RESPONSE TO COMMENTS ON THE DEIS AND PROPOSED RULE CHAPTER 1

NMFS received 533 letters from commenters on the Draft Environmental Impact Statement (DEIS) and proposed rule via Regulations.gov, letter, fax, or email. Additionally, two form letters were received on the DEIS via letter and email; approximately 27,500 of one form letter, 13,500 of another form letter, and approximately 1,300 slight variations to the form letters. NMFS also solicited comments on the DEIS during 16 public hearings held along the Atlantic coast. The public hearings were held as follows:

- Machias, Maine on August 5, 2013
- Ellsworth, Maine on August 6, 2013
- Rockland, Maine on August 7, 2013
- Portland, Maine on August 8, 2013
- Chatham, Massachusetts on August 13, 2013
- Plymouth, Massachusetts on August 14, 2013
- Narragansett, Rhode Island on August 15, 2013
- Gloucester, Massachusetts on August 19, 2013
- Portsmouth, New Hampshire on August 20, 2013
- Wilmington, North Carolina on August 26, 2013
- Virginia Beach, Virginia on August 27, 2013
- Manahawkin, New Jersey on August 28, 2013
- Ormond Beach, Florida on September 9, 2013
- Jacksonville, Florida on September 10, 2013
- Brunswick, Georgia on September 11, 2013
- Charleston, South Carolina on September 12, 2013

The substantive comments are summarized and grouped below by major subject headings. NMFS' response follows each comment. NMFS received technical comments on the DEIS that were not substantive, and incorporated such changes in the FEIS as appropriate. These technical comments are not listed in the summary.

1.1 COMMENTS AND RESPONSES

1.1.1 General Comments

Comment 1: One commenter stated that the proposed measures should be extended to the recreational fishermen and not just commercial fishermen.

Response: The regulations implementing the Plan are governed by Section 118 of the MMPA, which requires take reduction teams to assist NMFS in the development of take reduction plans that address serious injuries and mortalities of marine mammals that interact with commercial fishing operations. Therefore, the proposed measures are specific to commercial fishing only. However, recreational fishers that take marine mammals are in violation of the MMPA prohibition against taking marine mammals. NMFS has created brochures designed to inform recreational fishermen about protected species conservation.

Comment 2: Two commenters requested that the 60-day public comment period be extended.

Response: Public comment periods are required to be at least 15 days. NMFS believes that the 60-day comment period was adequate and chose not to extend the time period.

Comment 3: One commenter stated that the proposed regulations should consider the shifting baseline in the marine food chain as a result of climate change and eutrophication. Right whale prey distribution is changing in time and place and management should be adapted to account for these shifts. The commenter suggested that the status quo approach be supplemented with dynamic solutions using an ecosystem approach for management.

Response: NMFS acknowledges this important comment. Managing resources in the face of changing environmental conditions is challenging. The ability to account for distribution shifts that may result from changing environmental conditions exist in the current regulations. These regulations can be found at §229.32 (i)(2). Among other considerations, should NMFS determine that right whale distribution shifts result in its current conservation measures being no longer appropriate, NMFS has the ability to make changes to the measures.

Comment 4: A few commenters stated that they have never seen a whale in state waters and thus it was unfair to propose new laws in areas without whales.

Response: Because most large whale entanglements (particularly those involving right whales) tend to be free swimming entanglements when detected and the gear recovered from these entanglements do not provide adequate information to determine where an entanglement occurred, entanglements from specific fisheries and areas are rarely documented. Therefore, NMFS developed a model to help identify the relative likelihood of an entanglement by time and area. The model is based on high “co-occurrence areas” which are areas that have the highest frequency of gear that overlap with large whale

sightings per unit effort. NMFS believes that these high co-occurrence areas represent a higher likelihood of entanglement to large whales. Areas identified as a high co-occurrence area may be subject to conservation measures regardless if a take has not been documented in that area.

Comment 5: Some commenters stated that the entanglement risk to right and other large whales is greater in areas outside of the Southeast U.S. Atlantic and that there have been no documented cases of black sea bass or blue crab gear on a right whale. Some commenters also noted that fewer trap/pots are set in the Southeast relative to northern regions (including Canada) and that gear in the Southeast is lighter, uses shorter vertical lines, and is therefore less risky to whales than trap/pot gear found further north.

Response: The annual Stock Assessment Report (SAR) partition out entanglement records between U.S. and Canadian waters for large cetacean species. Currently, in the 2012 SAR (Waring et. al 2013) the average number of annual fishery entanglements of right whales was 1.6 in U.S. waters and 0.2 in Canadian waters. The potential biological removal for this species is calculated at 0.9. Thus, even when considering only entanglements from U.S. fisheries, right whales are being taken at too great of a rate to maintain optimal population sustainability. Furthermore, gear removed from right whales is not always identified to a specific fishery; however, in cases where the gear could be identified, more rope was associated with trap/pot gear than gillnet gear (Johnson et al. 2005).

The vertical line model utilized by NMFS and the Team for the development of this rule focused on areas of high co-occurrence of vertical lines associated with commercial trap/pot and gillnet gear and large whale sighting per unit effort data. The analysis of these data indicated that co-occurrence was relatively low within the Southeast Restricted Area North during the right whale season. Consequently, NMFS did not propose a closure throughout the Southeast Restricted Area North or critical habitat area. However, the gear is not risk-free, which is why NMFS is implementing other risk reduction measures through this final rule. Also, see Response to Comment 40.

Comment 6: One commenter stated that before taking further action NMFS should provide fishermen with statistical significance and a five year period by which to assess the major April 2009 implementation requiring fishermen to change their floating groundline to sinking groundline.

Response: At its 2003 meeting, by consensus, the Team agreed to two overarching principles associated with reducing large whale entanglement risks: 1) Reducing entanglement risks associated with groundlines in commercial trap/pot gear; and 2) Reducing entanglement risks associated with vertical lines. The Team agreed to focus first on addressing the groundline entanglement risk, which completed in October 2007 (72 FR 57104, October 5, 2007), followed by the development and implementation of a vertical line rule. This rule addresses the entanglement risk identified by the Team to large whales from vertical lines. This rule completes the two pronged strategy identified by the Team to address the large whale entanglements in commercial trap/pot and gillnet gear. Under the MMPA the number of deaths or serious injuries due to commercial fishing activities must not affect a species ability to reach or maintain its optimum sustainable population. At

present, with just the sinking groundline conservation measures in place, the number of serious injuries and mortalities for right whales and humpback whales remain above mandated levels and mortalities due to entanglements in vertical lines in trap/pot and gillnet gear continue to occur.

NMFS, in consultation with the Team, has developed a monitoring strategy to evaluate industry compliance with the Plan and the effectiveness of the Plan in achieving the plan's goals and objectives. For more information on the monitoring strategy, please see the response to Comment 8.

Comment 7: A few commenters suggested that NMFS move forward with one measure to reduce interactions at a time in a phased in type approach. It was suggested that NMFS should just increase the number of traps per trawl before proposing closures or just move forward with the increased gear marking at this time and then once the problem areas are identified come back with management measures targeting those problem areas.

Response: NMFS appreciates the suggestion but believes that the combination of management measures in the final rule is necessary to achieve the goals mandated by the MMPA and ESA.

Comment 8: A few commenters were concerned that there was a lack of strategy if entanglement levels continued to exceed PBR regardless of the proposed measures. The commenters stated that whales could continue to experience high levels of entanglement than legally allowed with no recourse.

Response: On February 23-24, 2009, NMFS convened an internal workshop to discuss the development of a comprehensive monitoring strategy for the Plan. The goal of this workshop was to develop an outline for a monitoring strategy that included components to review compliance with and to assess the effectiveness of the Plan regulations in achieving the MMPA short- and long-term goals of reducing serious injury and mortality of large whales in U.S. commercial fisheries. This monitoring strategy was shared with the Team and went into effect in August 2012. This strategy includes both annual monitoring reports and a multi-year status summary intended to review the Plan's effectiveness and compliance over a 5-year timeframe. If analyses determine that the Plan is not achieving its goals, NMFS will review the multi-year status summary to evaluate the potential causes for not achieving the management objectives and consult with the Team on the development of appropriate actions to address the Plan's shortcomings.

Comment 9: One commenter requested that the preamble to the rule and FEIS include a discussion that more accurately reflects decisions reached by the Team with respect to the rulemaking timeline.

Response: NMFS disagrees with the commenter's assessment that the discussion of the rulemaking timeline is not accurately reflected. NMFS believes that the proposed rule's preamble and EIS reflect the Team discussions at past meetings about the need to move forward with a Vertical Line rule and the timeline to develop and implement the rule. The text in the preamble and EIS is consistent with summaries from the Team's meetings.

Comment 10: Several commenters stated that there are too many unanswered questions that need to be answered before expanding new policies. They requested that the northeast portion of the rule be reconsidered until better information exists regarding what part of the line is entangling whales and what the economic impact of the changes will be on the industry.

Response: The FEIS notes that entanglements of large whales are still occurring and highlights the legal mandates of the MMPA and ESA that NMFS is required to follow. Based on the continued serious injury and mortality of large whales NMFS must take action to provide more protection to large whales. Although NMFS acknowledges the need for more scientific information, NMFS is required to take action based on the best information that is available when developing the EIS. The economic impact of this action is discussed in the EIS. As new information becomes available regarding large whales, entanglements, or economic impacts of these policies NMFS will share this information with the Team to determine if additional changes to the Plan are warranted.

Comment 11: One commenter stated that there is a lack of data and the data that is available is often flawed.

Response: See Response to Comment 10.

Comment 12: A few commenters commented that NMFS fails to link the proposed measures to a reduction in serious injury/mortality. The commenter stated that although a reduction in risk does not necessarily equate to the same level of reduction in serious injury/mortality it provides some basis for meeting the PBR goals. The rule should meet a 50% reduction standard or provide explanation for how the rule will reduce the levels of serious injury/mortality to below PBR.

Response: Sufficient information is not available on when, where, and how entanglements occur such that a quantifiable line reduction target can be calculated. Therefore, NMFS and the Team have not determined a percent reduction of vertical lines that would reduce serious injury and mortality of large whales that encounter vertical lines to a level that would achieve the MMPA's PBR and ZMRG mandates. NMFS used the best information that is available and worked with commercial trap/pot and gillnet fishermen and other stakeholders to develop feasible conservation measures intended to achieve the goals and objectives of the Plan and MMPA. The preferred alternative achieves a 38% reduction in co-occurrence coastwide. NMFS believes this level of reduction is consistent with the goals and objectives of the MMPA and ESA.

Comment 13: In response to the request to comments on the proposed changes to the 'other special measures' provision one commenter agreed that the Team must be consulted but the consultation must involve dialogue. The commenter questioned if the provision agreed with the MMPA since the MMPA specifically provides NMFS with authority to take emergency actions to promote conservation.

Response: NMFS appreciates the support for the change to the provision. The provision and the MMPA emergency regulations are different and have their own requirements. The "Other Special Measures" provision is not intended to address NMFS' ability to take emergency actions, rather it allows NMFS make changes to the Plan as new information about gear marking, gear technology, or right whale distribution in closed areas becomes available. The final rule will include language to ensure that the Team is consulted with prior to actions being taken under the 'other special measures' provision.

1.1.2 General Comments on Proposed Alternatives

Comment 14: Many people stated their general support for the Preferred Alternative stating that the level of serious injury and mortality is above PBR and therefore additional management measures are necessary.

Response: NMFS acknowledges this comment and agrees that additional management measures are necessary.

Comment 15: Numerous people stated their support for the No Action Alternative referring to the increasing right whale population as a sign that the current management measures are working and additional measures are not necessary.

Response: NEPA requires NMFS to analyze a no action alternative. NMFS did not choose this alternative in its final rule because it does not meet the goals and objectives of the Plan and therefore does not satisfy the requirements of the MMPA or ESA. Although the right whale population has increased in recent years the number of serious injury and mortalities occurring as a result of entanglement in commercial fishing gear is still at an unstainable level. NMFS has determined that additional measures included in this action are necessary to meet the objectives of the MMPA and ESA.

Comment 16: One commenter stated that the proposed alternative would require fishermen to spend more money on weak links and sinking rope and fishermen can't afford to spend more money.

Response: NMFS is sensitive to the costs of complying with this final rule and characterized the economic and social impacts in the FEIS. Chapter 7 of the FEIS identifies the vessels segments that may be heavily affected by the new requirements. Based on the comments received during the public comment period and public hearings, the preferred alternative was chosen because it provided an adequate conservation benefit to large whales while having a lower economic cost to industry.

Comment 17: One commenter agreed that reducing vertical line offshore is a good thing to do as there are more whales offshore so the rules should be made to account for this.

Response: NMFS agrees with this comment and the final rule includes measures for vessels fishing offshore.

Comment 18: A handful of commenters provided general comments about the Southeast U.S. portion of the proposed rule: 1) the proposed rule contained a patchwork of requirements within the currently designated critical habitat that are inconsistent and arbitrary, 2) the various requirements would make it difficult for fishermen to comply and law enforcement officials to enforce, and 3) the presence of neophyte calves in Florida state waters were NMFS' basis for requiring weak links and ropes with lower breaking strengths in that area, but these same "neophytes" are born further to the north where breaking strengths are far higher (and presumably create higher risk). Many of these commenters were also concerned that proposed measures in the Southeast largely retain the status quo and do not reduce risk to right whales, especially for mother/calf pairs.

Response: This rule provides additional protection to right whales by focusing management measures in areas of elevated co-occurrence of whales and vertical lines. First, NMFS believes the various requirements provide protection for right whales while avoiding unnecessary impact to fisheries. Second, NMFS did not receive any comments about difficulties associated with compliance or enforcement from fishermen or law enforcement officials. Third, NMFS is particularly cognizant of the weaker physical characteristics of neophyte calves, which most often occur in the Southeast U.S. Neophyte calves are occasionally documented off North Carolina and Cape Cod Bay, Massachusetts; however, the highest co-occurrence of very young right whale calves and vertical lines is in Florida state waters and where the trap/pot gear modifications in this rule are the most risk averse.

Finally, NMFS agrees that some of the Southeast measures in this final rule codify the status quo regarding existing fishing gear and techniques. In those instances, the present gear/practice is appropriately risk averse and codified those practices to ensure the gear does not become riskier to whales in the future. However, other measures such as requiring object-free lines, sinking vertical lines, returning gear to port from federal waters, and additional gear marking are all new measures that reduce entanglement risks to right whales, including mother/calf pairs.

Comment19: One commenter supported customizing management measures to specific high priority areas rather than using wide-scale broad management; this commenter thought that applying the same management measures to the area from North Carolina all the way down to Florida to the 29 latitude line isn't a customized plan. Another commenter stated that the SERA N is a huge area and that they fish in only a small portion of that area and requested a "secondary boundary" that would allow him to fish for blue crab in Federal waters.

Response: NMFS is defining the Southeast Restricted Area North as a trap/pot management areas so that the southeast U.S. measures in this rule apply to the same management area used for gillnet fisheries. This helps reduce and streamline the number of management areas while providing protection for right whales. However, new information on right whale distribution does exist since when the Southeast Restricted Area North gillnet area was established. This new information is currently being evaluated. , Should NMFS will determine that the Southeast Restricted Area North and South boundaries should be adjusted, it will do so in consultation with the Team as part of a future rulemaking.

Comment 20: Some commenters suggested that all states should have the same protections coastwide paying special attention to areas and seasons where right whales feed and give birth.

Response: NMFS, in consultation with the Team, chose not to implement a broad-based management scheme as it had done in the past. Instead, NMFS and the Team developed a model to help compare the relative likelihood of entanglements occurring across areas and seasons. NMFS utilized these high co-occurrence areas as a proxy for high risk of entanglement to large whales. The management measures are intended to provide the same protection to areas of high co-occurrence regardless of if the measures differ from state to state. There are regional differences in fishing practices that influence fishing techniques and NMFS tried to account for the differences in techniques when developing the rule.

Comment 21: Two commenters stated they did not support making splicing line illegal. It would be impossible to make buoy lines without splices.

Response: NMFS agrees and did not intend to suggest that splicing line would be illegal. This will be clarified in the final rule.

Comment 22: One commenter agreed that there is insufficient data in the mid-Atlantic to propose management measures at this time. The commenter supports efforts to assess whale distribution in this area and if high co-occurrence areas are identified later on then fisheries should be managed.

Response: NMFS agrees that there are fewer whale sighting data in the mid-Atlantic than in other regions. For that reason, NMFS has undertaken efforts to consolidate data and information on right whale distribution and use of the mid-Atlantic. Once these efforts are completed, NMFS will assess all of its mid-Atlantic large whale-related management measures relative to the new information.

Comment 23: One commenter requested that NMFS add another alternative that assesses the impacts of the closures without the proposed increase in number of traps per trawl.

Response: During the development of the alternatives, NMFS and the Team did discuss utilizing only closures. However, preliminary analysis indicated that the closure-only strategy would not afford enough protection to large whales to satisfy the requirements of the MMPA and ESA. Further, NMFS believes that the number of alternatives analyzed in the EIS was adequate. The alternatives analyzed were a combination of stakeholder proposals developed by the Team during the course of several meetings and the result of input received during the public scoping meetings.

Comment 24: One commenter stated that fishing effort in the Gulf of Maine lobster fishery may have exceeded capacity and the fishing effort could be reduced without significantly impacting lobster catch. Reducing effort would reduce entanglement risk but

the proposed rule sidesteps the issue of effort reduction and it is unclear how effective the rule would be at reducing entanglements.

Response: NMFS acknowledges that effort reduction through limits on the number of trap/pot gear utilized by fishermen has taken place. However a reduction in traps does not necessarily equate to a reduction in the number of vertical lines in the water column. During the comment period NMFS requested comments on how best to quantify potential future trap reductions or increases with respect to how many vertical lines could be reduced. NMFS did not receive any substantive comments addressing this issue.

Comment 25: A few commenters felt that the proposed rule did not address latent effort and the potential for more gear to be in the water in the future.

Response: NMFS realizes that potential effort reductions or increases in future fishing effort could reduce or increase the number of vertical lines in the water column. During the comment period NMFS requested suggestions for how best to quantify potential future trap reductions or increases with respect to how many vertical lines could be reduced or increased. NMFS did not receive any quantifiable responses. NMFS intends to monitor this issue as part of the Plan's monitoring strategy (see response to Comment 8).

Comment 26: NMFS received many comments on the proposal to require trap/pot gear fished in Southeast Restricted Area North (SERA N) federal waters be brought back to port at the end of a fishing trip. SCDNR and several individuals from Georgia and South Carolina commented that a small number of blue crab fishermen with larger boats may set traps in both state and federal waters (up to 12 miles offshore) in years when coastal water temperatures may be cooler than normal and crabs move farther out of the estuaries and into the ocean. This seasonal fishing activity is extremely important economically to the relatively few fishermen who can participate in this aspect of the fishery, particularly since winter is the high-dollar season for blue crab. These commenters stated that the requirement to return all traps to shore at the end of the day would, at minimum, greatly hamper the efficiency and cost effectiveness of fishermen, but more likely would create a closure of the blue crab fishery in federal waters and cause an economic hardship on fishermen. One commenter supported the requirement to return gear to port at the conclusion of each fishing trip because it represented a de facto seasonal closure in federal waters for trap/pot fisheries that required long soak times and would prevent trap/pot effort from encroaching into federal waters where whale density is high. One commenter thought there were multiple ways to interpret the meaning of "the conclusion of each fishing trip" and was curious about how enforcement officials would interpret the phrase.

Response: NMFS is concerned about the risk to right whales from trap/pot gear in SERA N federal waters because fishermen use longer vertical lines with a higher breaking strength. These factors increase the risk from entanglement to right whales because longer lines mean more line that whales may encounter and higher breaking strength means a whale, particularly, calves, are less likely to break free of gear once they become entangled. Additionally, all other things equal, long-soak gear represents a greater opportunity for entanglement than short-soak gear. Right whales, including calves, occur in federal waters

off the coasts of South Carolina and Georgia, from November through April. The measures in this rule reduce risk to right whales from entanglement in federal waters by specifying a 2,200 lb maximum breaking strength of vertical lines and reducing the exposure of gear to right whales by requiring gear be returned to port at the end of a fishing trip.

Based on fishermen's comments, we recognize that this measure will likely eliminate blue crab fishing effort in federal waters in the winter because deploying trap/pots for only a short period of time (period of hours) is not effective at catching blue crabs. However, according to comments, the majority of blue crab fishermen do not fish in federal waters. Consequently, this requirement will likely impact only a small proportion of fishermen and only during cold winters when blue crabs are reportedly found further offshore. NMFS believes that the majority of fishermen in the blue crab fishery will be largely unaffected by this rule because they will still be able to fish in state waters where the majority of blue crabs are harvested. In developing these regulations, NMFS considered right whale distribution, entanglement risk factors, and blue crab fishery characteristics.

A fishing trip is defined in 50 CFR 300.21 as a period that a fishing vessel spends at sea between port visits and during which any fishing occurs.

Comment 27: NMFS received one comment on the object-free line proposed for trap/pot gear fished in the Southeast Restricted Area North. The commenter stated that many Florida blue crab fishermen use a second, trailing buoy and wondered if weak links would need to be attached to each buoy.

Response: This final rule prohibits any object, including buoys, from being placed between the surface buoy and the trap/pot gear while fishing in the Southeast Restricted Area North. NMFS believes that knot-free and object-free lines have a higher probability of sliding through whale baleen than lines with bumps, bulges, or attached buoys, weights, bottles, etc. that are larger than the line's diameter (splices are allowed, but not preferred). A few Florida blue crab fishermen report they attach a trailing buoy by 1-3 ft of line to the surface buoy of blue crab trap/pot. The surface and trailing buoy combination is used to assess ocean currents and the direction from which they should approach and retrieve their gear. A trailing buoy would defeat the purpose of the object-free line, however, NMFS did not notify and request comments on prohibiting trailing buoys or using weak links with trailing buoys. Therefore, trailing buoys are allowed, but via this preamble, NMFS discourages fishermen from using trailing buoys. If a trailing buoy is used, the use of a weak link is required.

Comment 28: One commenter commented that the lack of risk reduction proposed in the mid-Atlantic was unacceptable. The commenter stated that this is an area of high seasonal use for humpbacks and subject to sparse survey effort. The commenter also suggested that recent increases in dogfish and black sea bass quotas are likely to increase effort beyond what was considered in the model and likely result in increased risk.

Response: The Plan was developed to reduce the level of serious injury and mortality of North Atlantic right, humpback, and fin whales. NMFS chose to develop

management measures in areas of high co-occurrence of gear and large whale sightings. NMFS used these high co-occurrence areas as a proxy of entanglement risk to large whales. There are fewer large whale sighting data in the mid-Atlantic than in other regions. Because of the lack of sighting data in the mid-Atlantic, it did not register as an area of high co-occurrence between whales and fishing gear. NMFS would welcome new information, including sightings and effort data, on large whales in this area. In fact, NMFS and the Team have identified Mid-Atlantic surveys as a high priority. Should funding support increased monitoring and/or modelling efforts in the Mid-Atlantic, NMFS will work with its research partners to develop an adequate monitoring plan and/or model for the Mid-Atlantic area.

As part of this ALWTRP vertical line rule development process, NMFS did not consider future increases in dogfish and black sea bass quotas and how those quota increases might affect relative levels of fishing effort.. NMFS will monitor these developments, fishing effort, and whale distribution data in the mid-Atlantic and elsewhere to see if future management measures are needed. NMFS intends to monitor this development as part of the Plan's monitoring strategy and to ensure that those fishery management efforts do not conflict with our efforts under the ALWTRP (see response to Comment 8).

Comment 29: One commenter commented that the proposed measures only incidentally protect humpback whales in the Gulf of Maine and do nothing to protect them in the mid-Atlantic. The commenter stated that the closures are in areas where humpbacks are known to occur but not during times when they're the most abundant.

Response: The closures were developed by stakeholders in areas of high right whale abundance. The final rule will implement one closure in an area including portions of Massachusetts Bay, Cape Cod Bay, and the Outer Cape. Humpback whales are known to frequent these areas and as such will benefit from the closure. As mentioned above in Response 28, NMFS chose to develop management measures in areas of high co-occurrence. High co-occurrence areas are areas that have the highest frequency of gear that overlap with right and humpback whale sightings. NMFS believes that these high co-occurrence areas pose the highest relative risk of entanglement to right and humpback whales. The mid-Atlantic did not register as an area of high co-occurrence between whales and fishing gear NMFS would welcome new information, including sightings and effort data, on large whales in this area. NMFS will monitor fishing effort and whale distribution data in the mid-Atlantic to see if future management measures are needed. NMFS intends to monitor this issue as part of the Plan's monitoring strategy (see Response to Comment 8).

1.1.3 Comments on Exemption Lines/Areas

Comment 30: Several commenters were in support of the proposed exemption to New Hampshire state waters.

Response: NMFS acknowledges this comment. The final rule will exempt New Hampshire state waters from portions of the Plan.

Comment 31: Several commenters were in disagreement with the proposal to exempt New Hampshire state waters and continue to exempt portions of Maine state waters from the Plan.

Response: The New Hampshire exemption and buffers around certain Maine islands implemented under this rule only apply to the requirement to increase the number of traps per trawl for commercial trap/pot gear. All other requirements of the Plan, including the sinking groundline and weak link requirements are still required. NMFS believes the risk of entanglement in the New Hampshire exempted area and Maine island buffers are minimal. However, NMFS will continue to monitor exempted areas, and encourage states to develop contingency plans for large whales in these areas in the event that entanglements are identified to gear from exempted areas.

Comment 32: One commenter stated that Buzzards Bay and Vineyard Sound should be exempt from regulations since Narragansett Bay in RI, inshore ME, and now possible state waters in New Hampshire would be exempt.

Response: The current and proposed exemption areas have been developed in response to requests from state fishery management agencies and are designed to ensure that regulations do not extend into areas where whales sightings or the potential for co-occurrence is low. Should a state wish to exempt portions of their waters from the Plan NMFS has established a process for requesting exemptions from requirements under the Plan.

Comment 33: Several commenters supported in the exemption to New Hampshire state waters from the increase in number of traps per trawl but not from all aspects of the Plan.

Response: NMFS agrees with this comment.

Comment 34: One commenter stated that the exemptions could increase the risk to leatherback turtles as a large number of boats fish in exempt waters and exempt areas put the species at risk.

Response: The risk to leatherbacks as a result of the proposed New Hampshire state waters exemption was considered in the FEIS (Chapter 5). NMFS is not relaxing the current restrictions in the exempted waters, thus, does not expect an increased risk to leatherbacks relative to the status quo. Leatherbacks are found within New Hampshire state waters but not in the abundance that they are found in other waters.

Comment 35: One commenter did not support exemptions of small vessels from the trawling up requirement. The commenter stated that small vessels operate close to shore and these proposed requirements are already proposed to be shorter lengths. If shorter trawls or singles were allowed then the projections of risk reduction would change and haven't been analyzed in the DEIS.

Response: The final rule does not include a small vessel exemption. NMFS is allowing a minimum of two traps per trawl in some state waters as opposed to the three traps per trawl originally proposed. Also, there will be a ¼ mile buffer around three inhabited Maine islands that will allow fishermen fishing in those waters to continue to fish singles. These changes and subsequent changes to projections of risk reductions were analyzed in the FEIS. The changes result in only a small adjustment to the level of risk reduction. NMFS believes these changes address the safety concerns for small vessel operators, which were raised by fishermen during the public comment period and public hearings while still reducing the risk of entanglement.

1.1.4 Comments on Closed Areas

Comment 36: Many commenters were in support of the proposed closures stating that the closures were aimed at reducing fishing effort in key areas with high concentrations of right whales.

Response: NMFS acknowledges this comment. However, the final rule will incorporate only one such closure, the Massachusetts Bay Restricted Area. This closure was chosen by NMFS based the importance of the area to right whales and presence of large whales within the area during proposed closure period. See response to comment 38.

Comment 37: Several commenters took issue with the start date of the proposed closure of January 1 for the Cape Cod Bay and Massachusetts Restricted Area. By starting the closure January 1 the commenters felt they would miss fishing opportunities during the months of November and December in that area. They stated that November and December are especially productive and profitable months for them.

Response: The proposed closure start date is the same start date as the current closure for the gillnet fisheries in that area. The closure period reflects the time period when whales are most abundant in this area. The social impact analysis included in the FEIS examines the economic burden posed by the closure and the likely effect on the economic viability of fishing operations. The analysis identifies vessel segments that may be heavily impacted by the requirements and suggests that under the preferred alternative, a limited number of small vessels are most at risk when comparing annual compliance costs to average per-vessel revenues. As a result, harvest levels are unlikely to change and related industries (e.g., seafood processing) are not likely to be affected. NMFS believes that the expected conservation gain will provide the best chance for the Plan to achieve its goals and objectives, as well as satisfying the requirements of the MMPA and ESA.

Comment 38: Many commenters opposed the closures and questioned the conservation value of the closed areas. In some of the proposed areas fishing effort is low so the chance of an entanglement is already low.

Response: NMFS made modifications to the final rule based on public comment. One such modification was the implementation of just one closure instead of the three

originally proposed. The Massachusetts Restricted Area contains habitat that is very important and heavily utilized by right whales and is currently closed to gillnet fishing. The closure in this area would be extended to trap/pot fisheries under the final rule in an effort to lower the risk of entanglement in a high co-occurrence area.

Comment 39: Numerous commenters stated that a closed area would displace fishermen to already crowded areas or create a wall of gear just outside the closure.

Response: NMFS analyzed the alternatives in two ways to account for varying fishing effort depending upon the behavior of industry as a result of the proposed closures. One way assumed 100% suspension of fishing as a result of the closures and the other way assumed some vessels would relocate to fish outside the closed areas. The potential range of the reduction in co-occurrence of the Preferred Alternative is 37.4- 37.9%. NMFS believes that this closure will result in a reduction in co-occurrence that will work towards meeting the goals of the MMPA and ESA.

Comment 40: Multiple commenters recommended that NMFS close the Southeast U.S. critical habitat to trap/pot fishing since the agency proposed closing Cape Cod Bay to trap/pot fishing in January and February and the two areas exhibited similar co-occurrence scores of whales and fishing gear during this time of year (as presented in Appendix 5-A of the DEIS). These commenters further stated that closing critical habitat in the Northeast but not in the Southeast was an inconsistent strategy given young small calves are at a greater risk for entanglement in the Southeast critical habitat. Some strongly recommended that NMFS adopt the black sea bass seasonal closure currently required under South Atlantic Snapper-Grouper Fishery Management Plan as part of this final rule throughout the Southeast U.S. Restricted Area, an area that is already closed to gillnet fishing.

Response: NMFS did not propose a trap/pot closure in the southeast U.S. critical habitat or Southeast Restricted Area North under this rulemaking because these areas did not exhibit extensive trap/pot fishing within either of these areas when compared to the volume of effort in Cape Cod Bay. In addition, the characteristics of blue crab trap/pot gear and lobster gear used in Cape Cod Bay are very different and therefore require different strategies to reduce risk to right whales. NMFS believes blue crabs can be harvested safely within state waters for reasons stated in the proposed rule, FEIS, and in this final rule under comments and responses on weak link, rope breaking strength, and trap removal. NMFS is not adopting the current black sea bass seasonal closure required under the Snapper-Grouper Fishery Management Plan under this rule-making. NMFS published the ALWTRP proposed rule to mitigate the threat of vertical lines in commercial fisheries on July 16, 2013 (78 FR 42654). In a separate, unrelated rulemaking action, NMFS published a South Atlantic Fishery Management Council (SAFMC) Snapper-Grouper Fishery Management Plan-related proposed rule on July 2, 2013 (78 FR 39700) which, among other things, proposed a closure of the commercial black sea bass fishery in the South Atlantic from approximately Cape Hatteras, North Carolina to Cape Canaveral, Florida from November 1 through April 30. That closure became effective when the final rule was published on September 23, 2013 (78 FR 58249).

During team discussion, data analyses and the initial ALWTRP rulemaking process, the Team and NMFS was unaware that there would be an increase in the black sea bass quota (specifically, during the right whale winter migration) and associated closure as a result of this quota increase. Thus, this scenario was not discussed or included in the proposed rule. NMFS cannot implement a similar closure in this rule-making because NMFS did not seek comment on mirroring the SAFMC Snapper-Grouper Fishery Management Plan black sea bass closure to protect right whales. NMFS will consider this issue as it further develops the Snapper-Grouper Fishery Management action.

Comment 41: Multiple commenters noted that the closure boundaries could be incorrect because of changing environmental conditions. The commenters believe that if the boundaries are wrong there is little chance to change them in a timely manner due to the lengthy process that is required to amend the Plan. They also did not support static closures as a means to protect whales.

Response: NMFS acknowledges this important comment. Managing resources in the face of changing environmental conditions is challenging. NMFS believes that there is enough evidence suggesting whales inhabit the proposed Massachusetts Restricted Area to support closing this area. This area has long been known to be an important feeding ground for large whales. In fact, according to a recent report by Massachusetts Division of Marine Fisheries (2011) there has been an increase in presence of whales, particularly right whales, in this area in the months of January through April. Including the Outer Cape as part of this closure area creates a protection corridor for the whales to travel through on their way to their Cape Cod Bay feeding ground. Recent passive acoustic studies analyzing right whale calls detected in Massachusetts Bay indicate a persistent presence of right whales and call activity throughout much of the year (Morano et al. 2012; Mussoline et al. 2012). NMFS will continue to survey the area for whale abundance and will work with the Team to modify the Plan if future surveys indicate that this area is no longer an important one for large whales. In addition, the ability to account for distribution shifts exist in the current regulations (see response to Comments 3 and 13). If it is found that right whales remain in a closed area longer than expected or leave earlier, or if the boundaries of a closed area are no longer appropriate NMFS, in consultation with the Team, has the ability to make changes to the requirements.

Comment 42: Multiple commenters noted that the boundaries of some of the closures (Jeffreys Ledge and Jordan Basin) appear to be based on right whale distribution and not co-occurrence as decided on by the Team. They mentioned that the closures were not fully vetted through the Team and adding them after the fact is not transparent to the Team process.

Response: NMFS agrees that the boundaries for all of the proposed closed areas were based in part on the distribution of right whales. Although the Team did agree to focus its conservation efforts on high co-occurrence areas, some Team members expressed concern. They felt that by relying solely on co-occurrence, some of the known right whale high use areas would not be adequately protected. In response, several closure proposals were

developed by Team members. The closure proposals were initially discussed at the January 2012 Team meeting followed by additional discussion at its February and April 2012 meetings. Therefore, NMFS disagrees with the notion that the closures were not vetted through the Team. Based on public comment, the final rule does not include the Jeffreys Ledge or Jordan Basin closure (see the "Changes from the Proposed Rule" section of the preamble).

Comment 43: One commenter stated that the proposal to close the northern portion of Cape Cod Bay was not warranted. There is not a lot of fishing effort in the area and to those that fish there that area encompasses almost all of their winter fishing area.

Response: See Response to Comments 37, 38 and 42.

Comment 44: One commenter commended NMFS for proposing the closures but stressed the importance of reporting requirements to assess the closures effectiveness. Closures could trigger a relocation of effort so NMFS should be ready to expand the boundaries of the closures if this relocation leads to new areas of high co-occurrence.

Response: NMFS intends to continue to monitor its fishing vessel trip report and observer data and work with states to improve reporting requirements to accurately capture fishing effort and changes in fishing effort as a result of the final rule requirements. Should relocation of effort occur that would result in new areas of high co-occurrence NMFS would work with the Team to adjust the Plan as needed.

Comment 45: One commenter suggested that NMFS consider replacing the proposed Jeffreys Ledge and Jordan Basin closures with an increase to the minimum number of traps per trawl from November 1 through February in Maine Zones F&G (6-12 mile) to 15 traps per trawl and in Maine Zone F&G (12+ mile) to 20 traps per trawl.

Response: The final rule does not include the Jeffreys Ledge and Jordan Basin closures (see the "Changes from the Proposed Rule" section of the preamble). The rule will implement the minimum number of traps per trawl in Maine as requested by Maine Department of Marine Resources. This includes the above suggested seasonal increase to a 20 trap per trawl minimum in Maine Zones F&G.

Comment 46: Many commented that the proposed area for closure in Nantucket Sound was not justified by the co-occurrence model.

Response: See response to Comment 42. NMFS has modified the final rule based on public comment and chosen to implement a seasonal closure in Massachusetts that does not include portions of Nantucket Sound.

Comment 47: One commenter suggested that the closures may provide some level of reduction but these closures may not achieve the reduction needed to reach PBR. The closures are a minor step in addressing the issue. The commenter further requested that

NMFS use an appropriate and peer-reviewed population model to quantify the impact of closures on whale populations.

Response: NMFS and the Team cannot determine the exact percent reduction of vertical lines needed to reduce serious injury and mortality of large whales that encounter vertical lines to satisfactory PBR levels. Sufficient information is not available on when, where, and how entanglements occur such that a quantifiable line reduction target can be calculated. NMFS believes that the closure, accompanied by the minimum number of traps per trawl requirement coupled with the current regulations already required under the Plan will achieve the goals and objectives of the MMPA and ESA. As part of its monitoring plan, NMFS will monitor the impacts of all the requirements in the rule on whale populations (see response to Comment 8.

Comment 48: One commenter suggested that the time period for the Jeffreys Ledge closure include September.

Response: The final rule does not include the Jeffreys Ledge closure (see the "Changes from the Proposed Rule" section of the preamble).

Comment 49: One commenter supported the use of closed areas to manage entanglement risks to right whales in locations where right whale abundance is predictable and industry impacts are minimal. The commenter supported closing the Massachusetts states waters in the Cape Cod Bay Critical Habitat and suggested that this closure be state managed. The commenter believes that a closure in Cape Cod Bay should be dynamic to allow the state to alter the closure based on the large whale surveillance program conducted in that area.

Response: See response to Comment 42. NMFS appreciates the support for a closed area in Cape Cod Bay. NMFS believes that the most effective closure to reduce the risk of serious injury and mortality would include Federal waters as well as state waters. NMFS intends to monitor this issue as part of the Plan's monitoring strategy (see response to Comment 8).

Comment 50: Multiple commenters stated that the economic costs of the closures to the industry is too great and outweighs the conservation benefits to whales gained by the closures. They stated that the reduction in co-occurrence as a result of the closures is minimal compared to the cost to industry. The cost per unit of co-occurrence reduction is spread across fewer vessels impacted by closures.

Response: NMFS partially agrees with the commenter and has modified the final rule based on public comment to include one closure instead of the proposed three (see the "Changes from the Proposed Rule" section of the preamble). NMFS is sensitive to the cost of complying with the final rule and has analyzed these costs in Chapter 7 of the FEIS. NMFS believes that there is enough evidence suggesting whales inhabit the proposed Massachusetts Restricted Area to support closing this area (see response to Comments 37, 38 and 42). The Massachusetts Restricted Area has long been known to be an important

feeding ground for large whales and there is a reduction in co-occurrence that will translate into a conservation benefit.

Comment 51: Multiple commenters stated that if the Jordan Basin closure is finalized the boundary of the closure area should be modified to only include waters in LMA1 and not have the boundary cross the LMA 3 line as currently proposed.

Response: The final rule does not include the Jordan Basin closure. Please see the "Changes from the Proposed Rule" section of the preamble and the response to Comments 37, 38 and 42.

Comment 52: One commenter stated that closures are essential to reducing serious injury/mortality of large whales. The commenter believes that closures are the best means to reduce risk as each proposed closure has a high co-occurrence score during the proposed season.

Response: NMFS believes that closures can serve as an important conservation tool if utilized appropriately. However, based on public comment and the analysis of its alternatives found in the FEIS, NMFS does not believe all three proposed closures are based on high co-occurrence scores during the proposed seasons as the commenter suggests. Therefore, based on public comment, the final rule does not include the Jeffreys Ledge or Jordan Basin closure (see the "Changes from the Proposed Rule" section of the preamble and response to Comment 42).

Comment 53: Some commenters were concerned about the failure to more fully address vertical line risk in the Southeast in light of the likely increased effort in the black sea bass trap/pot fishery during the winter as a result of the SAFMC's recent actions related to the Snapper-Grouper Fishery Management Plan. Commenters note that this potential increase in fishing effort was not considered in the DEIS.

Response: NMFS is aware that the SAFMC is developing a regulatory amendment, Snapper Grouper Regulatory Amendment 16, to modify or remove the recently implemented black sea bass fishery closure intended to protect right whales from entanglement in vertical lines associated with the black sea bass fishery. NMFS is also aware that this regulatory amendment has the potential to contradict or remain consistent with the intent of this final rule (intended to reduce the threat of entanglement to right and other large whales from vertical lines associated with commercial fisheries). Therefore, NMFS is collaborating with the SAFMC on their regulatory amendment to encourage adequate protection for right whales. Additionally, NMFS may consider future amendments to the ALWTRP, if appropriate, to address new developments that affect the risk to right and other large whales in the South Atlantic from vertical lines associated with commercial fishing gear.

1.1.5 Comments on Effective Date

Comment 54: One commenter recommended that NMFS provide an adequate period prior to implementation of the final rule to allow for public education and for fishers to convert their gear to comply with the new regulations. The commenter further noted affected states might need time to make changes to state trap/pot gear regulations to address inconsistencies between state regulations and NMFS' proposed amendments to the ALWTRP.

Response: NMFS agrees and considered input from state managers and industry leaders to ensure that the date chosen for implementation is practical and provides adequate time to comply with new requirements.

Comment 55: One commenter stated that there will be a significant burden placed on industry to comply with the proposed measures and requested that NMFS provide adequate time for industry to convert their gear.

Response: NMFS is sensitive to the needs of industry to convert their gear to the required minimum number of traps/pots per trawl and appropriate gear marking scheme. Typically NMFS provides 30 days for industry to comply with new requirements. Based on public comment, NMFS has agreed to provide additional time for fishermen to convert their gear (please see response to Comment 54).

Comment 56: Numerous commenters requested that the implementation date coincide with the trap/tag date of June 1 as a mid-season implementation date in the fall is not practical.

Response: NMFS agrees with the commenters and will work with state managers and industry leaders to ensure that the date chosen for implementation is practical and provides adequate time to comply with new requirements. NMFS will have a phased in approach to the new requirements if necessary.

1.1.6 Comments on Gear Marking

Comment 57**:** Numerous people commented that requiring one color code for trap/pot lines deployed in state waters and another for federal waters as proposed would force commercial fishermen to re-rig their gear because blue crab trap/pot gear is fished in state, federal, or state and federal waters depending on blue crab distribution. These commenters recommended a gear marking scheme that would allow fishers to quickly alter color markings without incurring the expense and labor of changing the entire line. One commenter requested a 3-year phase-in period because old or wet lines will not take paint or hold colored tape, so entirely new lines will have to be purchased before the fishery could come into compliance with this measure. However, the commenter supported the two-color marking requirements to differentiate trap/pot gear fished in state vs. federal waters. There were also some commenters, including fishermen that did not object to the proposed gear marking scheme.

Response: The concern about different gear marking requirements between federal and state waters is restricted to the blue crab fishery off Georgia and South Carolina. NMFS believes the requirement for trap/pot gear fished in federal waters to return to port at the end of a fishing trip will eliminate fishing for blue crab in federal waters. Consequently, NMFS does not believe a gear marking scheme that will enable trap/pot gear to be easily moved between federal and state waters is needed. Furthermore, the ALWTRT highlighted that gear marking is an important conservation measure, specifically gear marking that allows gear to be distinguished between areas.

NMFS appreciates the concern about old or wet lines not taking paint or holding colored tape. Since we did not receive any comments from trap pot fishermen regarding challenges with gear marking or the need for a phase-in period, NMFS does not believe these actions are necessary. See Response to Comment 26.

Comment 58: Many commenters while in support of gear marking felt the proposed gear marking fell short of manager's needs and a more refined gear marking was necessary.

Response: Based on implementation considerations and technology presently available, NMFS believes the final gear marking scheme is appropriate. If more promising techniques become available in the future, NMFS will discuss these further with the Team.

Comment 59: Many commenters stated that marking in exempted waters would be difficult and not feasible. Many fish both inside and outside of the exemption area so they would need to remark their gear with a different color scheme every time they fish in and out of the exempted waters. This is not time or cost effective.

Response: NMFS has modified the final rule based on public comment and will not require gear marking inside the exemption area.

Comment 60: Some commenters stated that if exempted waters were required to be marked that Maine and New Hampshire should have different colors for their exempt waters and not be grouped together.

Response: See Response to Comment 59.

Comment 61: Some commenters stated that marking the line 3 times was excessive and 1-mark mid-way down the line is adequate. The commenters felt that making the current mark larger would be the easiest approach but were unclear if this would really make a difference.

Response: NMFS believes the current gear marking scheme that requires only one 4-inch mark is inadequate. Frequently the line recovered from entanglement events is unmarked. Of the 499 entanglement events from 1997-2011 gear was only recovered in 170 cases; of the entanglement events, gear marking lead to 51 (10%) cases where fishery, location, and date were known. NMFS believes requiring larger marks more frequently will increase the amount of marked line recovered during events and thus inform future management decisions.

Comment 62: Some commenters questioned the need to mark in exempt waters if the occurrence of whales in exempt waters is rare.

Response: See Response to Comment 59.

Comment 63: Two commenters cited challenges with marking offshore gear as the gear is always wet and infrequently brought back to shore. The gear is also easily identified due to its size.

Response: NMFS acknowledges this challenge but points out that offshore gear is currently required to be marked. The new gear marking scheme would expand the size and frequency of the current gear marking scheme.

Comment 64: A few commenters noted that fine scale marking in the Gulf of Maine is justifiable and more unique color codes are necessary than what is being proposed.

Response: See Response to Comment 58.

Comment 65: Many commenters opposed increased gear marking in LMA1 (frequency, level, or size) stating that the gear marking only informs where the gear was set and not where the entanglement occurred. These commenters suggested that NMFS suspend increased gear marking requirements until more definitive regional markings are available.

Response: See Response to Comment 58.

Comment 66: A few commenters suggested NMFS modify the proposed gear marking to understand the gear configuration in the Gulf of Maine. The commenters suggested marking by trawl length.

Response: Various gear marking schemes were discussed by the Team over the course of several meetings during the development of this rule, including the idea suggested by the commenter. However, the Team could not reach agreement on how to mark gear based on the gear's configuration. NMFS also solicited gear marking ideas during its public scoping meetings, which also did not yield any favorable alternatives. Therefore, NMFS believes the final gear marking scheme is appropriate based on the current technology that exists and public comments received on feasibility of gear marking.

Comment 67: One commenter suggested adding a second color for each LMA. The commenter also did not support the use of orange as color for marking the Southern Nearshore Trap/Pot area as this is too similar to the red color required in other waters.

Response: Based on implementation considerations and technology presently available, NMFS believes the final gear marking scheme is appropriate (see response to Comment 63). The current color mark for Southern Nearshore Trap/Pot area is orange. The final rule does not change this color scheme.

Comment 68: One commenter suggested that rather than just 3 marks per line that the number of marks be increased for those fishing in deeper waters. The commenter also suggested marking groundlines.

Response: Based on the public comments received, NMFS believes that 3 marks per line is adequate at this time. NMFS did not propose marking groundlines through this rulemaking given the fact that all groundline in regulated areas should be sinking and thus easy to distinguish from vertical line.

1.1.7 Comments on Weak Links/Vertical Line

Comment 69: Multiple commenters stated they already use weak links and some used weak links with fewer hog rings than required (i.e. lower breaking strength). These commenters stated that they did not have objections to the proposed weak link requirement. One commenter requested test trials because he did not know how many hog rings resulted in 200 lb breaking strength and he wanted to ensure the feasibility of this requirement in the blue crab fishery. Another commenter mentioned the importance of enforcing the existing weak link requirements. Other commenters recommended that 200 lb weak links be required throughout critical habitat or throughout SERA N.

Response: We are pleased that many fishermen already use weak links and that some are using lower breaking strength than required by the ALWTRP. We agree that enforcement is important and we will ensure that our Joint Enforcement Agreements with state agencies include checking weak links on trap/pot gear.

We believe a three hog ring weak link configuration is feasible for the Florida blue crab fishery. We conducted five trials to test the breaking strength of a 3-hog ring, side-by-side configuration and each time found the breaking strength to be less than 200 lbs (NMFS unpub. data).

We are not requiring a uniform 200 lb weak link throughout critical habitat or the SERA N for the same reasons a vertical line with maximum breaking strength of 1,500 lbs is not required (see Response to Comment 70).

Comment 70: A number of commenters submitted the following comments on the rope breaking strength requirement: 1) The 1,500 pound (lb) vertical line breaking strength is the most risk-averse proposal and should be adopted for the right whale calving area critical habitat or the entire Southeast restricted area; 2) NMFS does not explain why the Federal waters vertical line breaking strength requirements mirror those of Georgia and South Carolina rather than the more appropriate (and more conservative) Florida breaking strengths; and 3) NMFS attempted to rationalize different rope breaking strengths in different areas by stating that the lower breaking strength in Florida state waters would protect “neophyte” calves; however, these same “neophytes” are born further to the north where rope breaking strengths are far higher and thus, presumably create greater risk. On the other hand, some submitted comments in support of lower breaking strengths for vertical lines and weak links in Florida state waters versus those required for Georgia and South Carolina. They commented that right whales off Georgia and South Carolina are frequently

found over 3 miles from the shoreline so there is less overlap of whales with state water fisheries, whereas right whales in northeast Florida frequently inhabit state waters.

Response: NMFS does not agree with the recommendation to require 1,500 lb vertical line breaking strength throughout critical habitat or the entire Southeast restricted area. The rationale for requiring different rope breaking strengths in different areas is based on multiple considerations: 1) right whale mother/calf pairs in the Southeast most frequently occur in water depths of 10-20 m (~33-66 ft) (Keller et al., 2012). Florida state waters are typically deeper than 10 m (~33 ft) closer to shore whereas depths along the coasts of Georgia or South Carolina are generally less than 10 meters (~33 ft). Therefore, NMFS believes the probability of blue crab trap/pot gear interactions with mother/calf pairs is higher in Florida state waters than South Carolina or Georgia state waters; 2) many fishermen in South Carolina and Georgia state waters report their trap/pot gear can be partially buried in bottom sediment and therefore require stronger vertical lines to avoid unintentionally breaking lines during retrieval; 3) Offshore federal waters are less protected and typically exhibit harsher conditions that require vertical lines with greater breaking strengths to reduce accidental gear loss and the potential risk to right whales from derelict gear. Consequently, NMFS capped the maximum vertical line breaking strength in federal waters at 2,200 lbs and included the additional requirement that all trap/pot gear be brought back to shore at the end of each fishing trip. NMFS believes these combined measures provide overall risk reduction for right whales while taking into account their co-occurrence with fishing gear, bathymetry, and characteristics of fishing practices in offshore federal waters.

1.1.8 Comments on Gillnets

Comment 71: Many commenters felt that the impact from gillnet gear should be included in the proposed vertical line reduction measures.

Response: Including gillnets in the proposed measures was analyzed in the FEIS and rejected (See Chapter 3, Appendix 3-A of the FEIS). The gear characterization information in the co-occurrence model shows that 99% of the vertical lines coastwide are from lobster trap/pot and other trap/pot fisheries (Exhibit 3A-1). For this reason, NMFS and the Team chose to focus this rule making on trap/pot gear only.

Comment 72: One commenter suggested that a prohibition on gillnets be included in the Jeffreys Ledge trap/pot closure area.

Response: The final rule does not include the Jeffreys Ledge closure (see the "Changes from the Proposed Rule" section of the preamble and response to Comment 42).

Comment 73: One commenter suggested that the rule include a prohibition on gillnets in all proposed closure areas as well as the sliver management area with the current Great South Channel Restricted Gillnet Area.

Response: See response to Comment 71. In addition, the amount of gillnet vertical lines removed as a result of the proposed closures the result is minimal compared to the trap/pot gear removed (Chapter 3 Exhibit 3A-2 of the FEIS). This result leads to a high economic impact on individual gillnet vessels but low overall conservation impacts or reduction in co-occurrence. Therefore, NMFS proposed the closures for only trap/pot gear and not gillnet gear.

1.1.9 Comments on Enforcement and Monitoring

Comment 74: Many commenters stated their support for increased effort and funding for enforcement to improve compliance.

Response: NMFS appreciates the support and acknowledges that enforcement is essential to the success of the Plan's regulations.

Comment 75: One commenter stated that status quo could be improved by having mandatory training for disentanglement by industry members. He stated that it didn't make sense to wait hours for trained responders to arrive during a rescue situation.

Response: NMFS has a Atlantic Large Whale Disentanglement Network that provides training, equipment and authorization for responders to disentangle large whales. There are defined safety protocols and established guidelines for training and designation of response levels within the program. A five level structure was established based upon levels of training, with respect for the inherent danger of working with various species of large whales. NMFS does not believe that training should be mandatory but encourages those that are interested in response to go through NMFS training process.

Comment 76: Multiple commenters stated that the rule does not address data gaps for lobster fishing in Federal waters. They suggested NMFS require Federal lobster permit holders to report landings, gear configuration, and other relevant information.

Response: NMFS is aware that data gaps exist in certain fisheries. The American lobster fishery is managed cooperatively by the Atlantic states and NMFS under a fishery management plan (FMP) developed by the Atlantic States Marine Fisheries Commission (Commission), which is a deliberative body of 15 Atlantic coastal states that coordinate the conservation and management of Atlantic coastal fishery resources. Under the American Lobster FMP, the states issue regulations for lobster fishing in state waters and NMFS supports the FMP by implementing regulations for fishing in federal waters. NMFS continues to work closely with the Commission to develop uniform reporting where appropriate.

Comment 77: One commenter stated his support for better enforcement and monitoring of existing regulations before proposing additional measures. He suggested there should be annual stock assessments for large whale species and a more timely decision making process that relies on real time information.

Response: NMFS and the Team have developed a comprehensive monitoring strategy that evaluates industry compliance to the Plan's requirements and the overall effectiveness of the Plan in achieving its goals and objectives (see response to Comments 6 and 8). NMFS continues to work with the US Coast Guard and state partners through Joint Enforcement Agreements to enforce regulations. NMFS currently publishes Stock Assessment Reports for large whales on an annual basis. Decision making processes that rely on real time information are often challenging, NMFS, in collaboration with the Team, bases decisions on the best information available at that time.

Comment 78: One commenter believes that the monitoring of the impacts of the proposed changes is unclear. The commenter recommends that funding for large whale scar analysis continue in order to determine if scarring has increased or decreased and if the reduction of vertical line has reduced the rate of interaction. Scarring analysis could also help to monitor the trend in severity of the entanglements.

Response: Scarring analysis is included as a metric in the monitoring strategy (see Response to Comment 8).

Comment 79: One commenter feels that NMFS must address the risk associated with emerging fisheries.

Response: NMFS has a plan in place to deal with emerging fisheries through its annual List of Fisheries. Fisheries are added to the Plan once they are classified on the annual List of Fisheries as having frequent or occasional interactions with marine mammals. If an emerging fishery fits these criteria then that fishery would have to abide by all the Plan's requirements including the proposed trawling up requirements.

Comment 80: One commenter stated that improved enforcement and monitoring is needed and fisheries should be monitored on a day to day basis. The commenter suggested increasing the frequency of observer coverage or video surveillance as data collection leads to stricter enforcement.

Response: NMFS agrees that enforcement and monitoring are essential to the Plan's success. Sea-sampling observers do collect large whale sightings data, however, this is one of many data collection responsibilities and the likelihood of observing an entanglement event is rare.

Comment 81: One commenter feels that there should be mandated reporting requirements for all states.

Response: See response to Comment 72. NMFS will continue to work with state partners to improve reporting requirements to keep the fishing effort data in its vertical line model current. If voluntary reporting becomes an ineffective means to collect information NMFS will work with the Atlantic States Marine Fisheries Commission on the prospect of mandatory reporting.

Comment 82: One commenter encouraged NMFS to produce more robust annual monitoring reports. The commenter also requested a full five year report be completed before the final rule assessing the sinking groundline rule since it has been in place for five years.

Response: See Response to Comments 6 and 8. NMFS will assess its annual monitoring reports to ensure that the most useful information is included.

Comment 83: One commenter recommended a requirement that all trap/pot fishermen permitted to fish in federal waters record and submit data on the location, number, and length of time that endlines are deployed and describe in the FEIS precisely what data on endlines (e.g., number, location, and length) NMFS expects state fishery agencies to provide to evaluate compliance and rule effectiveness.

Response: NMFS cannot implement reporting in this rule-making because NMFS did not seek comment on this measure in the proposed rule. Although such reporting is outside the scope of this rulemaking, NMFS will re-evaluate a reporting requirement in future relevant rulemaking.

1.1.10 Comments on the Shipping Industry and/or Ship Strikes

Comment 84: One commenter stated that he thought whales got hit by boats and then entangled in the line so the shipping industry should be held accountable.

Response: The Recovery Plan for the North Atlantic Right Whale (National Marine Fisheries Service 2005) identifies vessel interactions and interactions with commercial fishing operations as the two primary sources of anthropogenic activities that result in right whale death or serious injury. Although the scenario suggested by the commenter is plausible, NMFS addresses vessel interactions and interactions with commercial fishing operations separately. Ship strikes are evaluated through a separate action in support of the implementation of the North Atlantic right whale ship strike strategy. The ship strike reduction rule, first implemented in 2008, presents regulatory measures that reduce the risk of ship strike to right whales, such as speed restrictions and vessel routing measures. The rule is one component of a suite of NMFS' comprehensive right whale ship strike reduction measures, which also includes education and outreach to commercial and recreational mariners, research on technologies that may help mariners avoid whales, a comprehensive program of sighting advisories to mariners, section 7 consultations to address Federal vessel activities, and the development of a Conservation Agreement with Canada ship strike strategy. This final rule addresses the risks to right whales from interactions with commercial fishing operations by reducing the risk of death or serious injury when large whales encounter vertical lines from commercial trap/pot gear.

Comment 85: One commenter stated that the ship speed rule should be permanent.

Response: On December 9, 2013 NMFS published a final rule (78 FR 73726) that eliminated the expiration date of the ship strike reduction rule. The rule is now permanent.

Comment 86: One commenter stressed the need to address the impact of ship strikes.

Response: See Response to Comment 84.

1.1.11 Comments on the Number of Traps per Trawl

Comment 87: Several commenters were concerned that increasing the number of traps per trawl would create safety issues for smaller fishing operations. These commenters stated that there would be stability issues and the potential for capsizing due to the distribution of weight of the additional rope and traps on board.

Response: Because vertical lines pose a risk to whales regardless of vessel size, NMFS requires both small and large vessels to increase the number of traps per trawl to reduce the number of vertical lines in the water column. However, NMFS is aware of these safety concerns for smaller vessels. To address impacts to smaller vessels, state managers and industry representatives on the Team proposed utilizing smaller minimum number of trap/pots per trawl. Those smaller limits in inshore state water areas are contained in the final rule. Also, based on public comment NMFS modified the final rule to allow for a minimum of two traps per trawl in areas that previously would have required three traps per trawl. NMFS also established a ¼ mile buffer around three inhabited Maine islands to allow those small vessels to continue to fish single trap/pots. NMFS believes that these modifications address the small vessel safety concerns while still meeting the conservation goals of the MMPA and ESA.

Comment 88: Several commenters disagreed with the changes to the inshore fishery to require pairs or triples and no longer allow singles. They stated that they fish around shallow bays and rugged bottoms so fishing with anything more than a single would create gear loss or damage. They suggested a near shore exemption for singles.

Response: The final rule will not include a near shore exemption for singles. See Response to Comment 82.

Comment 89: One commenter stated that it appeared that concessions were made to minimize the hardships in meeting the plan's goal and LMA 2 lobstermen are disproportionally affected by the proposal. The commenter stated that Downeast Maine lobstermen were allowed to fish doubles but LMA 2 would be required to go up to three traps per trawl in state waters even though there are probably 30-50% fewer vertical lines in LMA 2 today than in the past due to the lobster stock collapse.

Response: NMFS modified the final rule based on public comment. All those fishing in state waters of LMA 2 will be allowed to fish doubles rather than the previously proposed three traps per trawl.

Comment 90: Several commenters stated that trawls would increase gear conflict and thus ghost gear.

Response: NMFS evaluated the effects of trawls on gear loss in Chapter 6 of the FEIS. Overall, the effect of trawling on gear loss is unclear. While data from a Maine trawling project completed in 2012 suggest some potential for increased gear loss during fishermen's transition to trawls, the more extensive data from the Massachusetts ghost gear survey completed in 2011 suggest that trawls are less subject to gear loss in steady-state conditions. Gear loss is likely a function of numerous variables that extend well beyond the trawl configuration, including bottom structure, shipping traffic, gear density, gear conflicts, tides, currents, and weather events. The net effect of trawling in the context of all these variables is difficult to characterize or quantify. NMFS and the Team will continue to monitor this issue and make adjustments to the Plan if warranted.

Comment 91: One commenter stated that it was more profitable and safer to fish singles than trawls.

Response: Analysis of the impact to catch as a result of trawling is discussed in Chapter 6 of the FEIS. Data to support a quantitative analysis of trawling effects on catch are extremely limited. Because multiple factors influence catch rates (gear configuration, gear density, the abundance of the target species, bottom structure, soak time, individual skill, etc.), it is difficult to isolate the effect of trawl configuration on catch. Research has demonstrated that the optimal spacing of lobster traps depends upon the abundance of lobster in an area; the greater the density of lobster, the greater the density of traps that can be fished without an adverse impact on catch per trap (Schreiber, 2010). In Massachusetts waters where lobster appear to be less dense than Maine waters there is a possibility of that changing gear configuration may impact catch. These impacts may diminish over time, as fishermen adapt to new gear configurations and learn to fish longer trawls more efficiently. NMFS believes that the minimum number of traps per trawl required and exceptions made to this requirement, adequately address the safety concerns association with fishing trawls while still providing a viable economic return to fishermen.

Comment 92: A few commenters questioned the proposal to increase the number of traps per trawl and stated their opinion that a whale would be more likely to survive a single pot entanglement than an entanglement in a trawl.

Response: NMFS believes that a single line of high breaking strength with one or multiple traps can be deadly. No analysis has been conducted but past experiences show that just a simple loop can kill a whale. Also, it is unquestionable that fewer vertical lines create a lower entanglement risk to whales.

Comment 93: Many commenters were in support of the proposed number of traps per trawl, particularly the proposed increase outside state waters.

Response: NMFS appreciates the support.

Comment 94: Several commenters mentioned the danger of fishing with trawls in the Outer Cape citing issues related to storms, traffic and tides unique to the Outer Cape.

Response: NMFS is sensitive to these concerns and the uniqueness of the Outer Cape. The final rule will require those fishing on the Outer Cape to fish a minimum of two traps per trawl as opposed to larger trawls required elsewhere.

Comment 95: A few commenters stated that many in the Outer Cape and Cape Cod Bay use singles and wondered if there were confirmed interactions with singles in these areas. If there are not then why penalize fishermen?

Response: It is uncertain how many interactions there have been with Outer Cape and Cape Cod Bay gear. Because most large whale entanglements (particularly those involving right whales) tend to be free swimming entanglements when detected and the gear recovered from these entanglements do not provide adequate information to determine where an entanglement occurred, entanglements from specific fisheries and areas are rarely documented. After the implementation of the broad based prohibition on floating groundline in 2009, 54 new whale entanglements were reported, in 2010 (21 total: 5 right; 16 humpback), and 2011 (33 total: 11 right; 21 humpback; and 1 fin). The entangling gear was either retrieved or identified in only 15 of these incidents. NMFS must take action to ensure its goals under the MMPA and ESA are met.

Comment 96: Two commenters stated that mandating one buoy line on trawls per five or less would cause a safety issue and the potential for gear loss and gear conflict. It is a common problem for boat traffic or gear conflict to cause the temporary or permanent loss of a buoy, connected to a vertical line, identifying a trawl. Without the option to haul that trawl from a second vertical line there is a potential for increased ghost gear.

Response: NMFS acknowledges this comment but points out that the regulations currently require one buoy line on trawls having less than or equal to five traps. The final rule would not change this requirement.

Comment 97: One commenter had concerns with the trawling up strategy stating that those fishing in Federal waters are already fishing trawls with the minimum number proposed so there would be no reduction in vertical lines.

Response: NMFS disagrees with this comment. The model used current data to estimate vertical lines based from current fishing practices and estimated the reduction in vertical lines that would result from compliance with the new requirements. This demonstrates that there would be a reduction in vertical lines.

Comment 98: Two commenters felt that NMFS should set vertical line reduction limits and work with the Atlantic States Marine Fisheries Commission and Fishery Management Councils to reach those targets. One commenter felt that gillnet and other trap/pot fisheries should be included in this process as well.

Response: See response to Comments 12 and 47.

Comment 99: Numerous commenters voiced safety concerns associated with trawling up in waters surrounding Maine's many islands. The bottom is rocky and shallow in this area and many small boats fishing these waters. The waters are generally less than 30 fathoms deep and unlikely to impact whales or increase co-occurrence risk, Some suggested a ¼ mile exemption around islands from the proposal to increase the number of traps per trawl. One commenter suggested limiting the trawl minimums on a seasonal basis for areas around islands which are considered state waters but are found outside the 3-mile line.

Response: See response to Comment 87. The final rule includes a ¼ mile exemption around three inhabited islands in Maine. Those fishing in these waters will have no minimum number of traps per trawl requirement; however, all other requirements would remain in place.

Comment 100: A few commenters commented that the 4 pocket waters in Maine should maintain their current practices of fishing pairs rather than increasing to triples. These pocket waters are described in Federal law. Maintaining current practice in these waters are operationally practical for both industry and enforcement. One commenter also notes that the co-occurrence score near the pocket waters exceeds one in only one month at the head of one pocket water with the majority of this score located outside of the pocket water boundary.

Response: NMFS modified the final rule based on public comment to include the definition of pocket waters. The rule defines the geographic location of pocket waters and applies the same gear requirements for traps per trawl as in state waters, and as such, those fishing in that area can maintain the current practice of fishing pairs rather than increasing to triples.

Comment 101: Two commenters commented on Rhode Island's single pot fishery. They stated that three pot trawls are not an option for small boats for safety reasons. They also mentioned that there is no known serious injury/mortality in Rhode Island state waters and the area has a low co-occurrence score and as such should be exempted.

Response: NMFS modified the final rule based on public comment. The minimum number of traps per trawl required in Rhode Island state waters will be two instead of the three pot trawls originally proposed.

Comment 102: One commenter requested to decrease the minimum number of traps per trawl in LMA 2 (12+) from 20 to 15.

Response: The Preferred Alternative in the proposed rule proposed 15 as minimum of traps per trawl in LMA 2 (12+). The Preferred Alternative in the final rule includes this as well.

Comment 103: One commenter stated that there are indicators that suggest rope strength is too strong for whales to break free and a complex serious entanglement could occur.

Response: The final rule includes numerous measures to reduce the likelihood that a serious entanglement will occur. The rule requires a weaker breaking strength of rope in the Southeast where the potential for calves to get entangled is higher. The rule also defines a maximum breaking strength of weak links in the Southeast. Weak links are designed to reduce the breaking strength of traditional gear and have been in the Plan since its inception. Also, the final rule will lead to less vertical lines in the water which would make an encounter less likely.

Comment 104: One commenter feels that it is problematic to ban singles in areas where recreational fishing occurs and this creates a double standard.

Response: Section 118 of the MMPA requires that take reduction teams address serious injuries and mortalities of marine mammals that interact with commercial fishing operations; therefore, the proposed measures are specific to commercial fishing only. However, states may choose to regulate recreational fisheries within their state jurisdictions.

Comment 105: One commenter noted that it was counterintuitive that there would be a ban on singles proposed in the Northeast but a proposal to require singles in the Southeast. The commenter questioned the lack of consistency between regions.

Response: The proposed measures differ between the Northeast and Southeast region, as well as from state to state to account for variance in fisheries, right whale habitat use, right whale life history stage, and environmental features. The core right whale calving area located within the Southeast is of particular conservation concern due to the presence of neophyte calves and reproducing females. Singles are required in this area with the thought that calves may be able to break free of an entanglement in lighter single trap gear configuration than a heavier multiple trap trawl gear configuration. Also, in an effort to reduce damage to sensitive habitats, single trap/pots are preferable in the Southeast. The Southeast U.S. has many coastal habitats that include live bottom and corals; in particular, there are ample amounts of live bottom off the coast of Northeast Florida. Traps set in multiple trap trawls can damage live bottom more than single traps. Groundlines may drag across the bottom, potentially shearing off living organisms most important in providing topographic complexity (Barnette 2001). Furthermore, the area swept by the groundline is orders of magnitude greater than the cumulative area of the traps themselves (Barnette 2001). It is estimated that hauling in a single trap results in 30% more damage to the substrate than setting the trap itself (Appledorn *et al* 2000); thus, hauling in multiple traps would further increase the extent of the habitat than a single pot.

Comment 106: One commenter stated that a number of fishermen can't fish the minimum number traps/trawl proposed for the 12 mile line in Maine. The commenter suggested proposing a 'safe trawl equivelency'. Fishermen could fish in areas traditionally fished with a number of traps they feel is safe. This would be no less than 10 traps/trawl but

they would have to apply for this equivalency and explain why they are not able to fish the standard limit.

Response: NMFS appreciates the suggestion. NMFS developed the minimum number of traps per trawl with input from multiple stakeholder groups. NMFS believes that the minimum number of traps per trawl in the final rule is adequate, addresses the safety concerns of industry while meeting the MMPA and ESA goals.

Comment 107: One commenter suggested that the rule include a recommendation to maximize the number of traps per trawl as a voluntary measure similar to the current recommendation that ropes should be as knotless as possible.

Response: NMFS appreciates this suggestion and will add the suggestion to maximize the number of traps per trawl in northeastern waters to outreach materials similar to what is done with the knotless rope recommendation.

Comment 108: Numerous commenters supported the proposed increase in traps per trawl including adopting the proposed 6-mile line in Maine.

Response: NMFS appreciates the support for this measure in the final rule.

Comment 109: One commenter supported the proposed trawl minimums but stated without a defined target for reduction the trawl minimums are unlikely to achieve the required impact without the use of closures.

Response: NMFS appreciates the support for the trawl minimums and agrees that both the trawl minimums and closures combined will achieve the best reduction in co-occurrence. The final rule will include both trawl minimums and a seasonal closure. Regarding the use of a defined target for reduction, please see the response to Comments 12 and 47.

1.1.12 Comments on Trap Reduction/Existing Measures

Comment 110: A few commenters noted that LMA 2 has undergone trap reductions and the impact of these trap reductions should be accounted for when considering vertical line reductions.

Response: The measures developed are based on a vertical line model that allowed us to target conservation measures in areas that have the highest overlap of large whale sightings per unit effort with commercial trap/pot and gillnet fishing. The model accounts for the way the fishing industry deployed its gear in the past, which reflects the requirements when the proposed measures were developed. NMFS acknowledges that effort reduction has taken place however a reduction in traps does not necessarily equate to a reduction in the number of vertical lines in the water column. During the comment period NMFS requested comments on how best to quantify potential future trap reductions or increases with respect to how many vertical lines could be reduced or increased. NMFS did

not receive any substantive comments addressing this issue. NMFS realizes that potential effort reductions or increases in the future could reduce or increase the number of vertical lines in the water column. NMFS, in consultation with the Team, has developed a monitoring strategy to evaluate industry compliance with the Plan and the effectiveness of the Plan in achieving the plan's goals and objectives. For more information on the monitoring strategy, please see the response to Comment 8.

Comment 111: One commenter requested that NMFS anticipate the implementation of Addendum XVII to the American Lobster Fishery Management Plan intended to reduce the number of LMA 2 traps to greater than 50% in six years through active and passive reductions. He stated that 50% reduction in traps may not equate to the same vertical line reduction but it's anticipated the vertical line goal could be met by trap reductions and there should be attempt to quantify potential line reduction from effort control.

Response: See Response to Comment 110.

Comment 112: A few commenters noted that trap reductions occur when permits are transferred and thus the numbers of vertical lines are reduced. There has also been a reduction of traps because of the general reduction of fishermen.

Response: See Response to Comment 110.

Comment 113: A few commenters suggested that many fishermen are fishing below their allotment of trap/pot gear on their permit and flexibility should be allowed. They stated that NMFS can reduce the number of vertical lines by allowing that fishermen the option of either trawling up or fishing below their allotment of traps with less number of trawls.

Response: NMFS and the Team discussed this issue at several of its Team meetings during the development of this rule. Similar to the response to Comment 105, NMFS and the Team could not quantify how fishing below ones trap/pot allocations equates to a reduction in the number of vertical lines in the water column.

Comment 114: One commenter stated that LMA3 traps have been reduced by over 30% and will continue to be reduced by another 25% through active reduction. The passive reductions will result in 10% of transferred traps being retired.

Response: See Response to Comment 110.

Comment 115**:** Some commenters stated that many of the goals of the ALWTRP were currently being achieved through South Atlantic Fishery Management Council Snapper-Grouper Fishery Management Plan since it limits the number of endorsements, requires pot tending, requires that pots return to shore at the end of the fishing trip, limits fishermen to a 1000 lb trip limit, etc.

Response: In the proposed rule, we acknowledged changes within the commercial black sea bass trap/pot fishery have reduced risk to large whales. The most important and

effective risk reduction measure is that South Atlantic black sea bass fishing season has not co-occurred with the right whale season since January 2010 (i.e. no temporal or spatial overlap between commercial black sea bass trap/pot gear and right whales). However, there are other trap/pot fisheries active within the SERA N during the right whale calving season that NMFS must consider.

1.1.13 Comments on Research

Comment 116: Many commenters stated their support for increased funding for research and disentanglement.

Response: NMFS appreciates the support for increased funding for both research and disentanglement efforts. NMFS will continue to look for creative ways to fund these important programs.

Comment 117: One commenter commented that NMFS should continue to research and develop alternative fishing gear as a way to mitigate the effect of a potential increase in effort outside the closure areas. The commenter encouraged the development of ropeless fishing or reduced breaking strength of vertical lines.

Response: NMFS agrees that gear research is an important component of the Plan. NMFS funded two studies to look at the feasibility of ropeless fishing by using grapples/hooks to haul gear. There were a number of complications with this fishing method that made it infeasible from an economic and safety standpoint. At this time ropeless fishing is not a feasible option. NMFS encourages the fishing industry, state partners, and others to work collaboratively with the agency to continue to develop new ideas and techniques that will reduce entanglement risk. NMFS is committed to gear research and development and as funding allows will continue to develop reliable and safe gear modifications.

1.1.14 Comments on Economic and Social Impacts (of the ALWTRP)

Comment 118: Two commenters stated that the data used for the offshore fishery (LMA3) in the socio-economics is flawed and is not an accurate depiction of the fishery.

Response: NMFS acknowledges that the characterization of the offshore lobster fishery, like the characterization of other fisheries, is subject to the limitations of available data. The EIS attempts to address these limitations, where possible, by drawing on data from multiple sources. In the case of the offshore lobster fishery, for example, estimates of the impact of trawling requirements on revenues are based in part on catch-per-trap estimates from a 2005 survey conducted by the Gulf of Maine Research Institute (GMRI), and in part on data reported in the 2009 Lobster Stock Assessment, focusing on Georges Bank as an indicator of offshore catch rates (see Exhibit 6-4). These and the other sources upon which the EIS relies constitute the best available information on the economic characteristics of the offshore lobster fishery.

Comment 119: One commenter commented that with lower landings, less consumer surplus will lead to a greater boat price for fishermen to help offset the cost or loss in revenue from these proposed regulations. The commenter did not believe this would occur instead she thought that the U.S. imports Canadian lobsters with no import/export quota restriction, meaning, when these proposed closures result in lower landings from Maine, New Hampshire and Massachusetts, the U.S. businesses depending on this product will increase their imports from Canada before an increase in boat price will trickle down through dealers to harvesters. This may result in a higher Canadian price first, possibly a higher U.S. price later but nothing that will substitute the projected 40-66% loss in average annual gross revenue as stated.

Response: As the EIS indicates, the dynamics of the lobster market are complex, making it difficult to predict the impact of a reduction in domestic landings on the prices that U.S. lobstermen receive for their catch. The potential moderating effect of imports from Canada on any increase in U.S. prices adds to this complexity. In light of these considerations – as well as the relatively modest impact the alternatives would likely have on U.S. landings – the analysis does not attempt to adjust the estimate of economic impacts on U.S. lobstermen to account for a potential increase in ex vessel prices. It simply notes the possibility that a reduction in catch could lead to an increase in prices. It does not suggest that any such increase would be sufficient to offset the impact of a closure, either on the vessels displaced by the closure or on the industry as a whole.

Comment 120: One commenter commented that the loss in revenue as a result of closures are more than predicted stating that the cost is severely underestimated and creates a much larger cost per unit of co-occurrence reduction than cited.

Response: NMFS acknowledges the difficulty of predicting the impact of seasonal area closures on affected vessels. The EIS evaluates an upper and a lower bound scenario in an attempt to characterize the potential range of effects. In the upper bound scenario, the analysis assumes that vessels whose effort is displaced by the closure will not relocate that effort to other areas; hence, all revenue (net of operating cost savings) associated with this effort is assumed to be lost. NMFS believes this approach provides a conservative but reasonable high-end estimate of the potential economic impacts of a closure.

The commenter also notes the relatively high cost of closures, compared to minimum trawl-length requirements, in achieving a reduction in co-occurrence scores. The summary of the impact analysis (see Chapter 8) explicitly addresses this issue.

1.1.15 Clarification Requests for the FEIS

Comment 121: One commenter commented that the change in number of vertical lines and co-occurrence is not partitioned out by state versus Federal and as such it is difficult to evaluate the proposed rule.

Response: NMFS has attempted to present the results of the analysis in a manner that clearly communicates the key impacts of the alternatives under consideration. While presentation of some findings at a higher degree of geographic resolution is possible, developing this information would require a substantial investment of analytic resources. NMFS has evaluated the effectiveness of each alternative in reducing co-occurrence scores in all waters subject to the requirements of the ALWTRP, and believes it is appropriate to report the impacts of each alternative at that level.

Comment 122: One commenter requested that the discussion of weak links be expanded to include evidence that weak links have prevented entanglements, reduced the likelihood that an entangled whale would be seriously injured or die, have failed to prevent entanglements, or may be counterproductive in helping whales shed gear.

Response: Additional information was added to the FEIS to address this comment.

Comment 123: One commenter requested that the FEIS identify the steps NMFS will take to ensure enforcement of the new trawling up requirements.

Response: Additional information was added to the FEIS to address this comment.

Comment 124: One commenter requested that the analysis be revised to identify criteria being used to determine when the economic costs of closures outweigh the conservation benefit to large whales.

Response: As the EIS notes, NMFS' evaluation of regulatory alternatives is guided by the requirements of the Marine Mammal Protection Act, the Endangered Species Act, and the National Environmental Policy Act, as well as the requirements of Federal laws like the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act) and executive orders such as Executive Order 12866, Regulatory Planning and Review. None of these statutes or orders establishes explicit criteria for determining when the economic costs of a regulatory measure outweigh its benefits when – as is the case here – costs and benefits cannot be fully quantified and measured on a common basis. In such cases, identification of a preferred alternative requires an assessment of all information available, including information on the potential impacts of management measures that cannot be quantified. The preferred alternative that NMFS has identified was developed on the basis of such an assessment.

Comment 125: One commenter requested that the FEIS provide data on recent levels of fishing effort and economic impacts for proposed closures. Those data should include the number of affected fishermen, amount of gear set, and volume and net revenues of ex-vessel landings.

Response: Chapter 6 of the EIS provides the requested parameters in a series of exhibits (Exhibits 6-17, 6-22, and 6-24). For each closure, these exhibits show the number of affected vessels, the average number of traps per affected vessel, and the revenue lost per trap fished. As explained earlier in the chapter, the lost revenue figures incorporate assumptions regarding the total landings per trap (in pounds) during the closure period.

Exhibit 6-25 presents a concise summary of the commercial fishing activity each closure would be likely to affect. Exhibit 6-28 presents estimates of the costs associated with each closure.

Comment 126: One commenter requested that the FEIS include a discussion on the full range of Team and peer reviewer comments on the limitations of the model.

Response: As the EIS notes, documentation for the Vertical Line Model, including a detailed discussion of the model's limitations, is available online at http://www.nero.noaa.gov/protected/whaletrp/eis2013/index.html. The peer review of an earlier draft of the model's documentation is available at the same site.

A summary of each of the 16 public hearings held in 2013 to solicit comments on the DEIS is available online at http://www.nero.noaa.gov/protected/whaletrp/vlr2013/index.html. These summaries include comments made on the limitations of the Vertical Line Model, as well as other aspects of the DEIS.

Written comments on the DEIS are publicly available as part of the regulatory docket for this rulemaking. Volume II of the FEIS (this document) provides a summary of these comments, along with NMFS' response. This includes comments submitted by members of the Atlantic Large Whale Take Reduction Team, as well as comments submitted by others, concerning the limitations of the Vertical Line Model.

Comment 127: One commenter stated that there is no part of LMA3 that is within the 3-12 mile zone so this should be corrected in the traps per trawl proposals.

Response: This correction has been made.

Comment 128: One commenter requested the FEIS include a more thorough explanation and discussion on the following: impacts to sea turtles, rationale for continuing to exempt portions of Maine waters, recent fishery management actions, ocean noise, offshore energy development, and impacts and risks of chronic entanglements.

Response: The FEIS was updated to included a more thorough explanation.

Comment 129: One commenter commented that NMFS did not provide a sufficient variety of alternatives in the DEIS. The commenter suggested additional alternatives including reducing co-occurrence by 50%, mandating reductions in the amount of gear that can be used and season it is fished, and addressing gillnets.

Response: NMFS believes that the number of alternatives analyzed in the EIS was adequate. The alternatives analyzed were a combination of stakeholder proposals developed by the Team during the course of several meetings and the result of input received during the public scoping meetings.

Comment 130 : One commenter requested that the FEIS include adjusted co-occurrence scores for the mid-Atlantic as was done for the Northeast to account for areas with minimal to no survey effort.

Response: NMFS considered expanding the analysis presented in Appendix 5-B of the EIS to include the mid-Atlantic, but concluded that to do so would be overly speculative, given the relative dearth of both survey effort and opportunistic sightings data in the region for much of year. Rather than suggest a greater understanding of the potential for co-occurrence in the mid-Atlantic than the data warrant, NMFS chose to limit the analysis to the Northeast, where the effort to fill gaps in the effort-corrected sightings data would be better informed by opportunistic data on the presence of whales. Note too that the primary purpose of the analysis presented in Appendix 5-B is to examine how the use of adjusted sightings data would influence NMFS' assessment of the impact of the vertical line management measures under consideration. With the exception of gear marking, none of these measures apply to mid-Atlantic waters. Thus, while development of adjusted sightings scores for the mid-Atlantic would alter the estimates of absolute impacts on co-occurrence, it would have no effect on the relative ranking of alternatives with respect to this measure.

1.1.16 Comments on the Co-Occurrence Model

Comment 131: One commenter stated that the projections of risk reduction from a model are not accurate and don't work in the real world.

Response: NMFS acknowledges the uncertainties inherent in any attempt to model complex interrelationships, such as that between commercial fishing activity and entanglement. Through its research programs, NMFS has invested considerable resources in improving understanding of these issues. While significant uncertainties remain, NMFS believes that the co-occurrence model makes appropriate use of the information available to help guide development and assessment of alternative management measures. As better information is developed, NMFS will make every effort to incorporate it into the analytic tools it employs to inform the development of the ALWTRP.

Comment 132: A few commenters commented that there is a lack of statistical conclusion in the model citing the comments of one of the peer reviewers that "this version of model is not ready to be used in a management application until its performance has been validated or compared with other approaches".

Response: The data the Vertical Line Model employs were derived from a variety of sources, including fishing reports, surveys, and expert judgment, not all of which are amenable to statistical analysis; thus, it is not possible to generate statistical confidence intervals that characterize the uncertainty in the model's output. In addition, the availability of data to validate the model is extremely limited. When such information is available – as was the case with data on vertical line use in Massachusetts – NMFS has employed it to refine the model. NMFS has also shared information with other researchers who are attempting to model various indicators of entanglement risk, and has invited them to share information on their approaches with the ALWTRT. To NMFS knowledge, however, these

models have yet to be completed. Until they are more fully developed, attempts to validate the Vertical Line Model through comparisons with these models would be premature. NMFS will consider the recommendation to make such comparisons in future model development, analysis, and rulemaking efforts.

Comment 133: One commenter stated that the data used in the model is not sufficient for the intended purpose and stated that the use of Right Whale Consortium data only for all whale species was not appropriate. Inclusion of data outside this database would provide a more balanced and complete picture.

Response: NMFS incorporated the Right Whale Consortium data into the Vertical Line Model at the recommendation of the ALWTRT. Members of the team have also expressed interest in expanding the data the model considers to include information on the presence or distribution of whales from other sources, such as acoustic monitoring systems. NMFS recognizes the potential value of this information, but notes that incorporation of data from these sources raises issues of comparability and consistency that it has yet to investigate and resolve. Addressing these issues and incorporating the data into the model would delay action on modification of the ALWTRP, which would be inconsistent with the timeline for action to which NMFS has committed. NMFS believes that the information the model incorporates at this time is sufficient to guide development and assessment of alternative management measures. NMFS will consider the recommendation to incorporate additional data in future model development, analysis, and rulemaking efforts.

Comment 134: One commenter suggested that after a final rule has been adopted that NMFS revise the current model or develop a new one more suitable to estimate the extent to which co-occurrence between whales and gear would be reduced and the uncertainty of this estimate.

Response: NMFS will consider this recommendation in future model development, analysis, and rulemaking efforts.

Comment 135: One commenter requested that a study be completed to validate the model against results of an alternative co-occurrence model at least for LMA 1. Based on those results the model should be modified and co-occurrence estimates recalculated.

Response: As noted above, NMFS will consider this recommendation in future model development, analysis, and rulemaking efforts.

Comment 136: One commenter stated that the model is not an accurate method to detect whales as it only relies on visual sightings. It's possible that other important areas exist and alternate technology to detect high risk areas need to be included in the model.

Response: The sightings dataset upon which the model relies was incorporated into the model at the recommendation of the ALWTRT. Members of the team have also expressed interest in expanding the data the model considers to include information on the presence or distribution of whales from other sources, such as acoustic monitoring systems. NMFS recognizes the potential value of this information, but notes that incorporation of data

from these sources raises issues of comparability and consistency that it has yet to investigate and resolve. Addressing these issues and incorporating the data into the model would delay action on modification of the ALWTRP, which would be inconsistent with the timeline for action to which NMFS has committed. NMFS believes that the information the model incorporates at this time is sufficient to guide development and assessment of alternative management measures. NMFS will consider the recommendation to incorporate additional data in future model development, analysis, and rulemaking efforts.

Comment 137: A few commenters had concerns regarding the adequacy of the model and commented that NMFS should discuss the model's limitations and how they affect model output.

Response: The documentation for the Vertical Line Model, including a discussion of the model's limitations, is available online at http://www.nero.noaa.gov/protected/whaletrp/eis2013/index.html. The peer review of an earlier draft of the model's documentation is available at the same site.

Comment 138: A few commenters commented that additional data and approaches should be used to strengthen the accuracy of the model. The commenters stated that the model was based on outdated data and had concerns over averaging fishing effort across large areas as well as the failure to include opportunistic, acoustic, and telemetry data on whale distribution.

Response: As noted above, NMFS will consider these recommendations in future model development, analysis, and rulemaking efforts.

Comment 139: A few commenters commented that the model fails to provide adequate information regarding uncertainty. The commenter suggested that NMFS provide a qualitative score that ranks the quality of data that was input into each analysis cell.

Response: NMFS will consider this recommendation in future model development, analysis, and rulemaking efforts. NMFS notes, however, that the model's documentation already includes a detailed description of the fishing effort data upon which the model relies, along with detailed discussions of the limitations of the data. Similarly, the documentation discusses the limitations of the whale sightings data and presents a detailed analysis showing the effect of adjusting for key data gaps and uncertainties. NMFS believes that this information provides a more than adequate description of the limitations of the model.

Comment 140: A few commenters commented that the model appears sensitive to the presence of whales but a basic examination of the sensitivity of the model to all inputs would be helpful. NMFS needs to evaluate uncertainty even if the evaluation is qualitative in nature.

Response: NMFS will consider this recommendation in future model development, analysis, and rulemaking efforts.

Comment 141: A few commenters commented that the model should include all data on distribution of whales, press states for data on fishing activity and investigate the possibility of modeling activity in relation to physical parameters and environmental conditions to address data gaps. The commenters also suggested investigating alternative models that calculate risk.

Response: As noted above, the whale sightings dataset upon which the model relies was incorporated into the model at the recommendation of the ALWTRT. Members of the team have also expressed interest in expanding the data the model considers to include information on the presence or distribution of whales from other sources, and to include information on physical parameters (e.g., depth) or environmental conditions (e.g., the presence of prey species) that may identify areas that whales are likely to frequent. NMFS recognizes the potential value of this information and will consider this recommendation in future model development, analysis, and rulemaking efforts.

NMFS has collaborated closely with state fisheries managers to obtain all available data on fishing activity (and other parameters) for use in the Vertical Line Model. Similarly, NMFS has shared information with other researchers who are attempting to model various indicators of entanglement risk, and has invited them to share information on their approaches with the ALWTRT. NMFS will continue to work collaboratively with these groups to ensure that development of the ALWTRP takes appropriate advantage of the information and insights they can provide.

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