N	78° 6.710' W	1500
AR-440	33° 49.800' N	78° 13.083' W	1500
AR-445	33° 44.783' N	78° 14.100' W	1500
AR-455	33° 47.033' N	78° 17.883' W	1500
AR-460	33° 50.089' N	78° 22.022' W	1500
AR-465	33° 23.423' N	78° 11.052' W	1500

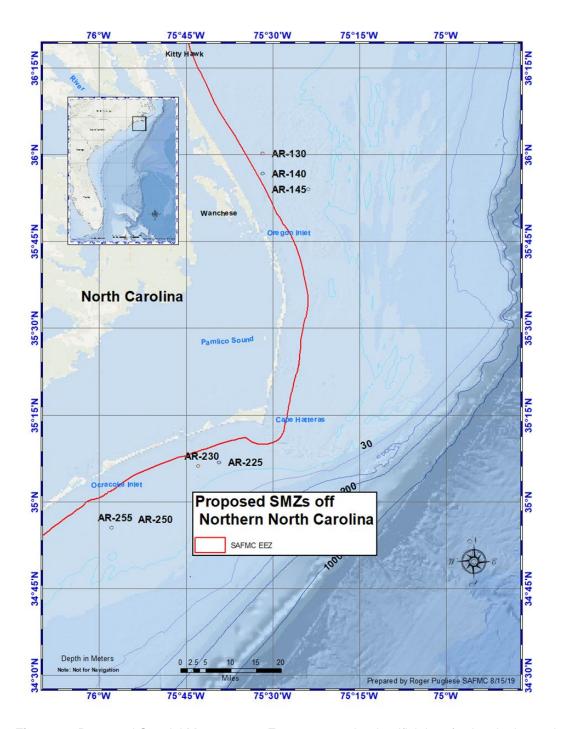


Figure 1. Proposed Special Management Zones at permitted artificial reefs sites in the exclusive economic zone off northern North Carolina.

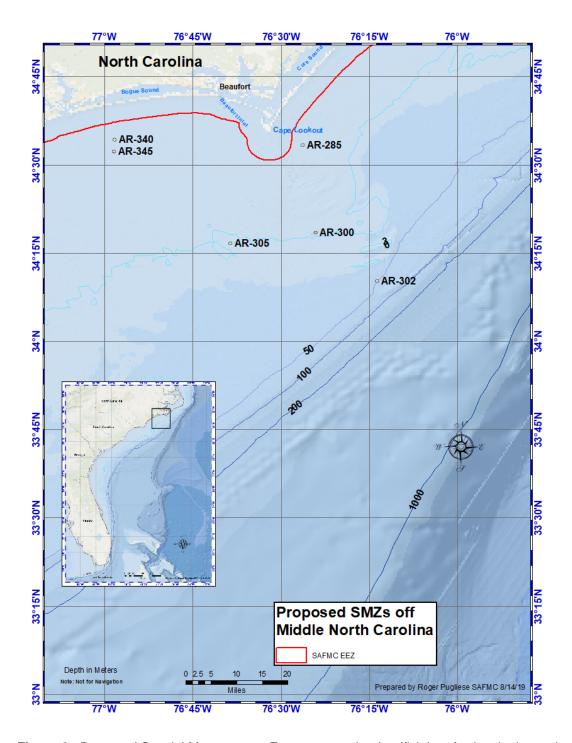


Figure 2. Proposed Special Management Zones at permitted artificial reefs sites in the exclusive economic zone off central North Carolina.

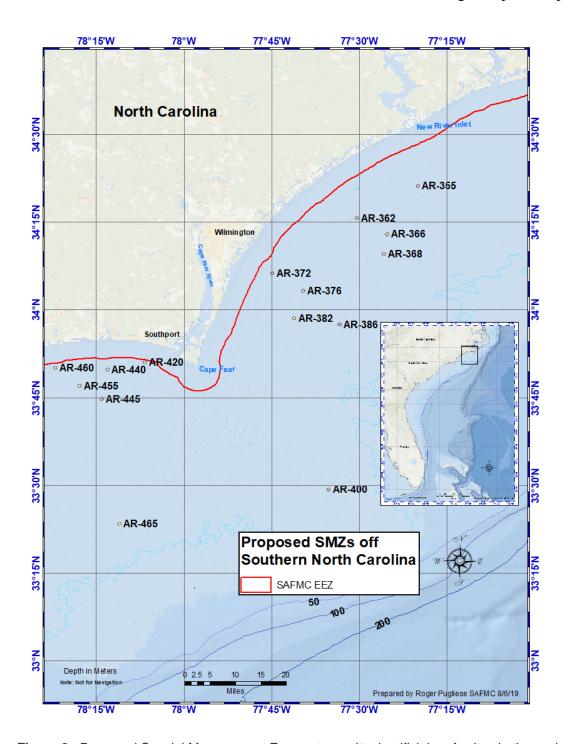


Figure 3. Proposed Special Management Zones at permitted artificial reefs sites in the exclusive economic zone off southern North Carolina.

Table 2. South Carolina artificial reefs proposed as special management zones based on permitted locations including three with centroids and radius and one with corner coordinates in Degrees Decimal Minutes (Source: SCDNR August 2019).

Reef Name	Centroid	Centroid Longitude	Radius
	Latitude DDM	DDM	(yards)
PA-07- Pop Nash Reef	33° 34.510' N	78° 51.000' W	200
PA-28- Lowcountry Anglers	32° 34.300′ N	79° 55.100' W	200
Reef			
PA-34- CCA-McClellanville	32° 51.800' N	79° 22.500' W	200
Reef			

Reef Name	Corner	Latitude	Longitude
PA-04 - Ron McManus Memorial	NW	33° 46.400' N	78° 36.200' W
Reef			
	SW	33° 45.900' N	78° 36.200' W
	NE	33° 46.400' N	78° 35.600' W
	SE	33° 45.900' N	78° 35.600' W

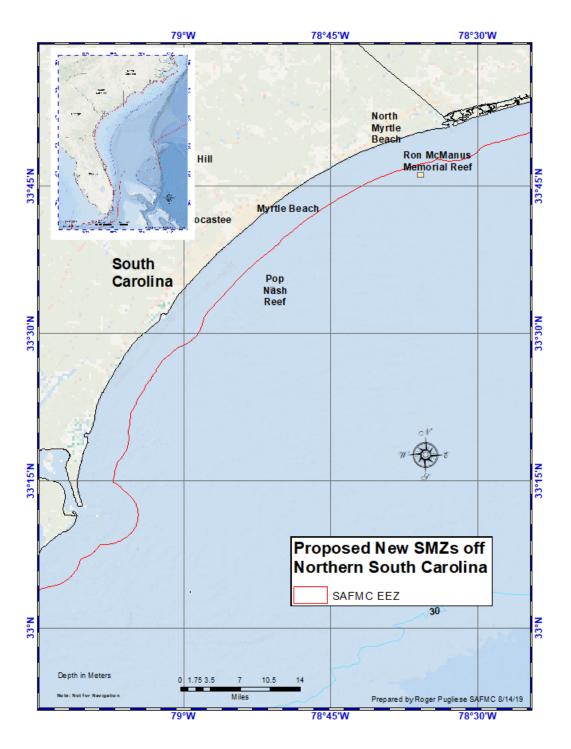


Figure 4. Proposed Special Management Zones at permitted artificial reefs sites in the exclusive economic zone off northern South Carolina.

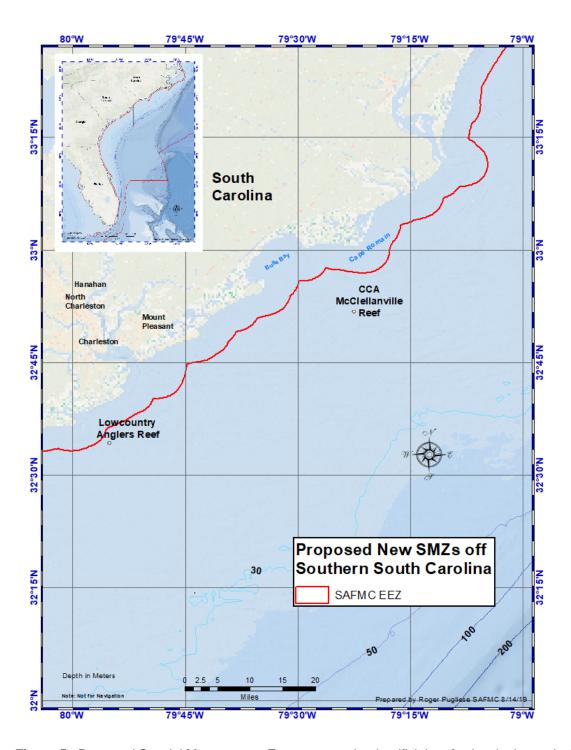


Figure 5. Proposed Special Management Zones at permitted artificial reefs sites in the exclusive economic zone off southern South Carolina.

Table 3. Area and Percent of EEZ off North Carolina of artificial reefs proposed as SMZs.

NC Proposed SMZ	Area (Square Miles)	% of EEZ off NC
AR-130	0.24	0.001%
AR-140	0.24	0.001%
AR-145	0.24	0.001%
AR-220	1.01	0.004%
AR-225	0.24	0.001%
AR-230	0.24	0.001%
AR-250	0.24	0.001%
AR-255	0.24	0.001%
AR-285	0.24	0.001%
AR-300	0.24	0.001%
AR-302	0.24	0.001%
AR-305	1.01	0.004%
AR-330	0.24	0.001%
AR-340	0.24	0.001%
AR-345	0.24	0.001%
AR-355	0.24	0.001%
AR-362	0.24	0.001%
AR-366	0.24	0.001%
AR-368	0.24	0.001%
AR-372	0.24	0.001%
AR-376	0.24	0.001%
AR-382	0.24	0.001%
AR-386	0.24	0.001%
AR-400	0.24	0.001%
AR-420	0.24	0.001%
AR-440	0.24	0.001%
AR-445	0.24	0.001%
AR-455	0.24	0.001%
AR-460	0.24	0.001%
AR-465	0.24	0.001%
Total	8.62	0.032%

Table Z. Area and Percent of EEZ off South Carolina present SMZs and artificial reefs proposed as new SMZs.

SC SMZ	Area (Square Miles)	% of EEZ off SC
Little River Offshore Reef	0.77	0.003%
Paradise Reef	1.55	0.006%
Ten Mile Reef	3.87	0.014%
Pawleys Island Reef	0.86	0.003%
Bill Perry Jr. Reef	1.22	0.005%
BP-25 Reef	0.89	0.003%
North Inlet 45 Foot Reef	1.33	0.005%
Murrel's Inlet 60 Foot Reef	1.45	0.005%
Georgetown Reef	1.40	0.005%
Georgetown 95 Foot Reef	1.70	0.006%
New Georgetown 60 Foot Reef	2.50	0.009%
CJ Davidson Reef	1.24	0.005%
Cape Romaine Reef	0.34	0.001%
Vermilion Reef	0.44	0.002%
Greenville Reef	1.11	0.004%
Capers Reef	2.21	0.008%
Charleston 60 Foot Reef	1.34	0.005%
Y-73 Reef	0.34	0.001%
Kiawah Reef	3.34	0.012%
Comanche Reef	0.45	0.002%
Edisto 40 Foot Reef	1.21	0.005%
Edisto 60 Foot Reef	1.79	0.007%
Fripp Island Reef	1.68	0.006%
Edisto Offshore Reef	1.88	0.007%
Hunting Island Reef	2.82	0.011%
Beaufort 45 Foot Reef	1.12	0.004%
Betsy Ross Reef	0.75	0.003%
Eagles Nest Reef	0.37	0.001%
Hilton Head Reef/Artificial Reef-T	1.65	0.006%
Total Area	41.61	0.155%
Proposed New SMZs		0.000%
Pop Nash Reef	0.41	0.002%
Lowcountry Anglers Reef	0.41	0.002%
CCA- McClellanville Reef	0.41	0.002%
Ron McManus Memorial Reef	0.33	0.001%
Total Area	1.55	0.006%

Appendix A. Management Measure #17: Prohibition or Restraint of Specific Fishing Gear From Artificial Reefs

Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region, 1983

Upon request to the Council from the permittee (possessor of a Corps of Engineers permit) for any artificial reef or fish attraction device (or other modification of habitat for the purpose of fishing), the modified area and an appropriate surrounding area may be designated as a Special Management Zone that prohibits or restrains the use of specific types of fishing gear that are not compatible with the intent of the permittee for the artificial reef or fish attraction device. This will be done by regulatory amendment similar to adding or changing minimum sizes (Section 10.2.3).

- 1. A monitoring team* will evaluate the request in the form of a written report considering the following criteria:
 - a. fairness and equity
 - b. promote conservation
 - c. excessive shares
- 2. At the request of the Steering Committee, the Council Chairman may schedule meetings of the Advisory Panel (AP) and/or Scientific and Statistical Committee (SSC) to review the report and associated documents and to advise the Council. The Council Chairman may also schedule public hearings.
- 3. The Council, following review of the Team's report, supporting data, public comments, and other relevant information, may recommend to the Southeast Regional Director of the National Marine Fisheries Service (RD) that a SMZ be approved. Such a recommendation would be accompanied by all relevant background data.
- 4. The RD will review the Council's recommendation, and if he concurs with the recommendation, will propose regulations in accordance with the recommendations. He may also reject the recommendation, providing written reasons for rejection.
- 5. If the RD concurs with the Council's recommendations, he shall publish proposed regulations in the Federal Register and shall afford a reasonable period for public comment which is consistent with the urgency of the need to implement the management measure(s).

Impact and rationale

The intent of a SMZ is to crate incentive to create artificial reefs and fish attraction devices that will increase biological production and/or create fishing opportunities that would not otherwise exist. The drawback to "investing" in artificial reefs or fish attraction devices is that they are costly and have limited advantages that can be rapidly dissipated by certain types of fishing gear (e.g. traps harvesting black sea bass from artificial reefs). Fishing gear that offers "exceptional advantages" over other gear to the point of eliminating the incentive for artificial reefs and fish attraction devices for users with other types of fishing gear prevent improved fishing opportunities that would not otherwise exist.

*Monitoring team – The Team will be comprised of members of Council staff, Fishery Operations Branch (Southeast Region, NMFS), and the NMFS Southeast Fisheries Center.