6 September 2016

Mr. Nikhil Mehta
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue, South
St. Petersburg, FL 33701

Dear Mr. Mehta:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's (NMFS) proposed rule (81 Fed. Reg. 53109) to implement Amendment 16 to the fishery management plan for the snapper-grouper fishery off the southeastern United States and the associated Final Environmental Impact Statement (FEIS). The proposed rule would modify an existing seasonal closure for black sea bass that has incidentally provided protection for endangered North Atlantic right whales from entanglement in buoy lines from black sea bass pots. The Commission offers the following comments and recommendations.

Background

The fishery management plan for the snapper-grouper fishery regulates the catch of black sea bass and various other benthic fish species caught commercially off the southeastern United States. The commercial black sea bass fishery is a small, limited-entry fishery currently involving 32 permit holders, each of which may fish up to 35 pots that must be returned to shore at the end of each trip. Because sea bass pots are fished individually with one buoy per pot, the fishery may involve up to 1,120 buoy lines in the water at any one time throughout its range. The stock of black sea bass was determined to be overfished in the late 1990s and early 2000s and, as a stock rebuilding measure, regulations were adopted in 2009 prohibiting fishing for the species with pots throughout waters off the southeastern United States from 1 November to 30 April each year.

In recent years the black sea bass stock has made substantial progress toward recovery and allowable catch levels have doubled. To fully exploit the increased allowable catch, the South Atlantic Fishery Management Council (the Council) has recommended measures to allow black sea bass pot fishing from 1 November to 30 April by eliminating the current winter sea bass pot closure along the Atlantic coast south of Cape Hatteras, North Carolina. Vertical lines connecting pots to marker buoys, however, pose a risk of entangling North Atlantic right whales that migrate and calve between North Carolina to central Florida – particularly in waters relatively close to shore – during this time of year. To prevent such entanglements, the proposed rule would prohibit the use of pots to catch black sea bass in waters shallower than certain specified depths that vary in time and area. For the entire months of November and April, pots would be prohibited in waters less than 25 m in depth from Cape Hatteras, North Carolina, to about Ponce de Leon Inlet, Florida. From 1 December through 31 March, they would be prohibited in waters approximately 30 m in depth from

Cape Hatteras to the Georgia-South Carolina border and in waters less than 25 m in depth from the latter point south to Cape Canaveral, Florida. Analyses of right whale sighting data indicate that the area closed in November and April would encompass approximately 91 percent of all right whale sightings from aerial surveys in those months, and that the area closed from 1 December to 31 March would encompass 96 to 97 percent of such sightings.

The proposed action also includes a gear marking requirement to help identify any buoy lines from black sea bass pots that are found on entangled whales.A 12-inch purple band would be required on the buoy lines of all black sea bass pots directly adjacent to marks already required for all traps and pots fished off the southeastern United States under the current Atlantic Large Whale Take Reduction Plan.

The Commission commends the Council and NMFS for recognizing and addressing the risk of entanglement to North Atlantic right whales. Right whale entanglement injuries and deaths have increased significantly in recent decades (Knowlton et al. 2012, 2016). For example, deaths attributed to entanglement among observed right whale carcasses have increased from 2 deaths between 1990 and 1999, to 8 between 2000 and 2009, and 9 between 2010 and 2016. Indeed, since measures were put in place in December 2008 to reduce right whale deaths due to ship strikes, entanglement has become the largest source of human-related right whale mortality along the U.S. East Coast. Where entanglements occur and which fisheries are involved is poorly known. Until recently, most fishing gear was not required to be marked in such a way that it could be assigned to a particular area or fishery on a broad scale. The right whale is the most endangered large whale in the North Atlantic Ocean and measures to prevent entanglement of right whales in fishing gear are essential to their survival and recovery. In this regard, recent regulatory amendments to the Atlantic Large Whale Take Reduction Team adopted by the NMFS have sought to reduce the number of buoy lines that might entangle large whales. This proposal would add lines that could potentially entangle whales and is therefore somewhat at odds with the recently adopted take reduction plan strategy. Although the Commission believes the proposed measures offer important levels of protection to right whales, it believes that they could and should be strengthened as discussed below.

Gear Marking

As noted above, the proposed action would require a new purple band on all black sea bass pot buoy lines to distinguish them from the lines used in other trap and pot fisheries in the region. This requirement would apply from 15 November to 15 April during the region's peak right whale migration and calving season. The Commission strongly supports requirements for marking sea bass pots with a distinctive color and commends the Service and Council for recognizing its importance, however, it believes that this requirement should be year-round rather than seasonal.

The FEIS (page S-1) states that "November 1 through April 30 is when right whales are present in the South Atlantic." While this timeframe includes the period when right whales are present in greatest numbers, it is not the only time of the year when they are present off the southeastern U.S. coast. Recent acoustic studies off southern North Carolina (Cape Lookout and Cape Fear) and Georgia have revealed that, while the primary peak in right whale call rates was recorded in autumn and winter, a secondary peak was detected in June and July (Hodge et al. 2015). Off Georgia, right whale calls were detected in eleven months of the year, while off North Carolina they were detected in seven months of the year, including June and July. Overall, these results, which

were not considered in the FEIS or *Federal Register* notice, indicate that at least a few right whales may be present off the southeastern United States in all months of the year.

Whereas the Commission agrees that available information on distribution and seasonal habitat use patterns suggests that right whale occurrence and entanglement risk off the southeastern U.S. coast is substantially reduced between April and November, it believes this new information on their presence in the region during late spring, summer, and early autumn makes it prudent to require the marking of buoy lines year-round to ensure that any sea bass gear found on entangled right whales can be identified. The Commission does not believe such a requirement would create a significant added burden on fishermen. Moreover, it believes that such a requirement would make it less likely for unmarked gear to be used accidentally during winter and spring when the risk of entanglement is greatest. Therefore, the Commission recommends that NMFS make gear marking a year-round requirement for all buoy lines on black sea bass pots, rather than a seasonal measure applicable only from 15 November through 15 April.

Seasonal Time Area Closures

The Commission agrees that the modified seasonal closures from 1 November through 30 April for the black sea bass pot fishery would substantially reduce the entanglement risk to right whales and commends the Council and NMFS for including such a measure. The Commission also recognizes the importance of restoring winter fishing opportunities in light of progress to recover the black sea bass fishery stock from its overfished status, but notes that by re-opening the black sea bass pot fishery where and when it has been closed, the action would increase entanglement risk to right whales compared to the status quo. Although recent information suggests that at least a few right whales may occur off the southeastern United States in all months of the year, given the small size of the fishery, the minimal number of buoy lines, and what is known about the distribution of right whales in non-winter months, the Commission believes entanglement risks from May through October are likely to be negligible and that time-area closures in those months should not be necessary.

However, the Commission is concerned that the proposed depth thresholds for the offshore boundaries (i.e., less than 25 m in depth in November and April and 25 to 30 m in depth from December through May) do not adequately capture all areas likely to be used by right whales during the peak whale occurrence months. Analyses referenced in the FEIS and preamble in support of the proposed rule are based almost entirely on right whale sightings from aerial surveys. Those analyses indicate that more than 90 percent of all survey sightings occur within those depth ranges. While the Commission believes that right whale occurrence likely decreases with distance from shore and agrees that the greatest entanglement risk is likely in waters within those depth ranges, aerial survey effort drops off markedly between 15 and 20 nautical miles from shore where waters begin to exceed 25 or 30 m in depth. Given the importance of other factors besides water depth that influence right whale distribution off the southeastern U.S. coast, such as water temperature and sea state (NMFS 2016), and the limited amount of survey effort seaward of about 15 miles from shore, the Commission believes that analyses using aerial survey data to support the depth threshold for the closure boundary under-represent right whale occurrence and entanglement risks for areas farther offshore. In this regard, the Commission notes that other analyses of sighting data not cited in the FEIS and preamble to the proposed rule (e.g., Knowlton et al. 2002, Schick et al. 2009) report similar results indicating that a large majority of sightings have occurred within approximately 10 or

15 miles of shore, but conclude that habitat extending 30 nautical miles from shore should be considered important to migrating and calving whales off the southeastern United States.

The Commission also notes that, although data are limited, telemetry and recent acoustic monitoring not considered in the FEIS or preamble to the proposed rule suggests that waters beyond 15 or 20 miles from shore are used by right whales more frequently than aerial survey data indicate. For example, data on right whales tagged with telemetry devices to document northbound migration routes from the southeastern U.S. calving grounds (Slay et al. 2002, Andrews 2016) indicate that they regularly use waters out to 30 miles from shore and therefore are not confined to waters shallower than 25 or 30 m in depth. Similarly, recent analyses of right whale call rates detected by an acoustic monitoring array moored perpendicular to the coast off Cape Hatteras revealed that, while the rates may be highest within 15 or 20 miles of shore, significant numbers of right whale calls also occur between 20 and 40 miles offshore in that area (US Navy 2016). While the number of weeks with recorded right whale calls at offshore acoustic recording stations off Cape Hatteras was far fewer than stations inside 20 miles of shore, at times between December and January the number of hours per week with right whale calls between 20 and 40 miles from shore was equal to or even greater than that recorded at stations closer than 20 miles from shore. In addition, the peak number of hours per week with recorded right whale calls at beyond 20 miles (about 20 hours) was approximately equal to the peak number of hours per week recording stations closer than 20 miles from shore off North Carolina. This indicates that, at times, significant numbers of right whales occur beyond 20 miles. Similar arrays have been deployed off Georgia, South Carolina, and southern North Carolina since 2015; however, data from those arrays have yet to be published describing the frequency of call rates at different distances from shore.

Analyses of sightings cited in the FEIS and preamble to the proposed rule do not discuss the proposed closure boundaries in terms of distance from shore. However, maps of the areas (Figures 1 and 2 in the *Federal Register* notice) suggest the closure's seaward boundary extends less than 10 miles off the southern parts of North Carolina's Outer Banks and parts of Florida, to perhaps 40 miles or more off parts of South Carolina and southern North Carolina. Based on the above-mentioned data on right whale occurrence from telemetry and acoustic studies, the Commission is concerned that analyses supporting the proposed closure depth thresholds underestimate entanglement risks in some portions of the species' migratory and calving habitat. Given the recent increases in entanglement-related injuries and deaths of right whales, and the fact that these are now the largest source of human-related mortality for the species, the Commission believes it would be prudent to analyze the most recent data on right whale occurrence in waters beyond the proposed closure boundaries and expand the size of the closure area in least some areas.

Therefore, the Commission recommends that, before finalizing this proposed action, NMFS obtain and analyze data on right whale call rates from acoustic arrays off Georgia, South Carolina, and North Carolina to assess the probabilities of right whales encountering black sea bass pot buoy lines seaward of the proposed closure boundaries. In addition, the Commission is particularly concerned that the proposed seaward boundaries off portions of the North Carolina and Florida coasts which appear to extend only up to 10 miles or less from shore may not be adequate. To better capture what appears to be important right whale habitat, the Commission recommends that NMFS, in consultation with the Council, modify the seaward boundaries of the proposed black sea bass pot closure to extend seaward to the 25- or 30-m depth contour as currently proposed, or a specified minimum distance from shore, whichever is greater. Based on information referenced in this letter,

the Commission recommends that the minimum distance from shore for the seaward boundaries of the black sea bass pot closure extend to at least (1) 30 nautical miles from shore between Cape Hatteras and the Florida-Georgia border and (2) at least 20 miles from shore in Duval and St. Johns counties in Florida.

I trust these comments and recommendations are helpful. If you or your staff have questions, please let me know.

Sincerely,

Rebecca J. Lent

Rebecca J. Lent, Ph.D
Executive Director

Cc Ms. Laura Engleby, NMFS Southeast Regional Office
Ms. Kari MacLauchlin, South Atlantic Fishery Management Council

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