

RECORD OF DECISION
FINAL ENVIRONMENTAL IMPACT STATEMENT
AMENDMENTS TO THE
ATLANTIC LARGE WHALE TAKE REDUCTION PLAN
National Marine Fisheries Service
Northeast Region

This document comprises the National Marine Fisheries Service's (NMFS) Record of Decision (ROD) for amendments to the Atlantic Large Whale Take Reduction Plan (ALWTRP) as required by the National Environmental Policy Act (NEPA). The ROD is based on and incorporates, as described below, the ALWTRP Final Environmental Impact Statement (FEIS) and all other decision and analytical documents prepared for this action.

Background

In response to the continued serious injury and mortality of large whales from entanglement in commercial fishing gear, NMFS determined that additional modifications to the ALWTRP were warranted. Consequently, NMFS published a Notice of Intent (NOI) in the *Federal Register* to announce the agency's intent to prepare an Environmental Impact Statement (EIS), which would analyze the impacts of alternatives for amending the ALWTRP (68 FR 38676, June 30, 2003). The 2003 NOI expanded the scope of analysis from an NOI previously published in 2001 (66 FR 50390, October 3, 2001), which was issued when NMFS was planning to prepare an EIS to analyze the impacts of alternatives under consideration to finalize the Seasonal Area Management (SAM) program. In addition, the 2003 NOI announced that NMFS would be holding several public scoping meetings along the east coast to solicit comments on the range of issues to be considered during the preparation of the EIS. Proposals from the April 2003 meeting of the Atlantic Large Whale Take Reduction Team (ALWTRT) and subsequent subgroup meetings were used to develop an issues and options document, which NMFS made available to the public during the scoping process. During the summer of 2003, NMFS conducted six public scoping meetings at different locations along the east coast. NMFS considered the public comments provided during scoping during the development of management options for amending the ALWTRP, which were published in a Draft Environmental Impact Statement (DEIS) (February 2005) and proposed rule (70 FR 35894, June 21, 2005). These alternatives were intended to further reduce the risk of serious injury and mortality to large whales from entanglements in commercial fishing gear and minimize adverse impacts if entanglements occur. In the DEIS, NMFS identified two preferred, broad-based gear modification strategies to replace the SAM and Dynamic Area Management (DAM) programs. The primary differences between the preferred alternatives concerned when the DAM program would be replaced and what time/area restrictions and gear modifications would be identified for the SAM program.

Alternatives for Amending the ALWTRP

The DEIS analyzed and considered several other alternatives to reduce the risk of serious injury and mortality to large whales from entanglements in commercial fishing gear. These are summarized below.

- **Alternative 1 (No Action):** Under Alternative 1, NMFS would continue with the status quo, i.e., the baseline set of ALWTRP requirements currently in place.
- **Alternative 2:** Alternative 2 would impose broad-based regulatory requirements on a year-round basis. Regulatory changes common to all fisheries would include mandatory use of weak links on all flotation or weighted devices attached to buoy lines; mandatory use of sinking and/or neutrally buoyant line in all groundline associated with trap/pot or gillnet gear (excluding drift and shark gillnets); and elimination of both the SAM and DAM programs. The elimination of the SAM and DAM programs and the requirement to use sinking and/or neutrally buoyant groundline would take effect 12 months after publication of the final rule; unless otherwise noted, all other requirements would take effect six months after the final rule is published. Several new trap/pot fisheries would be brought under the Plan (including fisheries for black sea bass, scup, conch/whelk, shrimp, red crab, hagfish, and Jonah crab) and would be subject to requirements similar to the current and proposed requirements for the lobster trap/pot fishery. Alternative 2 also would extend ALWTRP requirements to the Northeast driftnet fishery (applying regulations similar to those that apply to the Mid-Atlantic driftnet fishery) and the Northeast anchored float gillnet fishery (applying requirements similar to those that apply to other components of the Northeast anchored gillnet fishery). In addition, a variety of new requirements would apply to specific fisheries and/or specific areas (see FEIS Exhibit 1-3). Finally, Alternative 2 would introduce a revised set of gear marking requirements for all fisheries, establish exempted areas where ALWTRP requirements would not apply, and introduce a variety of regulatory language changes.¹

¹ As formulated in the DEIS, Alternative 2 stipulated that broad-based requirements for the use of sinking and/or neutrally buoyant groundline would take effect on January 1, 2008, and that the SAM and DAM programs would be eliminated on that date. Due to unforeseen delays in the rulemaking process this date became impractical. To ensure that Alternative 2 remains practically viable, NMFS has updated it in the FEIS to specify that broad-based requirements for the use of sinking and/or neutrally buoyant groundline would take effect 12 months after publication of the final rule, and that the SAM and DAM programs would be eliminated when these broad-based requirements take effect. NMFS has made similar changes to the other alternatives that specified a January 1, 2008, effective date for some or all of these provisions (i.e., Alternatives 3*, 4, and 6 Draft*).

- **Alternative 3*:** Alternative 3* would entail the same requirements as Alternative 2 but would impose these requirements on a seasonal rather than year-round basis for fisheries in the Mid- and South Atlantic.²
- **Alternative 4:** Alternative 4 would entail the same requirements as Alternative 2 but would impose these requirements on a seasonal rather than year-round basis for fisheries in the South Atlantic.
- **Alternative 5:** Alternative 5 would modify or expand the provisions of the existing SAM program. It would expand the SAM East and SAM West zones; require the upper two-thirds of buoy lines in SAM waters to be made of sinking and/or neutrally buoyant line; and allow two buoy lines for all trawls in SAM waters except for the overlap with the Northern Nearshore Trap/Pot Waters, Stellwagen Bank/Jeffreys Ledge Restricted Area, and Federal waters of the Cape Cod Bay Restricted Area (May 16-December 31), in which trawls of four traps/pots or fewer would be restricted to a single buoy line. It would also include the weak link requirements described under Alternative 2, applying them year-round in northern waters and seasonally in other waters. Finally, Alternative 5 would bring the new fisheries addressed by Alternatives 2 through 4 under the ALWTRP; incorporate the same gear marking requirements, exempted areas, and regulatory language changes; and eliminate the DAM program six months after publication of the final rule. This alternative would not: expand broad-based requirements coast-wide, such as the sinking and/or neutrally buoyant groundline requirements for trap/pot and anchored gillnet gear; requirements that gillnet gear in the Northeast meet anchoring standards or use five weak links or more per net panel; and requirements that gillnet gear in the Mid-Atlantic use five weak links or more per net panel. Also, the Northern Inshore Lobster Take Reduction Technology List would not be eliminated.
- **Alternative 6 Draft*:** Alternative 6 Draft* would combine elements of Alternatives 3* and 5. Buoy line weak link requirements and broad-based gear requirements (net panel weak links, sinking and/or neutrally buoyant groundline, anchoring, gear marking, etc.) would be introduced on the same schedule and with the same seasonal and geographic provisions as described under Alternative 3*; however, DAM requirements would be eliminated six months after publication of the final rule (rather than 12 months after its publication), and the expanded SAM zone and SAM regulations described in Alternative 5 would apply from six months after publication of the final rule until 12 months after its publication, when the SAM program would be eliminated and all groundline associated with

² Alternatives previously identified as preferred in the DEIS are marked with an asterisk (*).

trap/pot and anchored gillnet gear would be required to be sinking and/or neutrally buoyant line.

For a description of the alternatives, please see Chapter 3 of the FEIS. For a full analysis of these alternatives, please see the corresponding sections of the FEIS.

Approved Amendments to the ALWTRP (Alternative 6 Final Preferred in the FEIS)

Amongst other requirements, NMFS is approving: (1) broad-based gear modifications (weak links, sinking and/or neutrally buoyant groundline, anchoring, gear marking, etc.) in specific times and areas that would replace the SAM and DAM programs; (2) the addition of other trap/pot and gillnet fisheries under the ALWTRP regulations; (3) an expansion of exempted waters; and (4) modifications to other regulatory changes for the purposes of clarification and consistency. Broad-based gear requirements would take effect six months after the final rule is published with the same seasonal and geographic provisions as described under Alternative 3*; however, DAM requirements would be eliminated six months after publication of the final rule, and the expanded SAM zone and SAM regulations would apply from six months after publication of the final rule until 12 months after its publication, when the SAM program would be eliminated and all anchored gillnet and trap/pot groundline would be required to be sinking and/or neutrally buoyant.

In response to comments received on the DEIS, NMFS formulated a final preferred alternative that builds on one of the preferred alternatives in the DEIS (i.e. Alternative 6 Draft*). Key differences under Alternative 6 Final (Preferred) in the FEIS include the following: (1) an alternative weak link configuration would be allowed for anchored gillnets; (2) an alternative weak link and anchoring configuration would be allowed for anchored gillnets within 300 yards of the North Carolina shoreline; (3) exempted areas would be expanded in Maine and Long Island Sound but revert to the status quo in Massachusetts; (4) a number of requirements pertaining to gillnet fisheries in Southeast waters would not be extended to waters east of 80°00' W; and (5) buoy line marking requirements would be modified relative to Alternative 6 Draft*.

For a description of the approved action, please see Chapter 3 of the FEIS. For a full analysis of this action, please see the corresponding sections of the FEIS.

Factors Considered in Making a Decision on the Final Action

The Council on Environmental Quality (CEQ) NEPA implementing regulations require agencies, in addition to stating the decision made, to discuss how the decision was affected by the preferences among alternatives and to identify and discuss all factors that led to the decision. In making a decision regarding approval of the ALWTRP amendment, NMFS considered the analysis of alternatives contained within the FEIS, associated environmental impacts, the extent to which the impacts could be mitigated, and the agency's consideration of the objectives of the final action as they relate to the Marine Mammal Protection Act (MMPA) and Endangered

Species Act (ESA). NMFS has also considered the public and agency comments received during the NEPA and proposed rule comment periods.

Under the MMPA, NMFS is required to establish and convene take reduction teams to develop and implement take reduction plans for reducing the levels of mortality and serious injury of strategic stocks of marine mammals in Category I and II fisheries (i.e., those with frequent or occasional mortality and serious injury of marine mammals, respectively). The MMPA defines a strategic stock as a marine mammal stock: (1) for which the level of direct human-caused mortality exceeds the potential biological removal (PBR) level; (2) which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; or (3) which is listed as a threatened or endangered species under the ESA or as depleted under the MMPA. Northern right whales, humpback whales, and fin whales are strategic stocks because they are listed as endangered under the ESA; therefore, because these stocks interact with Category I and II fisheries, a take reduction plan is required to assist in the recovery of these large whale species. The PBR, as defined by the MMPA, means the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. Pursuant to Section 118 of the MMPA, NMFS is required to assemble a take reduction team composed of representatives from the fishing industry, fishery management councils, state and Federal resource management agencies, the scientific community, and conservation groups. In general, the purpose of the take reduction team is to provide recommendations and assist NMFS in developing management measures for including in a take reduction plan. After a plan is implemented, the take reduction team provides NMFS with recommendations on implementation activities, feedback on the effectiveness of current management measures, and strategies for modifying the plan as necessary.

With respect to the ESA, Section 7 requires Federal agencies conducting, authorizing, or funding activities that may affect threatened or endangered species to ensure that those impacts do not jeopardize the continued existence of listed species or result in the destruction or adverse modification of habitat determined to be critical. In 2003, NMFS was advised that the 2002 death of a female right whale (RW #3107) was an entanglement-related mortality. The gear recovered from RW #3107 was consistent with gear approved for use in the U.S. Federal lobster fishery, which provided evidence that the reasonable and prudent alternative (RPA) described in the June 14, 2001, biological opinion for this fishery was not effective at avoiding the likelihood of jeopardy to right whales. As required by the ESA, the Section 7 consultation was reinitiated to examine the effects of the lobster fishery, as modified by the existing ALWTRP and RPA measures. The consultation is in progress.

An informal Section 7 consultation under the ESA was concluded for the rule to modify the ALWTRP on December 21, 2004. As a result of the informal consultation, NMFS determined that the measures to modify the ALWTRP were not likely to adversely affect ESA-listed cetaceans, sea turtles, fish, or critical habitat that occur within the area affected by the rulemaking. All of the effects were expected to be either beneficial or negligible, depending on the species. Subsequent to completion of the consultation and in response to public comment received during proposed rulemaking, NMFS changed some aspects of the ALWTRP rule.

NMFS has reviewed the changes to determine whether the ALWTRP measures as revised through rulemaking would affect ESA-listed species under NMFS' jurisdiction in a manner that has not been previously considered. On August 2, 2007, NMFS concluded that none of the changes to the ALWTRP rule are expected to change the conclusion of the December 21, 2004, informal consultation. NMFS, therefore, concludes that the action, as modified through the rulemaking process, is not likely to adversely affect any ESA-listed species under NMFS' jurisdiction.

Decision on the Final Action

The ALWTRP is a comprehensive management program designed to reduce the risk of serious injury and mortality to right, humpback, and fin whales. Due to the continuing risk of serious injury and mortality of large whales since the most recent revisions of the ALWTRP have gone into effect (i.e. Alternative 1, No Action), NMFS believes additional modifications to the ALWTRP are needed to meet the goals of the MMPA and the ESA. In accordance with the MMPA, NMFS' goal for each of the three strategic large whale species (right, humpback, and fin) is to reduce incidental mortalities and serious injuries attributable to interactions with commercial fisheries to levels that do not exceed the PBR level for each stock. On the basis of the data presented in the FEIS on the continued serious injury and mortality of large whales due to entanglement in commercial fishing gear, NMFS is approving further modification of the ALWTRP. NMFS has determined that these measures support the mandates of the MMPA and ESA and comply with all applicable laws. The decision to implement the approved amendments to the ALWTRP is based on the rationale contained in the analyses prepared for the FEIS and all other decision and analytical documents prepared for this action.

NMFS' approved action (i.e. Alternative 6 Final Preferred) includes the broad-based, coast-wide gear modifications and seasonal restrictions. Additionally, the action would expand the SAM areas, allow for a second buoy line, allow both buoy lines to have up to one-third of the bottom portion of the buoy line to be composed of floating line in the SAM areas, and eliminate the DAM program upon expansion of the SAM areas. The SAM program will be eliminated when the broad-based groundline gear modifications become effective. Among all the alternatives considered that achieve the required reduction in mortality and serious injury to large whales by commercial fishing gear, this approved action minimizes potential economic impacts through various regulatory modifications without increasing risks to large whales.

For example, this action expands exempted waters off of Maine and Long Island Sound, based on a NMFS analysis that concludes that large whales are sighted infrequently and do not spend significant periods of time in these waters (see FEIS Appendix 3-A for additional rationale). This change effectively reduces the number of vessels that must comply with the ALWTRP gear modifications. The areas that would be newly exempted from ALWTRP requirements include only those in which whales are unlikely to be found, as suggested both by NMFS' review of the data and its current understanding of whale behavior, as well as areas where whales are at low risk from impacts due to entanglement. Therefore, exempting these areas from ALWTRP

regulations is believed to be unlikely to have significant direct effects on endangered or protected whales.

The final gear marking scheme is approved based on implementation considerations and technology presently available. The gear marking requirement of one mark midway along the buoy line, rather than every ten fathoms as previously proposed, is more cost effective and practical based on current technology. This final gear marking requirement effectively reduces the total number of new gear marks to be installed by vessels that must comply with the ALWTRP gear modification than previously proposed. The gear marking provisions are designed to improve NMFS' ability to identify the gear involved in an entanglement. Specifically, this action would maintain the ALWTRP's current gear marking approach but would extend this requirement to all newly regulated fisheries and currently regulated fisheries with no gear marking requirements. In addition, all vessels subject to ALWTRP regulations would be required to mark their surface buoys. The current requirements for marking shark gillnet panels would remain in place, but neither shark gillnet vessels nor other gillnet vessels in the Southeast would be required to mark buoy lines that are four feet or less in length. These provisions would have no immediate direct impact on entanglement risks; however, in the long-term, they may assist NMFS' management efforts to protect large whales. If more promising gear marking techniques become available in the future, NMFS will discuss these further with the ALWTRT.

This action would also grant an exemption to sinking and/or neutrally buoyant groundline, as well as gillnet panel weak link and anchoring requirements to any vessel fishing at depths greater than 280 fathoms. As stated in the FEIS, whales are not likely to occur in waters of this depth. Specifically, large whales (right, humpback, fin, and minke) are not known to commonly dive to depths greater than 275 fathoms (502.9 meters). Thus, providing an exemption to particular gear modifications when gear is fished at depths greater than 280 fathoms – providing a five fathom margin of safety to account for the vertical profile of excess groundline in the water column – is unlikely to pose a risk of entanglement.

The action would also provide optional gear modification configurations for gillnet fisheries, which will offer fishermen the ability to comply in a low-cost and conservation equivalent manner. In other words, the alternative configurations specified under Alternative 6 Final (Preferred) would provide the same level of protection to large whales as the configurations originally proposed. For example, gillnets used within 300 yards of the North Carolina coast would be allowed an alternative weak link and anchoring configuration: five or more weak links per net panel, depending on panel length, with a breaking strength no greater than 600 pounds, anchored with the holding power of at least an eight-pound Danforth-style anchor on the offshore end of the net string and a 31-pound dead weight on the inshore end of the string. Based on the results of the testing of this configuration and the comments received on the DEIS, NMFS believes that the alternative configuration will provide the same level of protection to whales as the configuration proposed and will be safer to coastal fishermen. Finally, as an alternative to the placement of five weak links per net panel, anchored gillnets in the Northeast, Mid-Atlantic, and Southeast would be permitted to employ the following weak link configuration: one weak link placed between net panels in the floatline tie loops; one weak link in the center of the

floatline of each net panel; one weak link in the up and down lines of each net panel; and one weak link placed where the floatline tie loops attach to the bridle, buoy line, or groundline at each end of a net string. NMFS would also clarify that rope of appropriate breaking strength is suitable to meet net panel weak link requirements and that in the absence of an up and down line, weak links are not required. Because net panels are strung closely together, a single weak link placed between net panels in the floatline tie loops is functionally equivalent to two closely spaced weak links at the end of each net panel. Thus, this action would allow anchored gillnet vessels to use alternate configurations that are the functional equivalent of what was proposed enabling fishermen to have more options and flexibility when configuring their gear without increasing risk to large whales.

NMFS approves this action because it responds to comments to improve the final action while balancing risk reduction considerations. Specifically, the variations listed above, as well as others in the approved action, decrease the number of affected vessels and result in reductions in compliance costs while changing little in terms of entanglement risk reduction. Additional information on the direct and indirect effects of the approved action on large whales can be found in Chapter 5 of the FEIS.

Because of the complexity of the ALWTRP and the management measures being implemented, only the following general components of the approved amendments to the ALWTRP are discussed in this document: 1) spatial and temporal extent of the ALWTRP; 2) broad-based gear modifications; 3) additional trap/pot and gillnet fisheries; 4) changes to exempted waters; and 5) changes to the regulatory text.

1) Spatial and temporal extent of the ALWTRP

The approved measures consist of a new broad-based management strategy emphasizing universal gear modifications throughout the entire range of right, humpback and fin whales rather than focusing on area-specific locations primarily off the coast of New England. This broad-based gear modification strategy is intended to account for the seasonal and temporal distribution of large whales throughout the entire east coast. Management areas will consist of waters from Maine to Florida and out to the eastern edge of the EEZ. Requirements will be effective year-round in the northeast, and seasonally in the Mid- and South Atlantic. Consideration of seasonal variation in gear modification requirements is based upon the understanding of seasonal differences in the geographic distribution of populations of endangered whales, as reflected in a NMFS analysis of whale sightings data (as described in Chapters 3 and 5 of the FEIS). NMFS has approved seasonal periods designed to protect whales when they are most likely to be present in Mid- and South Atlantic waters, without imposing restrictions on fishermen in these areas when whales are not likely to be present.

2) Broad-based gear modifications

The approved action identifies a broad-based gear modification strategy that would replace the DAM and expanded SAM programs. The broad-based gear modifications are designed to further reduce the risk of serious injury and mortality to Atlantic large whales due to incidental

interactions with commercial fishing gear. In contrast, the SAM program was originally implemented to protect specific areas based on predictable annual concentrations of right whales while the DAM program was originally designed to provide protection to unexpected aggregations of right whales in areas outside designated right whale critical habitat and SAM areas. However, both the SAM and DAM programs were limited to New England waters because the majority of right whale sightings data supporting these programs came from surveys in this area. Additionally, the SAM and DAM programs do not protect right whales, as well as humpback and fin whales, that travel in waters outside these designated areas, such as migratory corridors between southeastern and northeastern waters. Thus, in this approved action, the SAM and DAM programs would be replaced by a broad-based gear modification program which would better account for the temporal and spatial distribution of large whales. The replacement of these programs would occur sequentially and provide more predictable gear modifications throughout the ALWTRP management areas. The SAM areas would be expanded six months after publication of the final rule to encompass many of the areas that previously have been designated DAM zones, as well as other areas that have a high potential to receive such designation. Six months after publication of the final rule, most of the broad-based requirements would take effect, and twelve months after publication of the final rule the SAM program would be replaced with the sinking and/or neutrally buoyant groundline requirement. In light of these considerations, NMFS believes that replacement of the DAM program with an expanded SAM program, and the subsequent replacement of the expanded SAM program with broad-based gear requirements, would increase the amount of protection afforded to right and other large whales.

The broad-based gear modifications are designed to reduce serious injury and mortality of large whales in commercial fisheries during the times and areas where whales frequently occur. Some of these gear modifications include: sinking and/or neutrally buoyant groundline, weak links into net panels and buoy lines, anchoring, and gear marking requirements. The requirement to use non-floating groundline is designed to reduce the likelihood of interactions between large whales and fishing gear by reducing the amount of floating line in the water column. Both weak link and anchoring requirements are designed to reduce the number of interactions between whales and commercial fishing gear that result in a serious entanglement. Related to gear marking, a better scientific understanding about the nature of entanglements, specifically the gear part involved, would help NMFS to develop better management programs to reduce the risk of serious injury and mortality of large whales due to incidental interactions with commercial fisheries.

3) Additional trap/pot and gillnet fisheries

This action incorporates regulating new trap/pot and gillnet fisheries under the ALWTRP that have the potential to entangle and cause serious injury and mortality to large whales. These new fisheries include: crab (red, Jonah, rock, and blue), hagfish, finfish (black sea bass, scup, tautog, cod, haddock, pollock, redfish [ocean perch], and white hake), conch/whelk, and shrimp trap/pot; northeast anchored float gillnet; and northeast driftnet. The approved action requires these trap/pot and gillnet fisheries to comply with the ALWTRP regulations, including the ALWTRP's universal gear modifications, and applies the same area designations and area-specific requirements (e.g., weak links, SAM, and DAM) as those required for the lobster trap/pot

fishery. Additionally, the northeast anchored float gillnet and driftnet fisheries are required to comply with the ALWTRP regulations, including the same area designations and area-specific requirements as the Northeast anchored gillnet fishery.

4) *Changes to exempted waters*

The final action expands exempted areas in coastal waters as well as exempts groundline, net panel weak link and anchoring requirements in waters greater than 280 fathoms. Either all or portions of the ALWTRP requirements would be exempted in areas that endangered and protected whales do not frequent. The areas that would be newly exempted from ALWTRP requirements include only those in which whales are unlikely to be found, as suggested both by NMFS' review of the data and its current understanding of whale behavior, as well as areas where whales are at low risk from impacts due to entanglement. Therefore, exempting these areas from ALWTRP regulations is believed to be unlikely to have significant direct effects on endangered or protected whales.

5) *Changes to the regulatory text*

NMFS has approved a number of clarifications and wording improvements to ensure that the intended effect of the ALWTRP regulations is being achieved. For example, the current ALWTRP regulations require that all buoy lines must be attached to the main buoy with a weak link; however, some fishermen have multiple buoys, flotation devices, and/or weights attached to the buoy line. Thus, it would seem that a fisherman would be in compliance with the current weak link requirement if only one buoy were attached to the buoy line with a weak link. However, NMFS is concerned that this placement of weak links would not be effective at reducing the risk of serious injury and mortality if a large whale became entangled. Therefore, the approved action clarifies the techniques for complying with the weak link requirement by including all buoys, flotation devices and/or weights (except traps/pots [or gillnets], anchors and leadline woven into the buoy line), such as surface buoys, sub-surface buoys, toggles, window weights, etc., and specifying that the weak link must be attached to the buoy line with a weak link placed as close to each individual buoy, flotation device and/or weight as operationally feasible.

A summary of NMFS' reasons for not approving the other alternatives are included below:

- **Alternative 1 (No Action):** This alternative would neither achieve the required reduction in incidental mortality and or serious injury of large whales in commercial fishing gear, nor meet the requirements of the ALWTRP.
- **Alternative 2:** Alternative 2 would impose broad-based regulatory requirements on a year-round basis. NMFS concluded that the potential for entanglement of whales in Mid-Atlantic or South Atlantic waters during summer months is minor, and that year-round requirements, as proposed by this alternative, would offer a marginal risk-reduction benefit to large whales. Seasonal implementation of gear conversion requirements as proposed in other alternatives, instead of year-round gear

modifications, would also reduce compliance costs for fishermen without increasing risks to whales.

- **Alternative 3*:** Alternative 3* would entail the same requirements as Alternative 2 but would impose these requirements on a seasonal rather than year-round basis for fisheries in the Mid- and South Atlantic. NMFS rejected this alternative as it did not provide immediate protection to right whales by offering an expanded SAM zone with sinking and/or neutrally buoyant groundline requirements to protect predictable aggregations of right whales.
- **Alternative 4:** Alternative 4 would entail the same requirements as Alternative 2 but would impose these requirements on a seasonal rather than year-round basis for fisheries in the South Atlantic. This alternative was rejected because NMFS concluded that the potential for entanglement of whales in Mid-Atlantic waters during summer months is minor, and that year-round requirements, as proposed by this alternative, would offer a marginal risk-reduction benefit to large whales. Seasonal implementation of gear conversion requirements as proposed in other alternatives, instead of year-round gear modifications, would also reduce compliance costs for fishermen without increasing risks to whales.
- **Alternative 5:** Alternative 5 would modify or expand the provisions of the existing SAM program. This alternative would not expand broad-based requirements coast-wide, such as the sinking and/or neutrally buoyant groundline requirements for trap/pot and anchored gillnet gear; requirements that gillnet gear in the Northeast meet anchoring standards or use five weak links or more per net panel; and requirements that gillnet gear in the Mid-Atlantic use five weak links or more per net panel. Also, the Northern Inshore Lobster Take Reduction Technology List would not be eliminated. The benefits for whale survival are likely to be significantly lower than the benefits associated with all other alternatives considered other than the No Action alternative; hence, NMFS did not choose this alternative.
- **Alternative 6 Draft*:** Alternative 6 Draft* would combine elements of Alternatives 3* and 5. In response to comments received regarding economic and operational concerns resulting from the implementation of this alternative, NMFS is approving an action that builds upon this alternative. However, NMFS rejected Alternative 6 (Draft) as is since it does not contain modifications that will allow NMFS to respond to the comments received while balancing risk-reduction considerations.

For a complete description of the alternatives, see Chapter 3 of the FEIS.

Environmentally Preferred Alternative

As required by the CEQ NEPA implementing regulations, NMFS shall identify the “alternative or alternatives which were considered to be environmentally preferable (40 CFR Part 15.05.2(b)).” The environmentally preferred alternative is the alternative which causes the least damage to the biological and physical environment, and which best protects, preserves and enhances historic, cultural and natural resources. NMFS has determined that, overall, the measures being implemented represent the environmentally preferable alternative when considering the balance of environmental and economic effects that might accrue from these measures within the context and strictures of the MMPA and ESA.

NMFS considered the biological impacts across the considered alternatives using a variety of indicators that are likely to correlate with reduced entanglement risk to Atlantic large whales. Where sufficient information was available, the alternatives were compared using quantitative criteria. The analysis evaluates the impact of new ALWTRP requirements relative to the status quo — i.e., a baseline scenario that assumes no change in existing ALWTRP requirements. This baseline scenario is equivalent to Alternative 1 (No Action). It is important to note that the No Action Alternative (Alternative 1) would not achieve the objective of reducing harm to large whales by reducing the likelihood of entanglement and/or reducing the severity of an entanglement should one occur. If Alternative 1 were chosen, there would likely be additional incidents of serious injury and mortality to large whales due to entanglement in commercial fishing gear, rather than a reduction in these interactions. However, the evaluation of the impact of regulatory changes on whale entanglement risks is largely qualitative. This approach is necessary because models that would enable NMFS to conduct a rigorous quantitative assessment of such risks are currently unavailable. To the extent possible, however, the evaluation takes into account quantitative indicators of the impact of alternative regulations. Quantitative risk reduction indicators include changes in the number of affected vessels (e.g. newly regulated lobster trap/pot vessels), major gear requirements (e.g. fathoms of groundline converted, fathoms of buoy line with weak links installed on all flotation and/or weighted devices, number of gillnet net panels with multiple weak links installed), set and stow restrictions (e.g. newly affected vessels- night set restrictions), right whale area restrictions (e.g. newly affected vessels in Great South Channel [April 1 – June 30]), SAM Program (e.g. newly regulated vessels in SAM program), DAM Program (e.g. newly regulated vessels in DAM program), and seasonality (e.g. area-days: trap/pot). For a complete list of the quantitative risk reduction indicators and comparison of impacts by alternative, see Chapter 5 (e.g. Section 5.1.3) of the FEIS. These indicators do not measure quantitatively changes in entanglement risks but offer useful information on factors that may partially correlate with such risks. The impacts (i.e. reduction in entanglement risk) associated with Alternative 5 would be significantly less than those associated with Alternatives 2 through 4, 6 Draft*, and 6 Final (Preferred), primarily because Alternative 5 would not impose as broad a set of gear modification requirements. As a result of these differences, the benefits of Alternative 5 for whale survival are likely to be significantly lower than the benefits associated with Alternatives 2, 3*, 4, 6 Draft*, and 6 Final (Preferred).

The impacts of Alternatives 2, 3*, 4, 6 Draft*, and 6 Final (Preferred) are quite similar, reflecting similarities in the regulatory requirements imposed under each alternative. In other words, the reduction in entanglement risk and potential for serious injury and mortality is similar amongst these alternatives based on the quantitative risk reduction indicators. For example, each of these alternatives would require the conversion of similar amounts of: 1) floating groundline to sinking and/or neutrally buoyant line; 2) weak links on buoy lines; 3) single weak link into gillnet panels; 4) multiple weak links into gillnet panels; 5) gillnet strings with new minimum anchoring strength standards; and 5) additional vessels, including newly regulated gillnet and other trap/pot vessels. Such actions are expected to correlate with a greater reduction of entanglement risk to Atlantic large whales.

The most notable differences in the estimated impacts of Alternative 6 Final (Preferred) and Alternatives 2, 3*, 4, and 6 Draft* are primarily attributable to differences between Alternative 6 Final (Preferred) and the other alternatives in the designation of exempted areas. Alternative 6 Final (Preferred) would require vessels to convert approximately 77 percent of the total fathoms of groundline from floating to sinking and/or neutrally buoyant line compared to that which would be converted under Alternatives 2, 3*, 4, and 6 Draft*. Similarly, Alternative 6 Final (Preferred) would require weak links to be installed on all flotation and/or weighted devices attached to approximately 81 to 82 percent of the total length of buoy line that would be affected by this requirement under Alternatives 2, 3*, 4, and 6 Draft*. However, the differences between Alternative 6 Final (Preferred) and Alternatives 2, 3*, 4, and 6 Draft* on the two indicators noted likely overstate any actual differences in the degree to which these alternatives would reduce entanglement risks. The designation of exempted areas under each of these alternatives is based on a review of large whale sightings data to determine where whales are likely to be found. While Alternative 6 Final (Preferred) would exempt areas off the coast of Maine and in Long Island Sound that would be regulated under Alternatives 2, 3*, 4, and 6 Draft*, whales are unlikely to occur in these areas and entanglement risks are low. As a result, Alternatives 2, 3*, 4, and 6 Draft* would likely offer little additional risk reduction relative to Alternative 6 Final (Preferred).

With respect to most other indicators, the impacts of Alternative 6 Final (Preferred) are similar to those of Alternatives 2, 3*, 4, and 6 Draft* (e.g. newly regulated lobster trap/pot vessels, number of gillnet net panels with multiple weak links installed, newly regulated vessels in Great South Channel [April 1 – June 30]). The most notable exception is the number of "area-days" for which broad-based gear modification requirements would be in effect. This indicator is designed to capture seasonal differences in the application of regulations under each alternative and is calculated by multiplying the square nautical miles of area protected under the ALWTRP by the number of days each year that seasonal gear modification requirements would apply. As discussed in detail elsewhere, the provisions of Alternative 2 would be effective year-round. In contrast, ALWTRP provisions under Alternatives 3*, 6 Draft*, and 6 Final would be in effect seasonally for vessels fishing in the Mid-Atlantic and Southeast; under Alternative 4, ALWTRP provisions would also be in effect seasonally, but only in the Southeast. By this measure, Alternative 2 would provide the greatest degree of protection, followed by Alternative 4, and Alternatives 3*, 5, 6 Draft*, and 6 Final (Preferred), with an equal number of area-days each. As noted in the DEIS, however, the actual risk-reduction potential of these alternatives is unlikely to

vary as much as this indicator implies. The seasonal exemptions provided under Alternatives 3*, 4, 6 Draft*, and 6 Final (Preferred) are premised on the migratory patterns of whales. Current understanding of these patterns suggests that the risk of entanglement for a whale in the Mid-Atlantic or Southeast during the summer months (June through August) is low. As a result, year-round requirements in the Mid-Atlantic or Southeast would likely offer little additional risk reduction relative to seasonal standards.

Thus, among all the alternatives considered that achieve the required reduction in mortality and serious injury to large whales by commercial fishing gear, this approved action minimizes potential economic impacts through various regulatory modifications without increasing risks to large whales. The approved action contains modifications that will allow NMFS to respond to comments while balancing risk reduction considerations. Alternative 6 Final (Preferred) introduces a number of significant changes to Alternative 6 Draft*, including: (1) expanding exempted waters off of Maine and Long Island Sound and (2) allowing anchored gillnet vessels to use an alternate weak link configuration. These and other minor variations (see the “Decision on the Final Action” section above) decrease the number of affected vessels and result in significant reductions in compliance costs, while sacrificing little, if anything, with respect to the likely reduction in entanglement risks. For additional information on the comparison of biological impacts across regulatory alternatives, see Chapter 5 of the FEIS.

Mitigation

CEQ NEPA regulations require that agencies identify in the ROD whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why. The regulations further state that a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation. Mitigation measures are the practical means to avoid, minimize and reduce impacts, and compensate for unavoidable impacts.

No significant environmental harm is expected to result from the implementation of amendments to the ALWTRP, therefore specific management measures to mitigate environmental impacts are not necessary. NMFS develops an annual enforcement plan focusing on high priority areas for the ALWTRP. This includes, but is not limited to, working through the Atlantic States Marine Fisheries Commission, with our state partners through Joint Enforcement Agreements (JEA), and the U.S. Coast Guard. NMFS identifies these priorities through discussions with the ALWTRT through its annual review of its ALWTRP Status Reports. Since the ALWTRP’s inception NMFS has made significant progress regarding this issue, particularly with NMFS and state enforcement offices through the JEA process. However, NMFS acknowledges more work is needed in this area and will continue to discuss enforcement and other monitoring needs with the ALWTRT as its next meeting tentatively scheduled for the spring of 2008.

Response to Comments

NMFS issued the Notice of Availability for the FEIS on August 17, 2007 (72 FR 46218) with a 32-day comment period through September 17, 2007. NMFS received approximately 155 letters from commenters on the FEIS via letter, fax, or email. Additionally, approximately 6,700 of one type of form letter were received on the FEIS via email as well as 280 of another two types of form letters and/or signatures, which were of similar content, via letter, email, and fax. All comments were reviewed by NMFS and addressed issues ranging from enforcement, exempted areas, whale sightings, economic impacts, safety concerns, and pollution. Many of the comments were similar to those received on the proposed rule and DEIS, for which responses are available in Volume II of the FEIS (and will also be available in the final rule). However, new issues were raised and some comments, although similar to those made during previous comment periods, included points specific to locations, gear requirements, and other ALWTRP modifications. Many comments were provided on economic issues which included values dependent on the gear modification being discussed and area of operation; due to the general similarity in the nature of the comments, they were grouped together. NMFS is summarizing and responding to these comments below.

Comment 1: Many commenters proposed different implementation schedules for sinking and/or neutrally buoyant groundline such as: executing a longer transition period such as February 2009, as most gear comes ashore in December and January; delaying mandates until 2010 (some specifically stating June 2010 as it coincides with the beginning of the fishing season and trap/tag season); requiring sinking groundlines on new traps being set to sea 90 days after rulemaking, and then applying a 48-month rotation period for gear already at sea; or implementing a mandatory 4-year or 5-year phase in period. Reasons for requesting an extended implementation schedule included cost expenditures, availability of line, operational feasibility when re-rigging gear, bad weather, and allowing more time and funding for both gear and large whale research. Some lobstermen said they would help fund research by increasing trap tag fee.

Response: Traditionally, NMFS provides 30 to 60 days for fishermen to comply with gear modifications. However, given the magnitude of the sinking and/or neutrally buoyant groundline requirement, NMFS believes giving fishermen 12 months from the publication of the final rule to comply is an appropriate amount of time for fishermen to convert their gear to sinking groundlines. While initial conversion costs may be significant for some ALWTRP vessels, to address the economic burden raised by industry, NMFS believes that providing one year for fishermen to comply with the groundline requirement addresses the concerns raised by industry. In addition, NMFS and other partners have financed and implemented several groundline buyback programs and other efforts are underway (see Section 7.4.3 of the FEIS for additional information on buybacks).

NMFS and its state partners have worked with rope manufacturers to keep the cordage industry informed of the potential for a large increase in demand for sinking and/or neutrally buoyant line. Based on these communications, NMFS believes that the industry has the capacity to meet this change in demand in a manner that will permit fishermen to comply with the regulations in a timely manner. Thus, at this time, NMFS believes that the implementation schedule as specified in the FEIS is appropriate. NMFS will continue to monitor the supply and situation of available rope through discussions with industry during the upcoming year.

Comment 2: Some commenters noted that gear marking should be required in exempted areas.

Response: At this time, NMFS did not consider gear marking inside exempted areas based on the low level of risk of large whale entanglement. However, as noted in the response to comments on the DEIS and proposed rule, NMFS will continue to discuss gear marking issues with the ALWTRT in the future.

Comment 3: Many commenters asked how NMFS will assist in the disposal of floating line. Additionally, these commenters raised the concern that the FEIS has failed to take into account the cost to fishermen of disposing of old line.

Response: Several companies have expressed an interest in the recycling of polypropylene line. For example, NMFS and other groups have used local based companies to recycle polypropylene line from several gear buyback programs. NMFS encourages fishermen to contact the NMFS Gear Research Team (contact information found at <http://www.nero.noaa.gov/whaletrp/plan/gear/index.html>) for additional information or contacts. Although the costs of line disposal are not calculated, NMFS notes that the FEIS includes an extensive discussion of gear buyback and recycling programs that have been put in place both to defray the cost of changing over to sinking line and to ensure that used line is properly managed and recycled (see Section 7.4.3 of the FEIS).

Comment 4: Some commenters noted that NMFS did not consider entanglements of large whales within the Maine state waters during the finalization of the exempted lines. These commenters made note of Kingfisher (right whale) entangled in gear that was licensed for use in Maine state waters, Yellowfin (right whale) which was entangled in Maine licensed gear, and a humpback that was entangled in lobster gear set in inshore Maine waters.

Response: The sightings database that NMFS considered and noted in the FEIS does include any entangled large whale in Maine or other area. Thus, NMFS did consider the entanglement events noted, with the exception of Yellowfin as this gear was determined to be Canadian lobster gear. As NMFS noted in the response to comments on the DEIS and proposed rule, NMFS will continue to monitor all exempted areas and encourage states to develop contingency plans in the event a large whale is sighted in such areas.

Comment 5: A few commenters noted that NMFS did not consider the negative impact to whales (particularly right and humpback whales) of removing gear modification requirements in exempted areas that have previously been in place.

Response: The areas that would be newly exempted from ALWTRP requirements include only those in which whales are unlikely to be found, as suggested both by NMFS' review of the data and its current understanding of whale behavior, as well as areas where whales are at low risk from impacts due to entanglement. Although the sightings data indicate some observations of large whales inside currently exempted waters or waters that would be newly exempted, NMFS' review of the data suggests that these occurrences are rare and risk is low. Thus, exempting these areas from ALWTRP regulations is believed to be unlikely to have significant direct effects on endangered or protected whales. However, NMFS will continue to

monitor these exemption areas and may make changes to the exemption areas if warranted in consultation with the ALWTRT.

Comment 6: Some commenters expressed concern regarding the scientific basis of the location of the Maine exemption line and provided additional analyses. One investigated large whales sightings from 1990 through 2005 to consider where and when the sightings took place in relation to the 50 fathom curve. Another looked at the fishing effort versus right whale sightings from 2000 to 2005 inside the 50 fathom curve. An additional analysis investigated feeding aggregations of right whales based on 35 years of right whale sightings, adopting the analysis from Clapham and Pace (2001; Defining Triggers for Temporary Area Closures to Protect Right Whales from Entanglement: Issues and Options) but slightly modifying the analysis. Several commenters also cited a MEDMR analysis that DAM zones for right whales in last five years averaged 31 miles outside of Jeffrey's Ledge and 57 miles offshore off the remainder of the Maine coastline. The commenters believed that these analyses support an exemption line within 50 fathoms from the shore of Maine.

Response: NMFS considered the methodology and analyses provided in relation to the Maine exemption line and believes the exemption line in the approved action is still appropriate. Unlike the analyses submitted by the commenter, the NMFS FEIS analyzed the entire collection of survey based large whale sightings data for 1960-2005, which includes data from surveys conducted by the New England Aquarium and CeTAP (Cetacean and Sea Turtle Assessment Program) during 1970-1990. These sightings data have been peer-reviewed and published, and so should be included (and not discarded) when considering issues such as exemption lines under the ALWTRP. Aside from the current broad-scale NMFS surveys, the CeTAP surveys were the most significant survey efforts in the Gulf of Maine and thus, are an important contribution to our knowledge of large whale distribution. This survey information is especially valid given the limited information, in general, on whale sightings in this particular area. It is important to stress that NMFS is required to consider the best available information under the ESA and MMPA. Thus, the analysis as described in the FEIS indicates that large whales warrant additional protection and large whales are sighted inside the 50 fathom line. Adding additional areas to be exempted would increase risk at a time when NMFS needs to be protective to meet its mandates under the MMPA and ESA.

NMFS is unaware of the MEDMR analysis referred to by commenters. NMFS performed a cursory review of implemented DAM zones over the last 5 years and notes that many of these areas have overlapped with Maine state waters. NMFS does recognize that many of the core areas of these DAM zones have been outside Maine waters, and DAM zones have been implemented in Gulf of Maine offshore areas. However, many zones were also implemented within 5-10 nautical miles of the 3nm state limit. Moreover, numerous DAM zones overlapped significantly with the Stellwagen Bank/Jeffreys Ledge area.

The modified DAM analysis provided by the commenters indicates that right whale triggers, as determined by the commenters, would rarely be met within 50 fathoms of the coast of Maine. However, the analysis excludes the sightings of right whales often seen in the earlier surveys inside the 50 fathom line, as they did not meet the density criteria. Additionally, the modified DAM analysis did not include the additional buffer NMFS included in the Clapham and Pace (2001) document. Although NMFS acknowledges that right whale sightings may not be common inside the 50 fathom line, the occurrences are regular enough to warrant protection

inside this area. Thus, NMFS believes that the approved exemption line rather than the 50 fathom exemption line is appropriate.

Comment 7: A few commenters felt that the National Environmental Policy Act (NEPA) requires that the more restrictive measures be selected.

Response: NEPA is a process-forcing statute, and accordingly, it requires that analysis of alternatives and impacts be presented to the decision maker to allow the agency to develop a preferred course of action. Additionally, it requires the involvement of the public in the process through scoping and public comment. However, it does not require an agency to select the most environmentally preferable measure. The NEPA regulations (40 CFR Part 1505.2) do require that the agency identify that measure in the Record of Decision and allow the agency to consider all relevant factors and effects on the human environment (social, biological, and economic) that were balanced in its final decision. NMFS has determined that, overall, the measures being implemented represent the environmentally preferable alternative when considering the balance of environmental and economic effects that might accrue from these measures within the context and strictures of the MMPA and ESA.

Comment 8: One commenter suggested that NMFS conduct a Supplemental Environmental Impact Statement (SEIS) that evaluates the use of time/area fishing closures in known high-use right whale habitats as regulations for preparing supplemental environmental impact statements require that action agencies evaluate and compare a range of reasonable alternatives that sharply define the environmental issues with regard to proposed actions.

Response: NMFS believes the FEIS represents a comprehensive suite of alternatives to amend the ALWTRP as well as a thorough analysis of the impacts of the proposed alternatives on the human environment. Therefore, NMFS does not believe a SEIS is warranted. NMFS worked with the ALWTRT in 2003 to help evaluate the ALWTRP and discuss additional modifications necessary to meet the goals of the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA). NMFS also solicited input from the public after issuing a Notice of Intent to prepare an EIS in 2003. Although there were neither consensus recommendations from the ALWTRT nor a consistent proposal from the public, NMFS believes the FEIS reflects the best options available at the time for amending the ALWTRP. NMFS previously responded to comments regarding the proposal of including additional closures as an alternative in the “Comments and Responses” section of the FEIS (or the preamble to the final rule).

The “Purpose and Need for Action” section (CEQ 1502.13) of the FEIS delineates the scope of the FEIS and clarifies that the alternatives under consideration seek to reduce the risk of large whale entanglement by implementing broad-based measures, such as folding in other trap/pot fisheries under the ALWTRP, reducing the profile of groundline, and mandating gear modifications to vertical lines, for example, by requiring gear marking and weak links of lower breaking strength. These changes are designed to address ongoing entanglement issues, especially those involving groundline. Available data does indicate that whales may travel large distances between sightings and outside of special management areas. Thus, this final action reflects a broad-based management approach due to uncertainties as to where entanglements occur as well as limited sightings data for some areas.

Comment 9: One commenter believed that the FEIS improperly assigns an endangered status to the northern right whale that is not based on any reasonable presentation of fact, and believes that sightings records for right whales shows that population of species has been increasing over last 20 years and numbers over 400 at present.

Response: In the FEIS, NMFS explicitly provides information on the status of the endangered right whale from peer-reviewed marine mammal stock assessment reports. Specific information can be found in Chapter 4, Affected Environment, of the FEIS.

Comment 10: One commenter noted that NMFS did not consider the impact of ESA's Section 9 prohibitions, or conduct an ESA Section 7 consultation.

Response: The FEIS does not authorize violations of Section 9 of the ESA. Additionally, as noted in the “Factors Considered in Making a Decision on the Final Action,” section above, NMFS did conduct a Section 7 consultation and concluded that the action, as modified through the rulemaking process, is not likely to adversely affect any ESA-listed species under NMFS’ jurisdiction.

Comment 11: One commenter asked that NMFS remove the modification to the exemption line for Point Judith Harbor of Refuge, Rhode Island, such that “headland to headland” reference that was added be removed and that the Harbor of refuge be exempt. The commenter noted that there was a large amount of fishing gear in the area and that whales were infrequently sighted in this area.

Response: The current exemption line, as well as the approved exemption line in this action continues to exempt the Point Judith Pond Inlet by taking a headland to headland approach. Thus, NMFS never considered changing this approach in the FEIS. This approved action reflects only a slight modification to the coordinates to ensure they are more accurate to the location of the headlands for this area. NMFS established the areas exempted by this action by analyzing databases that included right, humpback, and fin whale sightings.

Comment 12: Several commenters stated that the potential for gear loss would significantly increase with the proposed groundline and weak link modifications, increasing the amount of “ghost gear” on the ocean bottom which would then raise the risk of entanglement for large whales. One commenter further stated that with sinking groundlines, if a whale became entangled in a buoy line, the groundline may snag on the bottom and prevent the whale from surfacing. Other commenters noted that “ghost gear” would continue to trap lobsters and other fish species, causing cannibalism and therefore applying pressure to valuable fishing resources.

Response: At this time, NMFS cannot state conclusively that whales are becoming entangled in ghost gear. NMFS is also unaware of studies that can quantify cannibalism that may occur in ghost gear. Traps are required to be equipped with biodegradable linkage systems (hog rigs made out of ferrous metal). Once links have degraded, vent panels detach from the traps, allowing for lobsters (of all sizes) and other species to escape when a trap is lost on the bottom. By providing these openings when the hog rings dissolve, the trap does not continue to fish. Please see the “Comments and Responses” section of Volume II of the FEIS (or the preamble to the final rule) for more discussions concerning ghost gear.

Comment 13: Many commenters expressed concerns for increased safety hazards with the use of sinking groundlines, including hang downs, snapping lines, breaking blocks, blown hydraulic equipment, bend davit poles, and the potential for capsizing one's vessel. Many commenters cited July and September 2007 articles contained in *Commercial Fisheries News* alerting fishermen to an incident in which a Massachusetts lobsterman using sinking groundline experienced a hang-down that resulted in damage to his vessel. Many commenters urged NMFS to consider the effect of the proposed regulations on lobstermen's safety. Related to this, one commenter specifically stated that the FEIS gave only cursory attention to the financial and social costs associated with the increased safety risks imposed by the new rules and.

Response: Although NMFS does recognize that these safety concerns exist, as stated in the FEIS, NMFS believes that the gear modifications required under the ALWTRP do not present any significant increased dangers above those of normal fishing practices. NMFS would like to note that hang downs are a regular occurrence in fixed gear fisheries, and fishermen in coastal Maine, including those who fish on rocky bottoms, are currently utilizing sinking groundlines. NMFS has considered safety issues of working with sinking line and will continue to monitor this situation through discussions with industry and the ALWTRT. Please see the "Comments and Responses" section of Volume II of the FEIS (or the preamble to the final rule) for more discussions concerning safety.

The social impact analysis in the FEIS acknowledges safety concerns, describing possible impacts and integrating them into consideration of the overall costs and benefits of the rule (see Section 7.5.1 of the FEIS). Because of their nature, these concerns are given qualitative (rather than quantitative) consideration. Although analytic options for incorporating safety issues are limited, issues indirectly related to safety (e.g., gear loss) are given more rigorous attention in the economic analysis. NMFS has included these considerations in its assessment of the alternatives and selection of a preferred alternative.

Comment 14: Some commenters suggested the prohibition of floating groundlines in months when whales are actually passing through the Gulf of Maine (e.g. July-September), instead of prohibiting floating groundlines year-round.

Response: Large whales are common in Northeast waters year-round, although NMFS recognizes that some species, such as right and humpback whales, do have a seasonal distribution in this area. To address the distributional and seasonal patterns of large whales, NMFS has designated exempted areas (i.e. coastal Maine) and created seasonal windows (i.e. mid-Atlantic waters), respectively, where the occurrence of whales is rare and there is a low risk of entanglement. However, outside, these areas, where whales are common and there are higher entanglement risks, NMFS believes regulations are warranted.

Comment 15: One commenter stated that the map for Massachusetts exempted waters in Exhibit 3-16 of the FEIS is incorrect and not consistent with areas in proposed in the DEIS.

Response: NMFS acknowledges the error in this graphic. However, correct information on exempted areas for the state of Massachusetts is contained in Appendix 3-B of the FEIS. Also exemption line graphics generated for recent outreach documents correctly display exempted areas for Massachusetts. Current and future maps will continue to depict these areas appropriately.

Comment 16: One commenter cited in the 2006 Northeast Fisheries Science Center Reference Document (Cole et al.) a statement that only 1 death out of 276 confirmed deaths was found to be a direct result of an entanglement with fixed lobster gear from 2000-2004 in Maine. The commenter noted that the rope was not specified nor cause of entanglement provided. Other commenters also questioned when and where entanglements occurred and in what type of gear.

Response: As noted in FEIS, the number of serious injury and mortalities due to commercial fishing interactions are above PBR for many large whale species. Although NMFS does not always know the location or gear type involved in an interaction, Atlantic large whales are at risk of becoming entangled in fishing gear because the whales feed, travel and breed in many of the same ocean areas utilized for trap/pot and gillnet commercial fishing. The number of entanglements for which gear type can be identified is too small to detect any trends in the type of gear involved in lethal entanglements. However, trap/pot and gillnet gear are the most common.

NMFS is aware of the event referenced above, in addition to other large whale entanglement events that have occurred in Maine state waters. Although NMFS marine mammal stock assessment reports (SARs) and their related reference documents include some reference to the gear (if known) when a fishery related serious injury or mortality is determined, details on the gear are not generally included. This information is typically found in NMFS Large Whale Entanglement and Ship Strike Reports which can be online at <http://www.nero.noaa.gov/whaletrp/plan/disent/index.html>.

Comment 17: Some commenters believed that due to sinking groundline requirements, many fishermen will move their gear to areas where they can still use floating groundlines, causing congestion on fishing grounds and “turf wars”. Commenters also expressed concern that if fishermen were only able to fish on mud bottom, the only fishermen to fish the “Gray Area” would be Canadian fishermen as they can still use float rope.

Response: As stated in the FEIS, NMFS recognizes that the change from floating groundline to sinking or neutrally buoyant groundline may result in changes in fishing practices and areas. The risk reduction for large whales warrants these changes in fishing practices and gear configurations.

The ALWTRP is only meant to protect whales in domestic waters, however, NMFS will continue to work with the government of Canada toward development of similar protective measures from fishing operations for right whales in Canadian waters. However, as noted in the “Comments and Responses” section of Volume II of the FEIS, NMFS is aware of fishermen who have fished successfully with sinking and/or neutrally buoyant groundline in many areas of Maine.

Comment 18: Some commenters recommended the allowance of floating line to remain between the first 2 traps in a trawl, as gear could be grappled easier when it parts off.

Response: NMFS received several comments on the DEIS and Proposed rule outlining suggestions on how to modify groundlines. However, NMFS was unable to support such “low profile” groundline suggestions in the development of this rulemaking action. NMFS identified additional research and analysis that is necessary to determine whether lowering the profile of groundline (e.g. including the line between the first 2 traps) to depths other than the ocean bottom sufficiently reduces the potential for large whale entanglement in certain areas.

Additionally, NMFS determined that the depth to which the groundline profile could be reduced needs to be established after more information is collected and analyzed on prey distribution, large whale distribution and behavior, and methods for reducing the profile of groundline. NMFS would need to define “low profile” line in such a way that it is enforceable, is operationally feasible for fishermen, and reduces the risk of entanglement. Presently, NMFS and others are researching all of these issues.

Comment 19: One commenter stated that in Maine coastal waters, buoy lines needed to be at least ½ floating line, citing safety and operational concerns and heightened entanglement risks, as additional floats or buoys would need to be added to the surface system and toggles would be required.

Response: Broad-based gear requirements do not include regulations on the proportions of sinking and floating line in buoy lines. However, universal requirements will still remain, including a prohibition of floating buoy lines at the surface.

Comment 20: In addition to comments received stating that the exemption line for the State of Maine should be moved to the 50fa curve (see Comment 9), NMFS received many other comments providing specific suggestions on how the exemption line for Maine’s coastal waters could be modified, including the following: 1) extending the line 20 miles offshore; 2) moving the line outside of Boon Island and outside the Isle of Shoals; 3) exempting the shallow waters of Maine’s offshore islands (i.e. exemption for traps set at depths no more than 35fa); 4) moving the exemption line outside of Mantinicus Rock; 5) pushing the exemption line to the edge of Area 1; and 6) exempting an area from either Mt. Desert Island and/or Schoodic Point to the Canadian border.

Response: NMFS also received comments on the DEIS and Proposed Rule which included various suggestions to modify exempted areas in Maine coastal waters. The areas that would be newly exempted from ALWTRP requirements contained in this final rule include only those in which whales are only occasionally found and are at low risk, as suggested both by NMFS’ review of the sightings data and its current understanding of whale behavior. After re-examining the sightings information from the available data sources, with respect to both NMFS’ proposed and Maine DMR’s suggested exemption lines, NMFS concluded that exempting areas inside the State of Maine’s suggested exemption line would provide an adequate level of protection to endangered large whales. NMFS will continue to monitor all exempted areas and should new information become available regarding the exemption areas, NMFS will share this information with the ALWTRT to determine if changes to the exemption areas are warranted.

Comment 21: Several commenters suggested that DAM zones should be utilized in exempted areas as well as the mid-Atlantic.

Response: The DAM program was not designed for mid-Atlantic waters. The DAM Program was designed for the New England region primarily to protect feeding aggregations of right whales. Additionally, they were not considered for exempted areas as NMFS believes sightings of large whales are rare and risk to large whales is low. However, as NMFS noted in the FEIS, NMFS will continue to monitor all exempted areas and encourage states to develop contingency plans in the event a large whale is sighted in such areas.

Comment 22: NMFS received a comment questioning the feasibility of the proposed marking system questioning what is considered “midway”, especially when lengtheners are added or if a line gets cut, and who will haul up a line, especially a trawl of traps, to check for compliance. The commenter also noted that marks will be hard to see due to accumulated growth on lines and that buoys and traps are already marked with an owner’s permit numbers.

Response: NMFS believes the gear marking system outlined in the ALWTRP is operationally and technologically feasible. Requiring only one mark alleviates all concerns regarding safety and other practicality issues raised by commenters on the DEIS and proposed rule (see Volume II of the FEIS). NMFS also believes it is important to mark both the surface and vertical lines systems so to increase the chance of identifying gear recovered during an entanglement event. However, NMFS will continue to discuss gear marking strategies with the ALWTRT.

Comment 23: One commenter mentioned participating in a whale foraging project where plankton nets were used to sample plankton in area in Maine. This commenter noted nine sites in Cutler were sampled to depths of 50 fathoms and no plankton was detected. Thus, the commenter noted that it is unlikely right whales forage in the area and groundline restrictions should be reconsidered.

Response: NMFS is aware that Maine Department of Marine Resources is conducting a large whale foraging project. NMFS has not seen any results but understands a report will be available to NMFS towards the end of they year. NMFS will discuss the information in the report, and any other whale research, with the ALWTRT during the next meeting. As noted in the FEIS, NMFS recognizes that there is a lack of information regarding large whale foraging issues in U.S. waters of the Gulf of Maine but that studies are underway.

Comment 24: Several commenters raised general concerns about the adequacy of the economic analysis presented in the FEIS and stated that these concerns are consistent with concerns raised by the U.S. Government Accountability Office (GAO) in its review of the DEIS.

Response: NMFS notes that GAO's review of the DEIS economic analysis recommended no changes to the models or methods employed. GAO's principal finding with respect to the economic analysis was to recommend that NMFS improve the representation of uncertainties in the analysis by presenting a range of possible costs in the FEIS. In response to this recommendation, the FEIS includes a quantitative assessment of the sensitivity of compliance cost estimates to variations in four factors: 1) the increase in gear loss that lobster trap/pot vessels fishing in Maine inshore waters may experience as a result of converting from floating groundline to sinking and/or neutrally buoyant groundline; 2) the rate at which sinking and/or neutrally buoyant groundline will wear out and need to be replaced; 3) the price of sinking and/or neutrally buoyant line relative to the price of floating line; and 4) the estimated number of state-permitted vessels subject to ALWTRP requirements. Appendix 6-J of the FEIS presents this analysis, providing cost estimates for each regulatory option under a range of alternative assumptions. NMFS believes that incorporation of this analysis into the FEIS fully addresses GAO's recommendations for improvement of the economic analysis presented in the DEIS.

Comment 25: Several commenters suggested NMFS review the Gulf of Maine Research Institute's Lobster Socioeconomic Impact Survey (2006) to improve its understanding of the social and economic impacts facing the lobster industry.

Response: Subsequent to completion of the FEIS, NMFS did review the GOMRI analysis and results. The study offers no data that would significantly alter the conclusions of the economic analysis presented in the FEIS, and many findings corroborate assumptions in the FEIS (e.g., crew size, lobstering effort). One notable finding is the revenue figure provided in the GOMRI study, which reports on the results of a telephone survey of a sample of lobstermen from Maine, New Hampshire, Massachusetts, and Rhode Island. The survey reports average gross revenues for active lobstermen of \$77,863 in 2005. In contrast, the FEIS does not report an overall average gross revenue figure for the lobster fleet. Instead, it reports average annual revenues by location of activity and vessel size (see FEIS Exhibit 7-3 for further detail). The weighted average annual revenue figure of the values reported in FEIS Exhibit 7-3 is \$68,560. Because the FEIS includes revenue data for vessels from states other than those covered in the GOMRI study, and because it is based on 2002 data rather than 2005 figures, the FEIS and GOMRI values are not directly comparable. Nonetheless, this comparison suggests that the FEIS and the GOMRI study do not differ dramatically with respect to the annual revenue figures they report. To the extent that they do differ, the values employed in the FEIS are lower, not higher. Thus, use of the revenue values reported in the FEIS will result in identifying more vessels as "heavily affected" or "at risk" (framed in terms of costs as a percent of gross revenue) than would be the case if the analysis were based on the revenues reported in the GOMRI study.

Comment 26: Several commenters raised concerns about the use of a 7 percent annual discount rate in the economic analysis and the escalating cost of line that is manufactured from petroleum derivatives.

Response: As noted in the FEIS, the use of a 7 percent annual discount rate is in accordance with guidance from the Office of Management and Budget (OMB). In addition, NMFS notes that the cost estimates presented in the FEIS are based upon price quotes obtained from marine supply dealers in 2007. The analysis does not attempt to forecast future changes in the price of these materials.

Comment 27: Several commenters took issue with the estimates of the durability of sinking groundline presented in the FEIS, particularly the durability of sinking groundline in areas of Maine that are characterized by rocky bottom. Another added that it is incorrect to assume that offshore lobstermen's annual replacement of groundline will change from 11 percent to 17 percent per year, asserting that floating groundline in offshore waters will last on average about six years, and sinking groundline will last only an average of two years.

Response: The estimates of the useful life of groundline employed in the economic analysis were provided by the NMFS Gear Research Team, based upon the team's professional expertise and its discussions with fishermen who employ different types of line. These discussions included lobstermen in Maine, from Lubec to Kittery, who have used sinking groundline for several years. Based on the estimates provided by the NMFS Gear Research Team, the economic analysis assumes that the floating groundline currently used by inshore/nearshore lobster vessels lasts approximately nine years, while sinking groundline in

these waters will last approximately six years. The analysis assumes that the floating groundline currently used by offshore lobster vessels lasts approximately six years, while sinking groundline in offshore waters will last approximately five years (see FEIS Appendix 6-A and Appendix 6-C). NMFS understands, however, that differences in bottom conditions and fishing practices can affect the lifespan of line. The sensitivity analysis provided in Appendix 6-J of the FEIS provides information on the cost impact of alternative assumptions concerning the useful life of sinking groundline.

Comment 28: Several commenters raised the concern that NMFS has overlooked the economic impact of the regulations on offshore fishing operations and associated small businesses.

Response: NMFS recognizes these potential impacts and has given them equal consideration with impacts on other fisheries. The economic analysis incorporates models that are designed to estimate the economic impact of new regulations on offshore fishing operations, and specifically presents estimates of compliance costs for the offshore lobster industry (see Section 6.2.2 of the FEIS).

Comment 29: Many commenters suggest that the FEIS does not take into account the cost of time to switch over to sinking line

Response: The FEIS does consider these costs (see Section 6.1.2.1 of the FEIS).

Comment 30: One commenter asked NMFS to consider the broader impacts on the local economy of Stonington, Maine.

Response: NMFS agrees with the commenter's description of the Town's dependence on lobstering, which is consistent with the characterization of Hancock County presented in the FEIS. While a subset of the heavily affected vessels identified in the FEIS are likely to land their catch in Stonington, the most heavily affected vessels would likely be those that are smallest in size, and account for a relatively limited share of landings. In the long run, NMFS anticipates that any decrease in landings as a result of the retirement of these vessels would likely be offset by landings from vessels that remain active. These considerations suggest that impacts on dealers and processors ultimately would be minor, although short-term supply disruptions at the local level are possible. As noted in the FEIS, the effects under NMFS preferred alternative (Alternative 6 Final) would likely be less than those that would be incurred under Alternatives 2, 3*, 4, and 6 Draft*.

Comment 31: Several commenters contend that the cost of the final rule to the lobster fishery may be significantly greater than the estimates reported in the FEIS. One commenter formulated a series of assumptions about groundline useful life and costs, gear loss rates and costs, and vessel activity levels to develop their own analysis of costs. This commenter contends that individual fishermen would incur annual costs of over \$30,000 and industry-wide costs of nearly \$134 million.

Response: NMFS disagrees with these conclusions. The commenter's analysis of costs includes alternative assumptions that increase each of the cost parameters to reflect extreme predictions of gear costs and functionality. Although the commenter and the fishermen it represents have an intimate knowledge of the lobster fishery, its statements are based upon the

predictions of individuals with limited or no experience fishing with sinking groundline. In contrast, NMFS gear experts developed the assumptions applied in the economic analysis based upon detailed conversations with individuals throughout the Atlantic coast with years of experience fishing sinking groundline in a variety of habitats, including Maine's rocky bottom.

NMFS would also like to specify some additional points related to these comments:

- The average cost of groundline was estimated based upon estimates for specific products. The estimate the commenter uses for certain brands is significantly higher than the price at which the brand is sold by gear suppliers.
- The assumptions about the useful life of sinking groundline are based upon field studies with experimental gear, not commercially available sinking groundline.
- Based upon discussions that NMFS gear experts had with fishermen operating with sinking groundline in hard bottom environments, the rate of gear loss would be significantly less than the rate suggested by the commenter.
- Evidence from Vessel Trip Report data indicates that a significant number of federal permit holders that the commenter assumes would be affected by the rule do not actively fish and would therefore not incur costs of gear conversion.

Comment 32: One commenter estimates rope costs that are higher than estimates employed within the FEIS. The commenter provided a summary of line costs based upon discussions with gear manufacturers and retailers which included for each size and type (e.g., floating or sinking) of line, a cost estimate for a variety of manufacturers and brands. For example, the commenter indicated that the cost of 7/16" Everhaul sinking line by Orion is \$4.29 per pound (\$270 per coil).

Response: As noted in responses to comments on the DEIS, NMFS acknowledges that the price of gear fluctuates. The key determinant of costs to the industry, however, is the difference between the cost of line that fishermen will need to purchase as a result of the rule and the cost of line that they no longer need to acquire. In Appendix 6-J of the FEIS, NMFS estimates the effect on the economic analysis of fluctuations in the relative costs of floating and sinking groundline. Specific to the information provided, it is important to note that the costs the commenter reports for gear from "Orion" significantly exceed the price that fishermen would pay to purchase the line. NMFS gear experts investigated the cost of this line and found that the manufacturer's list price matches the price cited by the commenter, but that the manufacturer provides a significant price discount when selling to its distributors. According to a marine supplier contacted by the same gear expert, the price of this line is \$2.15 per pound (approximately half the cost reported). NMFS does not anticipate that fishermen would purchase line that is significantly more expensive than similar line available. As a result, these estimates are not representative of the costs fishermen are likely to incur.

Comment 33: One commenter anticipates that, when converting from floating to sinking groundline, some fishermen will switch to a thicker diameter rope to offset some of the wear on the rope, which was not considered in the FEIS.

Response: The breaking strength of sinking groundline is typically greater than that of floating line of the same diameter. As a result, NMFS gear experts do not anticipate that fishermen will need to switch to larger diameter fishing line when converting to sinking

groundline. However, NMFS acknowledges that fishermen can and may opt to reconfigure their equipment for thicker line.

Comment 34: One commenter estimates that lobstermen in Maine will lose 24 percent of their gear each year as a result of fishing with sinking groundline.

Response: NMFS has talked to several fishermen in Maine, from Lubec to Kittery, who have used sinking groundline for several years. The estimates of gear loss applied in the FEIS are based upon discussions with these fishermen and considers loss from chaffing, hang downs, weather events, and other sources. The FEIS also acknowledges that gear loss may be higher in certain waters such as rocky bottom areas. The analysis of changes in gear loss rates separately examines Maine's inshore fishery and applies a rate higher than other waters. This value represents an estimate of the typical change in gear loss rates for Maine inshore waters; NMFS acknowledges that some fishermen will likely experience higher rates while others will likely experience lower rates. The sensitivity analysis provided in Appendix 6-J of the FEIS provides information on the affect of different gear loss assumptions in Maine.

Comment 35: One commenter anticipates that fishermen will need to fish an additional hour per day to strategically position their vessels when hauling sinking groundline and to deal with chaffing and hang down issues.

Response: NMFS acknowledges that some vessels will incur additional time at sea as they learn to operate with and grapple for gear lost as a result of the conversion to sinking groundline. For instance, on page 7-25 of the FEIS, NMFS acknowledges that fishermen may spend additional time at sea due to the regulations and that this could reduce the quality of life for fishermen and their families.

Comment 36: One commenter from Maine estimates additional loss of catch due to the unavailability of replacement trap tags for vessels that lose more than 10 percent of their traps.

Response: As discussed in the FEIS, the economic analysis acknowledges that some fishermen may lose more than 10 percent of their gear. Vessels that fish the maximum number of traps could therefore exhaust their supply of trap tags allocated for gear loss, which is currently restricted to 10 percent of their trap allocation. At the State of Maine's discretion, it could revisit its trap tag allotment procedures to minimize the impact on vessels that lose more than 10 percent of their traps.

Comment 37: One commenter disagreed with the assumption in the FEIS that federally permitted vessels fishing more than 50 percent of their trips in exempted waters will restrict all future activity to these areas. The commenter estimates that only 10 percent of federal permit holders will fish exclusively within exempted waters. Furthermore, the commenter estimates that there are 1,400 federal permit holders in Maine and that 1,260 of these vessels would operate within regulated waters. When combined with state permitted vessels, the commenter suggests that a total of 4,617 vessels would incur the full compliance cost estimated in its analysis.

Response: The analysis employed in the FEIS applies Federal Permit and Vessel Trip Report (VTR) data on the location and timing of activity reported by lobster vessels. For vessels that file trip reports, the analysis assumes that vessels with more than 50 percent of their trips in exempted waters will focus all future activity in those waters and therefore will not incur

conversion costs. Of those vessels required to file Vessel Trip Reports, the analysis employed in the FEIS estimates that less than 15 percent would restrict all future activity to exempted waters. For federally permitted vessels that do not report to VTR, the analysis assumes all activity will take place within regulated waters. Similar to the commenter's statements, when NMFS considers both categories of federally permitted vessels, the agency estimates that approximately 10 percent of federally permitted vessels would limit future activity to exempted waters.

To develop its estimate of total industry costs in Maine, the commenter multiplied its estimate of individual costs and the number of permitted vessels within the state. This approach, however, fails to acknowledge that a significant proportion of permit holders do not actively fish. Lobstermen that hold federal permits for fish species other than lobster must report the location and catch for each fishing trip, including trips where lobster was the targeted species. Based on an analysis of Permit and Vessel Trip Report data for these vessels, NMFS estimates that a significant proportion of these vessels hold a permit but do not actively fish for lobster.

Similarly, the commenter's approach for estimating total industry costs fails to acknowledge that gear quantities and configurations vary significantly between vessels. Some fishermen will operate with fewer traps or, due to variations in gear configurations, require less groundline. As a result, the commenter's analysis inflates total industry costs by assuming that all permit holders will incur its estimate of vessel compliance costs.

Comment 38: One commenter notes that only 10 percent of Maine's state permitted vessels are likely to restrict all activity to exempted waters.

Response: The FEIS acknowledges that fishing activity is not likely to be equally distributed throughout state waters. Data on the location of state-permitted vessel activity are unavailable; in lieu of better data, the analysis employs assumptions that provide a reasonable basis for estimating the number of affected vessels. To the extent that fishing activity is disproportionately concentrated in waters exempted from the requirements, fewer vessels than estimated in the FEIS would be affected. Conversely, to the extent that activity is disproportionately concentrated outside of the exempted waters, more vessels than estimated in the FEIS would be affected. Appendix 6J of the FEIS identifies the sensitivity of the analysis to changes in the number of affected state vessels.

Comment 39: One commenter presented data from the GOMRI (2006) study as evidence that socioeconomic impacts may be greater than those estimated in the FEIS. (The focus is on the discussion in the FEIS of "heavily impacted" vessels, i.e., those for which compliance costs exceed 15 percent of *revenues*.) The commenter quotes GOMRI figures on vessel *profit*, stating that costs as a percent of these figures would exceed 15 percent for all vessels.

Response: NMFS' analysis indicates that costs for some vessels (although not all vessels) would likely exceed 15 percent of the profit figures that the commenter presents. As discussed on page 7-22 of the FEIS, however, the data needed to develop comprehensive estimates of vessel profit do not exist. The ALWTRP affects a diverse set of vessels; this diversity is reflected in the large set of model vessels on which the economic analysis is based. A profit analysis for each of these model vessels was infeasible due to data limitations. Instead, the social impact assessment evaluates costs relative to *gross revenue*, and employs impact measures that are designed to identify "heavily affected" or "at risk" vessels on this basis. Applying the 15 percent impact measure to profits rather than revenues in order to identify heavily affected

vessels provides for an inconsistent comparison. To provide a consistent comparison, it would be necessary to calculate the number of heavily affected vessels based on the *revenue* figures reported in the GOMRI study. NMFS has not undertaken such an analysis. It is notable, however, that the GOMRI study reports average gross revenues for active lobstermen of \$77,863 in 2005. In comparison, the weighted average annual revenue figure of the values reported for lobster vessels in the FEIS (derived from the figures reported in FEIS Exhibit 7-3) is \$68,560. Because the FEIS includes revenue data for vessels from states other than those covered in the GOMRI study, and because it is based on 2002 data rather than 2005 figures, the FEIS and GOMRI values are not directly comparable. Nonetheless, these figures suggest that the FEIS and the GOMRI study do not differ dramatically with respect to the annual revenue figures they report. To the extent that they do differ, the values employed in the FEIS are lower, not higher. Thus, use of the revenue values reported in the FEIS will result in identifying more vessels as "heavily affected" or "at risk" (framed in terms of costs as a percent of gross revenue) than would be the case if the analysis were based on the revenues reported in the GOMRI study.

Comment 40: One commenter states that the FEIS identifies 231 heavily affected vessels, all of which are Class I vessels.

Response: The FEIS estimates a total of 173 heavily affected vessels under Alternative 6 Final (Preferred), of which 66 are identified as Class II or III vessels (see FEIS Exhibit 7-6).

Summary

After careful review of the proposed measures, the associated analyses, and the public comments that NMFS received on the amendments to the ALWTRP, NMFS is approving the amendments in the FEIS final preferred alternative. This final action seeks to reduce the risk of large whale entanglement by measures such as folding in other trap/pot fisheries under the ALWTRP; reducing the profile of groundlines; and mandating gear modifications to vertical lines, for example, by requiring gear marking and the use of weak links of lower breaking strength. These changes are designed to address ongoing entanglement issues, especially those involving groundline. NMFS has determined that, overall, the measures being implemented represent the environmentally preferable alternative when considering the balance of environmental and economic effects that might accrue from these measures within the context and strictures of the MMPA and ESA. In addition, NMFS has determined the preferred alternative will promote the national environmental policy as discussed in Section 101 of NEPA. NMFS also concludes that all practical and legally justifiable means to avoid, minimize, or compensate for environmental harm from the final action have been adopted.

NMFS has considered all applicable public comments received on the amendments to the ALWTRP. Responses to all comments on the ALWTRP DEIS are available in Volume II of the FEIS.

Further information concerning this Record of Decision may be obtained by contacting Mary Colligan, NMFS Northeast Region, One Blackburn Drive, Gloucester, MA, 01930, (978) 281-9116.



Assistant Administrator, National Marine
Fisheries Service



Date