

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
* Jaguar	* <i>Panthera onca</i>	* U.S.A. (AZ, CA, LA, NM, TX), Mexico, Central and South America.	* Entire	* E	* 5, 622	NA	* NA
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Dated: July 14, 1997.

John G. Rogers,

Acting Director, Fish and Wildlife Service.

[FR Doc. 97-19208 Filed 7-21-97; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 229

[Docket No. 970129015-7170-04; I.D. 031997B]

RIN 0648-A184

Taking of Marine Mammals Incidental to Commercial Fishing Operations; Atlantic Large Whale Take Reduction Plan Regulations

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Interim final rule.

SUMMARY: NMFS by this action establishes a take reduction plan, and issues an interim final rule implementing that plan, to reduce serious injury and mortality to four large whale stocks that occurs incidental to certain fisheries. The target whale stocks are: The North Atlantic right whale (*Eubalaena glacialis*), western North Atlantic stock, humpback whale (*Megaptera novaeangliae*) western North Atlantic stock, fin whale (*Balaenoptera physalus*) western North Atlantic stock, and minke whale (*Balaenoptera acutorostrata*), Canadian East Coast stock. Covered by the plan are fisheries: For multiple groundfish species, including monkfish and dogfish, in the New England Multispecies sink gillnet fishery; for multiple species in the U.S. mid-Atlantic coastal gillnet fisheries; for lobster in the interim final rule includes time and area closures for the lobster, anchored gillnet and shark drift gillnet fisheries, gear requirements, including a general prohibition on having line

floating at the surface in these fisheries, a prohibition on storing inactive gear at sea; and restrictions on setting shark drift gillnets and drift gillnets in the mid-Atlantic. The plan also contains non-regulatory aspects, including recommendations for gear research, public outreach and increasing efforts to disentangle whales caught in fishing gear.

DATES: Except for §§ 229.32 (b), (c)(1), (d)(1), (e)(1), and (f)(1) (the gear marking requirements), the regulations are effective November 15, 1997.

Sections 229.32 (b), (c)(1), (d)(1), (e)(1), and (f)(1) (the gear marking requirements) are effective January 1, 1998. If the Office of Management and Budget gives approval for the information collection requirements in these sections at a later date, NOAA will publish a timely document in the **Federal Register** with the new effective date.

Comments on the plan, the interim final rule, and paperwork burden estimates must be received by October 15, 1997.

ADDRESSES: Comments should be sent to: Chief, Marine Mammal Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910. Copies of the Environmental Assessment accompanying this interim rule can be obtained by writing to the same address. Comments regarding the burden-hour estimates or any other aspect of the collection of information requirements contained in the interim final rule should also be sent to the Office of Information and Regulatory Affairs, OMB, Attention: NOAA Desk Officer, Washington, DC 20503. Copies of the 1996 Stock Assessment Reports for northern right whales, humpback whales, fin whales and minke whales may be obtained by writing to Gordon Waring, NMFS, 166 Water St., Woods Hole, MA 02543.

FOR FURTHER INFORMATION CONTACT: Kim Thounhurst, NMFS, Northeast Region, 508-281-9138; Bridget Mansfield, NMFS, Southeast Region, 813-570-

5312; or Michael Payne, NMFS, Office of Protected Resources, 301-713-2322.

SUPPLEMENTARY INFORMATION:

Background

The Marine Mammal Protection Act (MMPA) requires commercial fisheries to reduce the incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero mortality and serious injury rate by April 30, 2001 (section 118 (b)(1)).

For some marine mammal stocks and some fisheries, section 118(f) requires NMFS to develop and implement take reduction plans to assist in recovery or to prevent depletion. Take reductions plans are required for each "strategic stock." A strategic stock is a stock: (1) For which the level of direct human-caused mortality exceeds the potential biological removal (PBR) level; (2) that is declining and is likely to be listed under the Endangered Species Act (ESA) in the foreseeable future; or (3) that is listed as a threatened or endangered species under the ESA or as a depleted species under the MMPA. Fisheries primarily affected by take reduction plans are those classified as "Category I" or "Category II" fisheries under section 118(c)(1)(A) (i) or (ii) of the MMPA. Category I fisheries have frequent incidental mortality and serious injury of marine mammals. Category II fisheries have occasional incidental mortality and serious injury of marine mammals.

The immediate goal of a take reduction plan is to reduce, within 6 months of its implementation, the mortality and serious injury of strategic stocks incidentally taken in the course of U.S. commercial fishing operations to below the PBR levels established for such stocks. The PBR level is defined in the MMPA as 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. The parameters for calculating the PBR level are described by the MMPA.

The long-term goal of a take reduction plan is to reduce, within 5 years of its implementation, the incidental mortality and serious injury of strategic marine mammals taken in the course of commercial fishing operations to insignificant levels approaching a zero mortality and serious injury rate, taking into account the economics of the fishery, the availability of existing technology, and existing state or regional fishery management plans. Unlike PBR, the MMPA does not define how to calculate the "zero mortality rate goal" (ZMRG). For the purposes of this rule, NMFS intends to interpret ZMRG to be 10 percent of the PBR level for each stock until a formal definition is established.

Through this document, NMFS publishes an Atlantic Large Whale Take Reduction Plan (ALWTRP) and an interim final rule implementing that plan. The plan, in conjunction with the Offshore Cetacean Take Reduction Plan, currently being developed, is intended to meet the goals stated above for right whales, humpback, and fin whales, which are listed as endangered species under the ESA (and are thus considered strategic stocks under the MMPA). Although minke whales are not considered strategic at this time, the ALWTRP is also expected to reduce takes of minke whales. The plan may be amended in the future to take account of new information or circumstances.

The fisheries affected by this plan are: Anchored gillnet fisheries including the New England sink gillnet fishery, the Gulf of Maine/U.S. Mid-Atlantic lobster trap/pot fishery, the U.S. mid-Atlantic coastal gillnet fisheries, and the Southeastern U.S. Atlantic drift gillnet fishery for sharks. The New England Multispecies sink gillnet fishery is a Category I fishery that has an historical incidental bycatch of humpback, minke, and possibly fin whales. This gear type has been documented to entangle right whales in Canadian waters. Additionally, entanglements of right whales in unspecified gillnets have been recorded for U.S. waters, although U.S. sink gillnets have not been conclusively identified as having entangled right whales. The Gulf of Maine/U.S. mid-Atlantic lobster trap/pot fishery is a Category I fishery that has an historical bycatch of right, humpback, fin and minke whales. The mid-Atlantic coastal gillnet fisheries are considered a Category II fisheries complex that has an historical incidental bycatch of humpback whales. The Southeastern U.S. Atlantic drift gillnet fishery for sharks is a Category II fishery that is believed to be responsible for bycatch of at least one right whale.

The pelagic drift gillnet fishery is a Category I fishery which has recorded takes of large whales. Those interactions will be addressed in the Atlantic Offshore Cetacean Take Reduction Plan.

Other fisheries operating on the U.S. Atlantic Coast have a low level of historical bycatch of large whales but some may potentially take large whales, because the gear is similar to that used by the four fisheries regulated by this rule. These fisheries include the tuna hand line/hook-and-line fishery, groundfish (bottom) longline/hook-and-line fishery, surface gillnet fishery for small pelagic fishes, pot fisheries other than lobster pot, finfish staked trap fisheries, and weir/stop seine fisheries. Currently, these fisheries are either classified as Category III or are unclassified. NMFS will continue to assess the appropriateness of these classifications and may recommend a reclassification in the future if evidence is found that any fishery contributes significantly to the overall entanglement problem.

Some waters are exempt from this plan. The basic rule for the exempted water boundaries is that all waters landward of the first bridge over any embayment, harbor or inlet will be exempted. Some bays that do not have bridges over them are also exempted, including Penobscot Bay, Casco Bay, Long Island Sound, Delaware Bay and Chesapeake Bay. South of the Virginia/North Carolina border, all waters landward of the demarcation line of the International Regulations for Preventing Collisions at Sea, 1972 (72 COLREGS line) are exempted. These are all areas where large whale occurrences are so rare that NMFS believes gear requirements will have no measurable effect on reducing entanglements. For a precise definition of the exempted areas, see the regulation section of this document.

Current Entanglement Rates and Future Targets

The information in this section is from the 1996 Stock Assessment Reports (Waring *et al.*, 1996) compiled by NMFS as required by the MMPA. Additional information about the population biology and human-caused sources of mortalities and serious injuries is included in the Stock Assessment Reports, which are available from NMFS (see ADDRESSES).

Some entanglements of large whales were observed by the NMFS sea sampling program; however, most records come from various sources such as small vessel operators. Limitations on the use of the available entanglement data include: (1) Not all observed events

are reported; (2) most reports are opportunistic rather than from systematic data collection; consequently, conclusions cannot be made regarding actual entanglement levels; (3) identifying gear type or the fishery involved is often problematic; and (4) identifying the location where the entanglement first occurred is often difficult since the first observation usually occurs after the animal has left the original location.

North Atlantic Right Whales—Most of the measures in this plan focus on ways to reduce the risk of serious injury and mortality to right whales, both because the right whales' population status is more critical than that of any other large whale and because right whales are the only endangered large whale in U.S. Atlantic waters for which the PBR level is known to be exceeded. The North Atlantic right whale is one of the most endangered species in the world, numbering only around 300 animals. The 1996 stock assessment compiled by NMFS estimates that a minimum of 1.1 right whales from the western North Atlantic stock are seriously injured or killed annually by entanglement in U.S. fishing gear from 1991 through 1996. The reports available to NMFS often do not contain the detail necessary to attribute an entanglement to a particular fishery or location. However, lobster pot gear and pelagic drift gillnet gear are known to have contributed to these entanglements. Longer-term records held by NMFS include entanglements of right whales in other gillnets, including gillnets in Canada and in the southeastern United States. Unobserved entanglements are also known to occur, based on observed scarred animals. More than half of all right whales bear scars that appear to be from entanglements. NMFS is unable to estimate the rate of these unobserved events.

The overall rate or serious injuries or mortalities of right whales by commercial fisheries must be reduced from 1.1 animals per year to less than the PBR level of 0.4 animals per year to meet the 6-month goal set by the MMPA.

Humpback Whales—The 1996 Stock Assessment Reports estimate that rate of serious injury and mortality of humpback whales due to fishery interactions is 4.1 animals per year. Of this value, 0.7 animals per year were observed by NMFS observers. The remaining 3.4 animals per year are from known entanglements not directly observed by NMFS. The PBR level for this stock is 9.7 whales per year. Therefore, NMFS has determined that a reduction in take for the western North

Atlantic stock of this species is not required for these fisheries to meet the 6-month goal.

Fin Whales—Although serious injury and mortality due to entanglement has been documented for this stock of fin whales over the 1991–1995 period, none of those events can be conclusively attributed to any of the four fisheries groups covered in this plan. The total known fishery-related mortality and serious injury rate for this stock is less than 10 percent of the PBR level, which is calculated to be 3.4 fin whales per year. Therefore, NMFS has determined that a reduction in take for the western North Atlantic stock of this species is not required for these fisheries to meet the 6-month goal. The 1996 Stock Assessment Report concludes that the known fishery-related mortality and serious injury for this stock is less than 10 percent of the PBR level and can be considered to be approaching the ZMRG. This assessment may change in the future. NMFS has records of fin whale entanglements that have not been analyzed, however, and intends to complete the analysis of these records soon. It should be noted that known entanglements of fin whales are rare. The number of entangled fin whale sightings is likely to be negatively biased, because carcasses usually sink and are therefore less likely to be observed.

Minke Whales—The 1996 NMFS stock assessment report estimates that 2.5 minke whales are seriously injured or die from fishery-related encounters. This level does not exceed the PBR level of 21 for this stock. Therefore, NMFS has determined that a reduction in take for the western North Atlantic stock of this species is not required for these fisheries to meet the 6-month goal. This species is not listed as threatened or endangered under the ESA or as depleted under the MMPA. Measures implemented to reduce the entanglement rate of right and humpback whales may reduce the entanglement rate for minke whales, facilitating progress of that stock toward ZMRG.

Atlantic Large Whale Take Reduction Plan

As stated above and as required by the MMPA, the plan has two goals. The first goal is to reduce serious injuries and mortalities of right whales in U.S. commercial fisheries to below 0.4 animals per year by January 1998 in conjunction with the Atlantic Offshore Cetacean Take Reduction Plan. The second goal is to reduce by April 30, 2001 entanglement-related serious injuries and mortalities of right whales,

humpback whales, fin whales, and minke whales to insignificant levels approaching a zero mortality and serious injury rate, taking into account the economics of the fisheries, the availability of existing technology and existing State and regional fishery management plans.

Achieving these goals will be difficult, particularly for right whales. NMFS has identified two approaches for reducing the risk of serious injury or mortality to right whales to achieve the PBR level and reducing that risk still further to achieve ZMRG. One approach is through extensive closures of large areas of the ocean to lobster and gillnet fishermen. This approach would guarantee reduction of entanglements causing serious injury and mortalities but only at a high cost to many fishermen.

The second approach is to close critical habitat areas only and to modify fishing practices in a manner designed to create a realistic potential of achieving MMPA objectives without sacrificing large parts of a vital fishing industry. This approach does not carry the guarantee of the first approach but it is calculated to have a reasonable chance for success. This approach emphasizes cooperation with the fishermen and takes advantage of their presence on the water to improve the disentanglement effort and to enlist their aid in developing gear modifications that will reduce bycatch while minimizing costs to the fishery. Disentanglement efforts may work with large whales, which can live for months or years carrying entangling gear, whereas they would not work for small cetaceans such as harbor porpoises, which tend to drown when entangled. The current estimate of serious injury and mortality to right whales is 1.1 animals per year. If one additional right whale is saved each year through fishermen's efforts to call in sightings of entangled whales and to stand by to assist in disentanglement efforts, this would go a long way to minimizing the bycatch problem. Likewise, if four additional humpback whales are disentangled per year, the entanglement rate might be below ZMRG. Furthermore, the fishing industry is the best source of new ideas for gear modifications to reduce bycatch and having the cooperation of the industry could have 10,000 more vessels involved in sighting and reporting entanglement events to the disentanglement network. Such ideas are more likely to be forthcoming if cooperation is emphasized.

In this plan, NMFS adopts the second approach. In essence, the plan

encourages the fishing industry to take responsibility for reducing takes of large whales, through measures that are designed to foster cooperation with NMFS and the Atlantic Large Whale Take Reduction Team (TRT), a group of stakeholders convened by NMFS to advise it on ways to reduce serious injuries and mortalities to large whales due to entanglements in fishing gear. Adopting a cooperative approach and emphasizing disentanglement and gear research does not preclude adopting additional measures later should that be necessary to meet the standards of the MMPA. Steps to achieve the short-term goal.

NMFS believes that the plan and the interim final rule, plus measures earlier this year and other measures to be taken under other take reduction plans, including the upcoming Atlantic Offshore Cetacean Take Reduction Plan, will reduce serious injury and mortality of right whales to below the PBR level within 6 months.

This plan is expected to achieve the necessary take reductions within 6 months through: (1) Closures of critical habitats to some gear types during times when right whales are usually present; (2) restricting the way strike nets are set in the southeastern U.S. driftnet fishery to minimize the risk of entanglement; (3) requiring that all lobster and sink gillnet gear be set in such a way as to prevent line from floating at the surface; (4) requiring all lobster and anchored gillnet gear to have at least some additional characteristics that are likely to reduce the risks of entanglements; (5) requiring that drift gillnets in the mid-Atlantic be either tended or stored on board at night; (6) improving the voluntary network of persons trained to assist in disentangling right whales; and (7) prohibiting storage of inactive gear in the ocean.

The degree of risk reduction achieved by each of these measures cannot be quantified in advance. An analysis of whether the PBR level may have been achieved can only be made after the fact.

Right whales are typically found in the Cape Cod Bay Critical Habitat from January 1 through May 15 and in the Great South Channel critical habitat from April 1 through June 30. This interim final rule closes the Cape Cod Bay Critical Habitat to sink gillnet fishing during the high right whale use period (January 1 through May 15) until modified gear or alternative fishing practices that reduce the incidence or impact of entanglements are available. Lobster pot gear in that area will be allowed but will have to be substantially modified to minimize the risk of

entangling right whales. Lobster pot gear will be prohibited during the high right whale use months in the Great South Channel (April 1 through June 30), most of which will also be closed to gillnet fishing, until modified gear or alternative fishing practices that reduce the incidence or impact of entanglements are available.

Sink gillnets may be set during the April through June high right whale use period in a "sliver area" of the Great South Channel critical habitat. The sliver area is comprised of the waters in the Great South Channel critical habitat west of the LORAN C 13710 line. Only three percent of right whale sightings have occurred in that area, and it was determined that a closure is not necessary to reduce likelihood of entanglements.

Although not allowing lobster pot gear in the area west of the Loran C 13710 line from April 1 through June 30 may appear inconsistent with allowing sink gillnet gear in this area, NMFS believes that lobster pot gear poses a greater threat to right whales than does sink gillnet gear in this area. The offshore location generally requires that gillnetters tend their gear, whereas lobster pot gear in this area is often not checked for extended periods especially if there is bad weather.

NMFS is closing the Great South Channel critical habitat to lobster pot gear during the high right whale use period but will allow fishing with strict gear requirements in the Cape Cod Bay critical habitat over the comparable period. The rationale for this difference is that there is a higher likelihood that an entangled whale in Cape Cod Bay will be sighted and reported, due to the high level of vessel traffic and more research efforts in that area. Potential whale entanglements in Cape Cod Bay are considered more likely to be observed and reported to the disentanglement network. In addition, NMFS believes that disentanglement efforts may be more effective in reducing the potential for serious injuries and mortalities in these relatively shallow, near-shore waters than in offshore waters. The Great South Channel critical habitat is further offshore and little whale-watching or survey effort exists there. The likelihood of observing an entangled whale offshore is lower, and offshore disentanglement efforts are subject to greater logistical impediments.

An area from Sebastian Inlet, FL, to Savannah, GA, out to 80° W long. is closed to all shark driftnet fishing, except for strickenetting, each year from November 15 through March 31. This closed area includes the southeastern

U.S. right whale critical habitat, which is a nursery area for mothers and calves.

Strikenetting in southeast waters is permitted during the high risk period only if: (1) No nets are set at night or when visibility is less than 500 yards (460 m), (2) each set is made under the observation of a spotter plane, (3) no net is set within 3 miles of a right, humpback or fin whale, and (4) if a whale comes within 3 miles of set gear, the gear is removed from the water immediately. A distance of 3 miles was selected because it is believed to allow sufficient time (half an hour) for gear to be pulled from the water before a whale reached a net. NMFS believes these measures will minimize the risk of entangling any large whale.

This rule also requires that all lobster and anchored gillnet gear be rigged in such a way as to prevent the buoy line from floating at the surface at any time. All large whales are vulnerable to entanglement in any line floating on the surface of the water. Right whales are particularly vulnerable to this entanglement threat, since they are known to "skim feed" by swimming slowly at the surface with their mouths open.

NMFS is also establishing lists of gear characteristics that are expected to decrease the risks of entanglement (see below for lists). Lobster pot gear and anchored gillnet gear used in low risk areas will be required to have at least one of the characteristics. Similar gear set in high risk areas are required to have at least two of these characteristics. There are slightly different requirements for inshore and offshore lobster fisheries because of the much heavier gear requirements for fishing offshore. The lists published in this interim final rule are based on public comments and the recommendations of the Gear Advisory Group and reflect current general fishing practices.

The main purpose of this measure is to help achieve the long-term goal by initiating a flexible process of gear modification over the next 4 years (see discussion under "steps to achieve ZMRG" below). To achieve the short-term goal, NMFS is relying primarily on closures, disentanglement, and other mandatory gear restrictions, not on the use of options from the gear lists. The Take Reduction Technology Lists contain gear specifications that have been shown to be stable in the water and catch fish, but that represent a reduction in entanglement risk over other gear that is also currently in use. Many fishermen may already be using gear that complies with the current list, but some fishermen will have to modify their gear to comply with this

regulation; hence, there will be a small immediate risk reduction from this requirement.

This rule also requires that mid-Atlantic drift gillnet gear be either removed from the water each night or be attached to the vessel. The purpose of this measure is to reduce the chances that a whale will encounter gear that is not anchored. This provision is in effect from December 1 through March 31 of each year, during the time when whales, primarily right and humpback whales, are most frequently seen in the mid-Atlantic.

Disentangling a whale can reduce the seriousness of an injury or prevent death due to entanglement. NMFS continues to commit funds to support and improve the disentanglement effort to help meet both the six month and the long-term goal (see discussion under "steps to achieve ZMRG" below).

Steps to Achieve the Zero Mortality Rate Goal

The plan has the realistic potential to reach the 5-year goal by continually reducing the number of entanglements causing serious injury and mortality to a level of 10 percent of the PBR level. If the plan succeeds in reaching 10 percent of the PBR level, this would be equivalent of achieving the most conservative estimate of ZMRG. The likelihood of succeeding in reducing such entanglement to 10 percent of the PBR level depends on many factors. Progress toward the ZMRG is expected to be achieved primarily through continued improvements to the disentanglement response teams and through gear research that identifies appropriate gear modifications that further reduce either the likelihood or the seriousness of an entanglement. This effort will only succeed with the willing participation of the fishing industry, especially in reporting and assisting in disentanglement efforts and in developing gear that will reduce the risks of entanglement. Accordingly, the plan emphasizes outreach and education efforts to share information between NMFS and fishermen, research on gear modifications, and active involvement of interest groups through the take reduction team process. This does not rule out the possibility of further closures if gear modifications and disentanglement do not appear able to achieve ZMRG.

The steps in this ALWTRP designed to facilitate continued reductions in entanglements include: (1) A commitment to improve public involvement in take reduction efforts, including consulting with the TRT and the Gear Advisory Group and

conducting outreach and educational workshops for fishermen; (2) instituting "Take Reduction Technology Lists" from which fishermen must choose gear characteristics that are intended to decrease the risks of entanglement; (3) facilitating further gear modification research; (4) continuing to improve the disentanglement effort, including encouraging more cooperation from fishermen; (5) prohibiting "wet storage" of gear; (6) implementing a gear marking program, (7) developing contingency plans in cooperation with states for when right whales are present at unexpected times and places; (8) working with Canada to decrease entanglements in its waters; (9) improving monitoring of the right whale population distribution and biology, and (10) an abbreviated rulemaking process (codified in this document) to allow NMFS to change the requirements of the plan through notification in the **Federal Register**, thereby improving the responsiveness of NMFS.

NMFS intends to make active use of the TRT to review progress and make recommendations on how to continue to decrease serious injuries and mortalities due to entanglements. As a first step in that process, NMFS will convene the TRT in the fall of 1997 to review this plan and its associated interim final rule. NMFS may modify the plan if it receives a consensus recommendation from the team to do so. In addition, NMFS plans to reconvene the TRT in 1998 to review the progress made during the first 6 months of the plan.

NMFS is developing fishermen outreach and education programs. These programs will have two main goals: (1) To inform fishermen of the status of whales, the requirements of the MMPA and this plan and to improve cooperation with disentanglement efforts, and (2) to exchange views and solicit advice from fishermen on appropriate gear modifications for their area or other take reduction methods.

The use of gear modifications to minimize the risks of entangling large whales will be a key to the long-term success of this plan. As a first step in that direction, NMFS will require that by January 1998 all lobster and anchored gillnet gear, including sink and coastal gillnet gear, have some characteristics that reduce the risks associated with entanglement. Because fishing conditions vary throughout the Atlantic, NMFS will not require specific modifications to be applied to all gear at this time. Instead, this interim rule contains lists of acceptable gear characteristics based on information received from public comments, including discussions of the Gear

Advisory Group. Vessels fishing in low risk areas will be required to ensure that their gear has at least one of the listed characteristics. Those fishing in areas where the risk of entanglement is high (i.e., Stellwagen and Jeffreys Ledge and in northern critical habitats during periods of relatively low right whale use) are required to ensure that their gear has at least two of the listed characteristics. Because fishing conditions require heavier gear offshore, for the time being there are different breaking strengths for offshore and inshore lobster pot gear.

The lists of acceptable gear characteristics from which fishermen may select to comply with the regulations in this plan are as follows:

Lobster Take Reduction Technology List

1. All buoy lines are 7/16 inches in diameter or less.
2. All buoys are attached to the buoy line with a weak link having a maximum breaking strength of up to 1100 lb. Weak links may include swivels, plastic weak links, rope of appropriate breaking strength, hog rings, or rope stapled to a buoy stick.
3. For gear set in offshore lobster areas only, all buoys are attached to the buoy line with a weak link having a maximum breaking strength of up to 3780 lb.
4. For gear set in offshore lobster areas only, all buoys are attached to the buoy line by a section of rope no more than 3/4 the diameter of the buoy line.
5. All buoy lines are composed entirely of sinking line.
6. All ground lines are made of sinking line.

Gillnet Take Reduction Technology List

1. All buoy lines are 7/16 inches in diameter or less.
2. All buoys are attached to the buoy line with a weak link having a maximum breaking strength of up to 1100 lbs. Weak links may include swivels, plastic weak links, rope of appropriate breaking strength, hog rings, or rope stapled to a buoy stick.
3. Gear is anchored with the holding power of a 22 lb danforth-style anchor at each end.
4. Gear is anchored with a 50 lb dead weight at each end.
5. Nets are attached to a lead line weighing 100 lbs or more per 300 feet.
6. Weak links with a breaking strength of up to 1100 lbs are installed in the float rope between net panels.
7. All buoy lines are composed entirely of sinking line.

The above lists may be modified in the future if new gear is developed and tested in field trials or if any of the

characteristics on the list published with this interim final rule are determined by NMFS to be insufficient to reduce entanglement risks. NMFS intends to seek the advice of the TRT and the Gear Advisory Group, and to seek public comment, before adding items to the lists.

The Gear Advisory Group also made several suggestions for gear characteristics that are not included in the lists above. Specifically, the Group recommended that light-colored line be used, because it might increase visibility, and that sections of buoy lines be joined with a splice rather than a knot, because a splice is smoother and is less likely to snag on a whale. NMFS recommends that fishermen adopt these techniques, because they may help reduce entanglements. NMFS is not including these measures on the Take Reduction Technology Lists at this time, however. NMFS has no scientific evidence that the color of the line has any effect on entanglements, and, although NMFS believes that spliced line will generally be smoother than lines with knots in them, fishermen have developed some knots that are almost as smooth as splices (in order to pass through the hauler more easily). Knotted line is also weaker than spliced line and may part more easily if a whale is entangled in it.

NMFS is also supporting research and development of gear modifications that may reduce the risk of entangling large whales. The Gear Advisory Group identified several techniques that might be effective with further development. NMFS has committed funds this year to study several of these. NMFS expects to continue to provide funding for this kind of research in the future. NMFS expects to reconvene the Gear Advisory Group to review progress on gear research and development and to continue to suggest future research directions. Note that NMFS can authorize experimental fisheries to test gear that does not comply with the gear requirements set forth in this rule.

Since 1984, NMFS has authorized the Center for Coastal Studies (CCS) disentanglement team to conduct whale rescue in the southern Gulf of Maine. Since 1995, NMFS has contracted with CCS to expand the disentanglement effort to other areas of the northeast. A first response network has been established for most of the Gulf of Maine/Bay of Fundy and the Georgia/Florida right whale critical habitat area, and collaborators will be identified in other areas of the northeast. With increased involvement from the U.S. Coast Guard and Canada's Department of Fisheries and Oceans, the

disentanglement network can now respond to entanglements on most areas of the U.S. east coast and the Scotia/Fundy region. NMFS and the CCS team have also been working with the State of Maine and the Commonwealth of Massachusetts to involve the fishing industry in the disentanglement network by providing information and assisting the CCS team with reporting and monitoring entanglements. NMFS is also funding and/or working cooperatively with other groups to expand the current survey effort to better monitor at-risk areas. These surveys will increase opportunities for sighting entangled whales, as well as warning ships of the presence of right whales in an area.

The removal of lost or unused gear from the water will also help reduce the risk of entanglement. This rule contains a prohibition on "wet storage" of lobster pot gear—the practice of storing gear in the water—through a requirement that gear be hauled at least every thirty days. (Note that this provision was characterized in the proposed rule as a 30-day "inspection" requirement, a term which caused confusion.) NMFS does not know the extent of the practice of wet storage of gear, and solicits comments on the number of persons affected by this provision.

To further reduce "ghost gear", NMFS will notify all Atlantic fisheries permit holders of the importance of bringing gear back to shore to be discarded properly, as called for under 33 U.S.C. 1901 *et seq.* and the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships (MARPOL Protocol). In addition, NMFS, in coordination with the U.S. Coast Guard, will review regulations currently in place that concern fishing gear or fishing practices that may increase or decrease the amount of ghost gear to determine what additional measure may be useful in reducing the potential for whale entanglement by such gear.

Through the gear marking requirements, NMFS hopes to obtain more data regarding where entanglements occur and what gear types need further attention. NMFS will require marks on six categories of gear—inshore and offshore lobster pot gear, anchored gillnets in northeast and mid-Atlantic waters, mid-Atlantic driftnet gear and shark driftnet gear. Because inshore and offshore lobster pot gear have different requirements, these types must be marked differently.

The gear marking measure is still under review by the Office of Management and Budget for compliance with the Paperwork Reduction Act, and

it will not become effective until a notice is published in the **Federal Register**. Note that this measure will not in itself reduce entanglements, but may provide useful information for designing future bycatch reduction measures to achieve ZMRG.

Although NMFS can predict where some right whales will be found at some times of the year, right whales have been sighted in virtually all coastal and offshore waters from Florida to Maine. Generally these sightings are of small, transient groups or individuals. On occasion, however, larger groups of right whales are resident at times and in locations that are unexpected, including times when large amounts of fishing gear may be deployed in the area. Under these circumstances, the risk of entanglement is higher. For example, all right whale entanglements in U.S. lobster pot gear where the location was known occurred either outside critical habitat or outside the peak season in critical habitat. There may be a number of ways to decrease that risk, including continuous monitoring of the whales' movements to alert a disentanglement team immediately in the event that a whale happens to get entangled. NMFS will work with states and fishermen's associations to develop quick response networks to these unusual right whale distribution patterns.

NMFS will continue to cooperate with the Canadian Department of Fisheries and Oceans (DFO) regarding take reduction efforts for large whales. NMFS will share data with DFO scientists and will continue to invite DFO's participation on the Team as a means of promoting effective bycatch reduction measures for large whales throughout western North Atlantic waters.

The regulations implemented through this notice contain a section (§ 229.32(g)(2)) that allows the Assistant Administrator (AA) of NMFS to make changes to the requirements through an abbreviated rule-making process. The process would allow the AA to modify the regulations implementing this plan through a notification in the **Federal Register**. The purpose of this measure is to allow NMFS to respond more quickly to make necessary adjustments to the requirements of the plan. This may be particularly important if necessary to extend a closure because right whales are still in an area or to open an area if NMFS determines that right whales have departed early.

Monitoring Strategies

NMFS estimates annual serious injury and mortality rates based on a 5-year period, as a part of its requirement to develop annual marine mammal Stock

Assessment Reports. Expected rates of entanglement during any 6-month period may vary from the 5-year annual average. This variation may be most pronounced where the sample size is particularly small, as is the case with right whale entanglements. Consequently, it will be impossible to prove within 6 months that the goal of reducing incidental takes of right whales to below the PBR level has been achieved. Under some circumstances, however, it may be possible to prove that the PBR level has not been reached. For example, the PBR level for right whales is 0.4, if more than two serious injuries or mortalities incidental to commercial fishing operations are observed within 5 years after the plan is promulgated, then it will be known that the PBR goal will not have been achieved.

NMFS will continue to monitor entanglements of all large whale species. Assessment of the success in bycatch reduction measures will be based on reports from the NMFS observer program, examination of stranded whales, abundance and distribution surveys, fishermen's reports and opportunistic reports of entanglement events. NMFS will expand field survey efforts to assess population abundance and distribution, particularly in the Great South Channel. The effectiveness of implemented take reduction measures may be most apparent through monitoring the entanglement rate for humpback whales, since this species has the highest known entanglement rate of the large whales on the U.S. Atlantic coast. A decrease in entanglements of humpback whales will be taken as supportive but not conclusive evidence that the risk of entangling right, fin and minke whales has been reduced.

NMFS will also continue to gather information on how and where entanglements occur. For the duration of this plan, NMFS will form a repository for gear removed from entangled whales.

In the proposed plan, NMFS suggested a gear marking system that was intended to provide information about where entanglements occur and what gear is causing the entanglements. Knowing this information would be important to help devise any further take reduction measures. However, the proposed system was considered too cumbersome by many commenters and questions were raised about whether marked gear retrieved from a whale would determine definitively where that whale was entangled. Furthermore, some marking of lobster pots, gillnets and associated surface gear is currently

required or being considered under Federal or state fishery management plans for the four groups of fisheries covered by this plan. In this plan, NMFS intends to implement a simplified gear-marking requirement as soon as Paperwork Reduction Act approval is obtained from OMB. NMFS will also consult with State governments, the Take Reduction Team, and members of the Gear Advisory Group with a view to improving the gear marking system by 1999.

Fishery Specific Measures

American Lobster Trap/Pot Fisheries

Except for gear set in the exempted areas mentioned above, all lobster pot gear must be set in such a way as to avoid having line floating at the surface at any time. Floating line is allowed between two buoys on the same buoy line and between a buoy and a high flyer.

Lobster pot gear is prohibited from the Great South Channel critical habitat area from April 1 through June 30, until the AA determines that alternative fishing practices or gear modifications have been developed that reduce the risk of serious injury or mortality to whales to acceptable levels. From July 1 through March 31, lobster pot gear set in the Great South Channel critical habitat must have at least two characteristics from the Take Reduction Technology List. Note that, although portions of the Great South Channel critical habitat would be considered offshore, NMFS believes that the weaker maximum breaking strengths allowed for inshore gear are more appropriate in the critical habitat, since right whales may return to the area when not expected. Therefore, the Great South Channel critical habitat is not considered "offshore" for the purposes of this plan. Lobster pot gear set in this area must comply with the inshore gear characteristics.

From January 1 through May 15, lobster pot gear may only be set in the Cape Cod Bay critical habitat if it meets certain criteria. All lobster pot gear set during that time must have all four of the following characteristics. (1) All buoys must be attached to the buoy line with a weak link with a maximum breaking strength of up to 1100 lb. (2) All pots must be set in trawls of four or more pots. (3) All buoy lines must be made of sinking line, except for the bottom third of the line, which may be floating line. (4) All ground lines between pots must be made of sinking line. These measures conform to the current requirements set by the State of Massachusetts for its portion of the critical habitat during that period. From

May 16 to December 31, lobster pot gear set in the Federal portion of the Cape Cod Bay critical habitat must have at least two characteristics from the Take Reduction Technology List.

For either critical habitat, if NMFS determines that the right whales have departed from that area for the season, the AA may allow lobster pot gear to be set, provided that the gear meets the requirements for lobster gear set in the Stellwagen Bank/Jeffreys Ledge area.

The Stellwagen Bank/Jeffreys Ledge (SB/JL) area is defined as all Federal waters in the Gulf of Maine that lie to the south of the 43°15' N lat. line and west of the 70° W long. line, except right whale critical habitat. Note that the boundaries of the Stellwagen Bank/Jeffreys Ledge Area have been changed from what NMFS proposed in April. State waters are no longer included, and the northern boundary has been changed. The new boundaries more accurately reflect the area where the risk of whale/fishery interactions is high, based on the frequency of right whale and humpback whale sightings.

In the Stellwagen Bank/Jeffreys Ledge area, lobster pot gear must always have at least two characteristics from the Lobster Take Reduction Technology list. Fishermen should be aware that humpback and/or right whales are present in this area most months of the year. Entanglements of both species are above the ZMRG. If the gear modifications are not sufficient to reduce serious injury and mortality to right and humpback whales to achieve the 6-month PBR goal or the 5-year ZMRG goal, additional restrictions or closures of certain portions of this area may be necessary. A decision to close any portion of this area would be made in consultation with the TRT, and after public comment.

In all other areas, lobster pot gear must be set with at least one characteristic from the Lobster Take Reduction Technology list. This requirement applies year-round in the inshore and offshore lobster fishery north of 41°30' N lat. and from December 1 through March 31 in the inshore and offshore lobster fishery south of 41°30' N lat. Some of the gear characteristics are only applicable to offshore lobster fishing because conditions offshore require heavier gear. However, fishermen using offshore gear are encouraged to use the inshore standards.

Anchored Gillnet Fisheries

Except for gear set in the exempted areas mentioned above, all sink gillnet gear and other anchored gillnet gear must be set in such a way as to avoid

having line floating at the surface at any time. Floating line is allowed between two buoys on the same buoy line and between a buoy and a high flyer attached to the same buoy line.

Sink gillnet gear is prohibited from most of the Great South Channel critical habitat area from April 1 through June 30, until the AA determines that alternative fishing practices or gear modifications have been developed that reduce the risk of serious injury or mortality to whales to acceptable levels. Sink gillnets may be used year-round in the "sliver area" and may be used from July 1 to March 31 in the Great South Channel critical habitat provided that such gear has at least two characteristics from the Gillnet Take Reduction Technology list.

From January 1 to May 15, the Federal portion of the Cape Cod Bay critical habitat is closed to sink gillnet gear, except that if NMFS determines that the right whales have departed from that area for the season, the AA may allow gillnet gear to be set, provided that it meets the requirements for gillnet fishing for Stellwagen Bank and Jeffreys Ledge. From May 16 to December 31, gillnet gear set in the Federal portion of the Cape Cod Bay critical habitat must have at least two characteristics from the Gillnet Take Reduction Technology List.

Gillnet gear in the Stellwagen Bank/Jeffreys Ledge area (as defined above for lobster pot gear) must always have at least two characteristics from the Gillnet Take Reduction Technology List. Fishers should be aware that humpback and/or right whales are present in the SB/JL area most months of the year. If the gear modifications are not sufficient to reduce serious injury and mortality to right and humpback whales to achieve the 6-month PBR goal or the 5-year ZMRG goal, additional restrictions or closures of certain portions of the SB/JL area may be necessary.

In all other "northeast waters" (defined as Federal and state waters east of 72°30' W long.), gillnet gear must be set with at least one characteristic from the Gillnet Take Reduction Technology List at all times. Mid-Atlantic gillnets (gillnets set west of 72°30' W long. and north 33°51' N lat.) must have at least one characteristic from this list from December 1 to March 31.

Mid-Atlantic Drift Gillnet Fishery

From December 1 to March 31, all vessels using driftnets in the mid-Atlantic gillnet area are required to haul all such gear and stow all such gear on the vessel before returning to port. If driftnets are set at night they must remain attached to the vessel.

Southeast U.S. Driftnet Fishery

The area from 27°51' N lat. (near Sebastian Inlet, FL) to 32°00' N lat. (near Savannah, GA) extending from the shore outward to 80°W long. is closed to driftnet fishing, except for strickenetting, each year from November 15 to March 31. Strickenetting is permitted under certain conditions set forth in the rule. In addition, observer coverage is required for the use of driftnets in the area from West Palm Beach (26°46.5' N lat.) to Sebastian Inlet (27°51' N lat.) from November 15 through March 31 and for the use of strikenets in the area between West Palm Beach, FL and Savannah, GA for the same time period. Vessel operators intending to use these gear types in these areas must notify NMFS at least 48 hours in advance of departure to arrange for observer coverage. In addition, shark drift gillnets must be marked, as directed in the implementing regulations for this rule, to identify the fishery and region in which the gear is fished.

Other Entanglement Reduction Measures Not Part of This Plan

Other measures under the Magnuson-Stevens Fishery Conservation and Management Act that are expected to decrease the risk of entanglement of whales in sink gillnets are either currently in effect or under consideration. Reductions in allowable days at sea and seasonal or year-round area closures to protect groundfish will also reduce the risk of entangling right whales. Additionally, area closures for harbor porpoise conservation are in effect for Massachusetts Bay, the Gulf of Maine "mid-coast" and "northeast" areas, and southern New England. With the exception of the harbor porpoise closure in southern New England, all of these closures coincide with times that right whales are also present in the area, further decreasing the likelihood of entanglement. Effort reduction measures under Framework Adjustment 20 to the Northeast Multispecies Fishery Management Plan are expected to reduce total sink gillnet effort by 50 to 80 percent. This measure is expected to also reduce the risk of large whale entanglement associated with this gear.

New England sink gillnetters that fish "day trips" are now limited in the number of nets they can set. This limit may further reduce the risk of entanglement of right whales in sink gillnet gear.

Some level of lobster pot gear effort reduction may occur under gear conflict management measures such as those recommended by the New England Fisheries Management Council

(NEFMC) in Southern New England. Gear conflict reduction measures are also expected to decrease the amount of lost gear, which should reduce the risk that whales would become entangled in "ghost" gear. Further, the Atlantic States Marine Fisheries Commission is currently considering reducing effort in the lobster fishery. Any effort reduction measures implemented for the lobster fishery are likely to reduce the risk of entanglement of whales in that gear.

Changes From the Proposed Rule

This interim final rule has been substantially modified from the rule proposed by NMFS on April 7, 1997. In the proposed rule, NMFS specifically solicited comments on many of the issues discussed below. Public comments have clarified several issues presented in the proposed rule and have substantially shaped this interim final rule. Major changes have been made to boundaries of affected areas, gear and marking requirements, and contingency measures. Because the changes from the proposed rule are so significant, NMFS is issuing these regulations as an interim final rule to allow comments on this version of the ALWTRP. Except for the gear marking requirements, this rule will become effective on November 15, 1997, unless it is superseded by a notice in the **Federal Register** prior to that date. The gear marking requirements will become effective on January 1, 1998 or on the date that OMB gives approval for this collection of information, whichever is later. Note that right whales tend to be in Canadian waters from July until November, so the risk of entanglements in U.S. fishing gear is relatively low until November 15.

Changes in Boundaries and Area Designations

The Stellwagen Bank/Jeffreys Ledge restricted area is defined in this rule as all Federal waters in the Gulf of Maine south of 43°15' N lat. line and west of the 70°W long. line. The proposed rule contained waters where the frequency of right whale sightings was quite low, especially in state waters. The northern boundary (43°15' N lat.) was proposed by the TRT and other groups. North of this line right whale sightings are also quite low. The eastern boundary remains the same as in the proposed rule.

NMFS has also changed the dividing line between northern and southern lobster waters to be 41°30' N lat. This allows all waters south of Cape Cod to be managed on the same seasonal basis, which is consistent with the usual large whale distribution patterns.

NMFS includes a new boundary in this interim final rule. This divides lobster waters into inshore and offshore components. The boundaries of the offshore lobster area are the same as for the areas sometimes known as Lobster Area III. Because offshore lobster pot gear is generally heavier than inshore gear, many commenters advised that the offshore gear have different requirements. In addition, because of the heavier gear used offshore, which might be harder for a whale to break, there is a specific marking code for offshore lobster pot gear. If offshore gear is found to pose a significant risk to whales, additional restrictions can be imposed.

In response to public comments, NMFS has exempted a number of areas from regulation that would have been covered by the proposed rule. NMFS analyzed the overall distribution data for right, humpback, fin and minke whales. It is clear that these species are rarely found within the bays, harbors, or behind barrier beaches in the Southeast and Mid-Atlantic areas. These are areas where right whale sightings are so low that NMFS believes regulation of fishing activity will have no practical benefit for right whale conservation. Exempted areas include all waters landward of the first bridge over any embayment, Long Island Sound, Delaware and Chesapeake Bays, some coastal areas in the Gulf of Maine and, in the southeast region, waters landward of the demarcation line of the International Regulations for Preventing Collisions at Sea, also known as the 1972 COLREGS line.

Changes to Proposed Gear Modifications

In its April 1997 **Federal Register** notice, NMFS proposed to mandate a number of specific modifications to lobster and gillnet gear that were intended to reduce the risk of entangling large whales. For example, NMFS proposed to require that buoy lines be made entirely or mostly of sinking line. It also proposed that buoys be attached with a weak link and sought comments on whether the breaking strength of that link should be 150 lb, 300 lb, 500 lb or any other breaking strength. In addition, NMFS proposed to require a suite of modifications to sink gillnets, including requiring weak links between nets on both the lead-line and the float-line.

NMFS has subsequently determined that some of these proposed modifications would not work under any circumstances. For example, field testing, since publication of the proposed rule, has shown that the 150-lb breaking strength would be too weak to keep a buoy attached to a line under the normal range of working conditions.

Requiring weak links between both the lead-line and the float-line would not have allowed gillnetters to haul their nets without high risk of loss. Both proposed modifications, if implemented, would have created additional lost gear, thereby perhaps increasing the risks of entanglement rather than decreasing them.

Other proposed modifications have worked in some areas but would not work elsewhere where fishing conditions are different. For example, sinking ground line or buoy lines can work and are used in some places but cannot work where the bottom is rocky.

Fishing conditions and practices differ widely throughout the range of this plan. Therefore a uniform application of gear requirements is not likely to be practical. NMFS has therefore decided that one set of regulations applying to all areas affected by this plan is not appropriate. Instead, in this interim final rule NMFS is establishing a "menu" of gear characteristics that are expected to reduce the risk of entanglements, based on the advice of the Gear Advisory Group and other public comments. Fishermen are required to comply with some of these characteristics but are allowed to select the characteristic or characteristics that are most appropriate for their region. This requirement contributes to achieving the goals of the plan in two ways. First, some fishermen will need to change their gear immediately; hence, there will be an immediate risk reduction, although NMFS believes that this will be only a small contribution. Second, these lists can be modified over time to help achieve the ZMRG. As new technology becomes available, it can be added to the list. If items on the list do not appear to reduce the risk of entanglements, they can be dropped.

Some of the proposed modifications are still in the development stage. For example, NMFS suggested that a weak buoy line, when developed, might substantially reduce the risk of entanglements. Other concepts for gear development were discussed by the Gear Advisory Group. NMFS noted in the proposed rule that further research on gear modifications were necessary, and it committed to funding research on this topic. NMFS intends to modify the gear "menus" when new take reduction technology is demonstrated to be operational on the water.

Changes to Gear Marking Proposal

The proposal to place identifying marks on gear met with generally favorable reviews, although a number of requests were made for a simpler

system. There was general agreement that it would be useful to know what type of gear was entangling whales and where that gear was set, although several commenters warned that it might be difficult to interpret data from marked gear. A chief concern was that the proposed system of marking was too complicated and time-consuming.

In this interim final rule, NMFS implements a simpler, quicker method of marking gear. The marking system keeps the general concept of identifying anchored gillnet, lobster and driftnet gear, but it substantially reduces the number of areas that are to be designated. This allows the use of only two color marks instead of three. The NMFS marking system incorporates two specific suggestions made in the public comment period. First, marking gear with paint is acceptable, provided the mark is refreshed when faded. Second, there were suggestions that marking the ground lines between lobster pots would be time consuming and expensive and the marks would not last long. NMFS has decided to defer the requirement to mark groundlines and will seek the advice of the TRT on the value of this measure.

Changes to Lobster Restrictions in Cape Cod Bay Critical Habitat

NMFS proposed a series of gear restrictions for lobster pot gear set in the Cape Cod Bay critical habitat during the period when right whales are likely to be present (January 1 through May 15). These were based on requirements instituted by the State of Massachusetts. Of the proposed requirements, two are not implemented in this interim final rule. These are: (1) The requirement that all buoy lines be sinking line and (2) the requirement that the buoy be attached with a 150-lb weak link. The purpose of the sinking buoy line requirement was to avoid having a loop of rope floating in the water column when tides were slack. (When there is a tidal current, all buoy lines are likely to be straight.) However, buoy lines made entirely of sinking line rest on the ocean bottom. They will chafe more quickly than buoy lines with some floating line at the bottom and are more likely to be caught on rocks. This requirement would have led to more lost gear. NMFS believes that the increased gear loss creates a larger risk to whales than the benefit of avoiding loose line in the water at slack tide conveys. Therefore, these regulations allow up to one third of the bottom portion of the buoy line to be made of floating line. This is consistent with the current requirements of the State of Massachusetts for this area.

The purpose of the 150-lb breaking strength was to minimize the chance that a buoy would get caught on a whale. Tests in Cape Cod Bay have shown definitively that 150 lbs is too weak to keep buoys on during storms. This requirement would also increase ghost gear. For the time being, instead of a 150 lb weak link, NMFS will require that all buoys in the Cape Cod Bay critical habitat have weak links of a maximum strength of up to 1100 lb. This breaking strength is based on the advice of the Gear Advisory Group, which believed that a weak link with a breaking strength of 1100 lb will allow gear to be effectively deployed under all normal inshore conditions, including some areas where currents and other oceanic conditions are more difficult than in Cape Cod Bay. Right whales can exert a pull stronger than 1100 lb, although the gear attached to the weak link would have to weigh more than 1100 lb, or be anchored or snag on the bottom for a weak link of that breaking strength to actually break. If ongoing research shows that weaker breaking strengths can be used in the Cape Cod Bay critical habitat without an increase in lost gear, this requirement will be revised.

Changes to Contingency Closures

NMFS proposed that if four or more right whales are present in an area for two or more consecutive weeks, that area would be closed to lobster and gillnet gear until the right whales had left the area. NMFS does not intend to implement this regulation at this time, although it will seek the advice of the TRT on whether this would be a useful measure. There are two reasons for not including this in the interim final rule. First, fishermen said that if forced to move gear, they would tend to set it just on the periphery of the closed area. This would create a denser area of gear around the right whales, increasing the risk that the whales would encounter gear on leaving the area. Second, NMFS has not identified a process for closing an area that can be put in place quickly enough to take into account the movements of the animals. If NMFS were to decide to close an area 2 weeks after four or more right whales were seen, it would take at least a week to publish a **Federal Register** document after which it could take a week or more for fishermen to move their gear. Thus, it would be difficult to close an area on account of unusual right whale movements in a timely way before the whales moved out of an area. There would be a high likelihood of closing an area after the departure of the whales. NMFS would still have authority to take

emergency measures, including area closures, under the MMPA and Endangered Species Act if it is deemed necessary for the protection of the whales.

NMFS initially proposed authorizing a suite of specific gear requirements which, if used, would allow a person to fish in critical habitat. NMFS further proposed that if a right whale were entangled in a critical habitat by such authorized gear, NMFS would close that area. Because this interim final rule does not authorize any specific gear, this measure is not included in the regulations. However, if a right whale is entangled in any gear in any critical habitat during the high right whale use periods, NMFS will close that critical habitat to that gear.

Comments and Responses

Over 13,000 comments (including form letters, postcards and signatures on petitions) were received on the proposed rule. Comments came from state and Federal agencies, Congressional offices, State legislature representatives, towns, conservation groups, industry associations, businesses, fishermen and other private individuals. Oral testimony was received at twelve public hearings held from Maine through Virginia.

1. Comments in Favor of Approval of the Large Whale Take Reduction Plan

Comment 1: Numerous letters were received from members of conservation groups urging NMFS to implement the Large Whale Take Reduction Plan as proposed. Most of those letters advocated involving the fishing industry in developing solutions to the entanglement problem. In addition, several comments were received expressing support for the flexibility in the proposed rule which would allow NMFS to respond quickly to the need for increased protection for large whales, or to relax certain restrictions, and to recognize improvements in gear technology.

Response: NMFS acknowledges this support of its mandates under the Marine Mammal Protection Act and will continue to work with both the fishing industry and other stakeholders to carry out its responsibilities. The ALWTRP contains measures to mitigate future interactions with large whales through disentanglement efforts, early warning monitoring systems, gear research, and outreach efforts that are designed to implement the best available fishing practices. NMFS believes these efforts will accomplish the ALWTRP goal while setting in place the infrastructure to identify and mitigate the causes for

entanglements and actively searching for better gear answers to the issue. The ALWTRP contains adequate contingencies to protect the severely endangered species involved while allowing the affected fisheries to seek to improve their entanglement performance.

2. General Opposition to the Proposed Plan

Comment 2: Many letters and much testimony at public hearings were received which did not provide comment on any specific measures contained in the proposed rule but expressed opposition to the plan itself or to the approach taken by NMFS. One conservation group stated that the proposed measures for protecting endangered whales are inadequate to either prevent the extinction of Northern Right Whales or adequately protect other whale species.

Response: NMFS acknowledges the interest of the public in this issue and has considered the public's concerns in developing this interim final rule. The task of preventing the extinction of right whales and protecting other whales is not solely the responsibility of this plan, although the NMFS has conducted an ESA Section 7 consultation on this matter that concludes that the ALWTRP is not likely to jeopardize the continued existence of any endangered or threatened species, including the right whale. Other measures are in place, or under development, under the Endangered Species Act and the MMPA to provide protection to those species and as noted in Response to Comment #1 above, are explained in the interim final rule and the Environmental Assessment (EA). NMFS believes this plan initiates the development of solutions to the large whale entanglement problem to the full extent possible given the current knowledge of whale biology and fishing gear technology.

3. Need for Action and Scientific Basis for the Determination of Need for Take Reduction Measures

Comment 3: Several comments were received questioning the need to reduce takes of humpback, finback, and minke whales, especially the need to reduce takes of these species within the first 6 months of the plan.

Response: The ALWTRP presents a strategy to address this issue, and has identified two major goals. The first goal is to reduce serious injuries and mortalities of right whales in fishing gear to below the PBR level by January 1998. The second goal is to reduce by April 30, 2001, entanglement-related

serious injuries and mortalities of right whales, humpback whales, fin whales and minke whales to insignificant levels approaching a zero mortality and serious injury rate, taking into account the economics of the fisheries, the availability of existing technology and existing State and regional fishery management plans.

Comment 4: An analysis of offshore lobster fishing effort will demonstrate that the risk to whales from the offshore lobster fishery is minimal.

Response: NMFS agrees that the quantity of gear in the offshore fishery is much less than that in the inshore fishery. However, NMFS believes that the risk imposed by this fishery is real and that risk reductions must be achieved. The fishery operates in areas of whale migration and possible concentration, and entanglements of humpback and right whales have recently been documented in this gear type. In addition, it is likely that injuries sustained during entanglement in this gear type are more serious because the gear is heavier. Since whales are known to become entangled in the groundlines of lobster pot trawls, the larger, heavier offshore trawls may pose a greater risk of injury or death.

Comment 5: A gillnet industry association questions the reasoning why the U.S. sink gillnet fishery is required: (1) to be considered for regulatory action under this proposed rule, and (2) to be considered for excessively restrictive action with regards to gear modification or closures when there is lacking empirical evidence and science for this gear type to be involved in incidental estimated serious injury and mortality exceeding the PBR level.

Response: Although takes of right whales in U.S. sink gillnet gear were not recorded during the 1991–1995 period chosen for analysis in developing this plan, the data clearly indicate that takes of humpback whales and minke whales have been recorded in sink gillnet gear during that period, and all four whale species have been recorded entangled in the gear type. The fishery in the U.S. also overlaps distribution of all four whale species and the potential for takes continue to exist.

Comment 6: There needs to be more accountability for the proposals in the plan. While it states that the risk of entanglement must be reduced by 67 percent, the document has been unable, by its own admission, to offer any indication of the amount of risk reduction which would occur from the imposition of any one of these proposals.

Response: Because it is not known where or when entanglements occur, it

is not possible to quantify risk reductions at this time. Even a two-thirds reduction in effort by all affected fisheries may not be sufficient to achieve a two-thirds reduction in entanglements of right whales if the areas where entanglements occur are not affected. On the other hand, such huge effort reductions may be much more than necessary. The measures being implemented are believed to have a realistic potential of achieving the necessary reductions in entanglements causing serious injury or mortality. Determining whether the goals of this plan are achieved can only be made after the fact.

Comment 7: Many comments were received that stated that ship traffic, not entanglements, is the real problem for the right whales. One commenter noted that the information available in the Stock Assessment Report suggests that interactions with fishing gear are just as responsible for right whale deaths as ship strikes. However, other available sources of information summarizing data over longer periods, including reports prepared by NMFS, suggest that collisions with ships are a greater cause of whale mortalities. Does the information reflect an increase in the incidence of fishing-related mortalities or is there simply some statistical anomaly, due to, for example, the small sample size.

Response: The difference in the two sets of numbers is the inclusion of serious injuries. NMFS is required to assess and reduce the number of serious injuries as well as mortalities. Ship collisions are rarely observed as injuries while injuries from fishery interactions are commonly observed. Available data suggest that the level of serious injuries and mortalities due to entanglement is significant relative to the level due to ship strikes. The 1996 Stock Assessment Report estimates that from 1991 to 1996 there were 1.1 cases of serious injury and mortality to right whales from gear entanglements and 1.4 such cases of ship strikes per year.

Comment 8: One scientist disagreed that the TRT was presented with the best available data on large whale distribution and abundance patterns in the Atlantic.

Response: NMFS agrees that it is preferable to have distribution and abundance plots that are corrected for sighting effort. However, because such plots were not available at the time of the TRT deliberations, NMFS maintains that the TRT was presented with sighting plots that represented the best available data.

Comment 9: One commenter expressed the opinion that NMFS had

not met at least one requirement of the Marine Mammal Protection Act because the stock assessment reports do not describe the rate of serious injury and mortality in units of fishing effort. The commenter presented calculations relative to the amount of gear in the water and stated that the rate of serious injury and mortality to right whales in the lobster fishery is approaching a zero mortality and serious injury rate.

Response: The MMPA does not require entanglement rates *only* be expressed relative to fishing effort. This is only one measure. It is not possible to express entanglement rates relative to a unit of fishing effort for the lobster fishery because catch-per-unit-effort is unknown. This calculation is only possible when a systematic sampling program is available. This is not the case for most large whale entanglement records. Therefore, NMFS uses the annual rate of entanglement based on the known events reported from opportunistic sources. Because the entanglement rate cannot be extrapolated to a total serious injury and mortality estimate, the known annual rate is considered to be a minimum. Furthermore, it is the responsibility of NMFS to assess rates of interaction relative to the PBR of each marine mammal stock, not to the amount of gear in the water.

Comment 10: NMFS is only picking on fishermen because they are less able to defend themselves than shipping and military interests and trying to make the fishing industry the scapegoat for historical mismanagement of the right whale population or to transfer the fishery to large corporations or to destroy the Maine economy so that fishery-dependent communities are forced to close down and move to big cities.

Response: NMFS disagrees. The reason for this action is that section 118 of the MMPA specifically requires NMFS to produce a plan to reduce serious injuries and mortalities of marine mammals due to commercial fishing operations. In other actions, NMFS is carrying out other aspects of its responsibilities under the MMPA. For example, we have taken action with respect to civilian and military ship activities to reduce risks to whales.

Comment 11: The proposed plan does not adequately define or discuss the PBRs. It is important that the term be defined and the methods of how it is calculated discussed. Like other scientific parameters, there needs to be confidence intervals for this metric and a formula given for calculating the mean and confidence intervals.

Response: The PBR levels for the affected species are given above (see Current Entanglement Rates and Future Targets). The MMPA defines PBR as the product of the following: (A) The minimum population estimate of the stock; (B) one half the maximum theoretical or estimated net productivity rate of the stock at a small population size; and (C) a recovery factor of between 0.1 and 1.0. The MMPA does not specify a confidence interval for the PBR level.

Comment 12: It is unclear why NMFS has chosen to use the minimum value of 1.2 for the number of right whales taken per year. This number biases viewpoints, calculations and the resultant management plans against the whales. In the case of right whales, it is expected that about one-half to two-thirds of the whales disappear each year without being sighted. It is likely that some portion of these whale injuries are caused by fishing activities and have simply gone unreported and unnoticed. Therefore, takes caused by entanglements could be much higher than the assumed 1.2. The known gaps in available entanglement data should be accounted for in making a realistic estimate of takes caused by entanglements.

Response: NMFS agrees that entanglements could be greater than the current estimate. However, NMFS cannot extrapolate data such as entanglement reports, and thus recognizes them as minimum estimates of interactions, serious injuries, or mortalities. The ALWTRP calls for enhanced disentanglement efforts, early warning monitoring systems, and outreach efforts to be implemented that will provide more accurate and consistent reporting of future such events.

Comment 13: One commenter questioned the differences in entanglement rates for right and humpback whales in comparing information presented to the take reduction team and in the proposed rule with that in the current draft 1996 stock assessment report.

Response: There were a number of inconsistencies between the documents. This has been rectified by deriving all stock assessment information from a single source, the MMPA-mandated Stock Assessment Report. The 1996 Report is now being finalized and is available on request (see ADDRESSES).

Comment 14: One commenter noted that the proposed rule does not appear to include serious injury and mortality data from entanglements in fishing gear for right whales in Canadian waters and stated that these data must be included

and assessed against the overall PBR level.

Response: NMFS interprets the MMPA as requiring a reduction in serious injury and mortality of marine mammals through interactions with U.S. fisheries. Canadian takes are monitored by NMFS in order to understand the status of the population and the overall effects of human-induced serious injury and mortality, but the PBR goal of this plan does not need to be reduced by such takes.

Comment 15: One whale research group noted that incidental takes of humpback whales in commercial fisheries are also currently near the PBR level, despite a paucity of sightings of juvenile whales in the northeast in the past four years. Previous data indicate that juvenile whales are those most likely to be seen entangled. If juvenile sighting levels in the northeast overall return to the levels seen from 1980–1990, it is possible the PBR level could be exceeded fairly rapidly. NMFS should plan for what they will do in the event this takes place.

Response: NMFS appreciates the information on juvenile humpback whales. If the entanglement rate of humpback whales is not reduced during the course of the implementation of this plan, further adjustments will be necessary. The available entanglement information will be reviewed by the TRT during periodic evaluations.

Comment 16: One commenter stated that the description of the fin whale stock in the proposed rule lacks sufficient detail and recommended that NMFS elaborate on this stock assessment and include the PBR estimate for this stock in the final rule.

Response: NMFS has included the PBR estimate for fin whales from the 1996 Stock Assessment Report. Further information is available in the Stock Assessment Report.

Comment 17: Minke whales, because of their smaller size and lower energetic requirements, are more likely to be found outside major identified whale concentration and gear modification areas, including inshore waters. As such, their protection from the right whale measures might be lower than that for other species.

Response: NMFS agrees. However, this plan institutes some measures in all regulated waters, including waters outside right whale critical habitats and other areas which have high concentrations of large whales. Minke whales do occur in areas where more stringent measures are being required. Therefore, some protection is expected for minke whales through this plan. Note that the entanglement rate of

minke whales appears to be substantially below the PBR level for this stock. No reduction is necessary in the rate of serious injury or mortality of minke whales to meet the 6-month PBR goal, although some bycatch reduction may be necessary to achieve the ZMRG.

Comment 18: There are three hundred right whales now known to exist; the sustainable goal is 6,000; at which time the incidence of right whale/gear conflicts can reasonably be projected to be twenty times the current rate, which will seriously impact on fixed gear fishermen, especially trap and pot fisherman who will be subject to regulation by the ALWTRP.

Response: NMFS agrees that the rate of interaction could increase when a marine mammal population increases. However, if a stock increases substantially, the PBR level would also increase. Therefore, the rate of interaction relative to the stock's PBR would not necessarily increase.

Comment 19: The proposed conservation measures are useless and not founded on scientific fact or analysis. This was proven through the entanglement of a northern right whale just prior to May 20, 1997, when the proposed management measures were already in effect as implemented emergency regulations. This whale was identified as one seen earlier on February 24, 1997, in Cape Cod Bay and not entangled. The irrefutable conclusion was that this whale became entangled after February 24, 1997, in fishing gear deployed in the northeast under NMFS emergency regulations. These regulations did not work because they were too little done, too late.

Response: The emergency regulations were only effective in right whale critical habitat in Cape Cod Bay during that period. NMFS is not aware of any documentation either that the right whale entanglement occurred in Cape Cod Bay or that the gear involved was from any fisheries deploying gear in Cape Cod Bay. Furthermore, the time elapsed between the two sightings (approximately 51 days) indicates that the whale could have traveled some distance in the interim. Information from satellite tracking indicates that right whales are capable of traveling from Maine to New Jersey and back in 3 weeks.

4. Marine Mammal Protection Act Sections 101 and 118, and the Take Reduction Team Process

Comment 20: On August 31, 1995, a NMFS 101(a)(5)(E) determination stating no allowable takes of fin, humpback, northern right, and sperm whale species requires that the ALWTRP achieve that

goal. NMFS denial at that time to issue any small take permits or exemptions to allow entanglements of these species in fishing gear only underscores the necessity for the ALWTRP to work and prove itself. The ALWTRP must significantly and demonstrably prove that it will reduce entanglements to levels required under Section 118 of the MMPA. The August 31, 1995, finding would then require actions be taken to eliminate this risk to the whale. By proposing untested gear modifications and only limited seasonal closures, the ALWTRP limited restrictions fail to do so by allowing for, and in fact, assuming entanglements will continue to occur. Therefore, reliance on gear modifications and limited closures creates a plan that does not afford the recovery of northern right whales or other marine mammals, and creates a violation of NMFS's own August 31, 1995 finding, Section 118 of the MMPA, and the Section 9 Take Prohibitions of the ESA.

Response: The purpose of the ALWTRP is to "assist in the recovery or prevent the depletion of each strategic stock." It is intended to reduce the likelihood of a take; it should not be viewed as authorizing any take of endangered species under the ESA. NMFS believes the closures, surveillance and disentangling efforts, gear modifications, outreach and other aspects of this plan have a realistic potential of achieving the goals of the MMPA in the required time frame. If the goals are not achieved, NMFS will seek the advice of the TRT on next steps.

Comment 21: Why is NMFS waiting until now to deal with this issue if the MMPA has been a law since 1972? NMFS is only responding to an artificial deadline.

Response: The take reduction plan process was initiated with passage of the 1994 amendments to the MMPA. The final regulations implementing Section 118 of the MMPA were not published until August 30, 1995. The Atlantic Large Whale Take Reduction Team was established in August 1996. Once the team was established, a rigid timetable prescribed in the MMPA was set in motion.

Comment 22: Several comments were received questioning the placement of the lobster pot fishery in Category I on the MMPA List of Fisheries. Some commenters believed that NMFS had only put the fishery in Category I because of an entanglement of a right whale in Canadian gear.

Response: NMFS has several records of entanglements that have occurred in the lobster fishery and as such, believes that the fishery is appropriately

categorized. No records of entanglements of whales in Canadian gear were used to classify the fishery.

Comment 23: Several comments were received in objection to flaws in the take reduction team process which included: (1) Insufficient time frame to deal with the broad scope of unfamiliar issues, (2) insufficient data on the whale entanglement problem, (3) lack of systematic and comprehensive facilitation at meetings, (4) inconsistent guidance from NMFS regarding the scope of the charge to the team and the nature of acceptable take reduction recommendations, and (5) arbitrary decision by NMFS to end the take reduction team deliberations prematurely.

Response: NMFS acknowledges this critique of the take reduction team process, which was received largely from TRT members, and hopes that the experiences of the TRT members and the agency during the promulgation of the proposed and interim final rules will help to increase the productivity of the TRT process in the future.

Comment 24: The basis of the decision used to support this rulemaking activity should be formally brought before the TRT. The Administrative Procedures Act is specific in its requirements on rulemaking, and the record of information necessary to avoid "arbitrary and/or capricious" decision making. NMFS did not follow the recommendations of the team it assembled to study the problem of whale take reduction. In addition, NMFS admits that it will not be able to determine if its proposed regulations will achieve the goal of reducing incidental whale deaths. Accordingly, since the proposed rules are not based upon available scientific data, and because NMFS does not have the ability to modify its decision based upon observable data collected after it implements the proposed rules, the only rational conclusion is that NMFS is acting in an arbitrary and capricious manner in advancing the proposed rules. How can rules go forward with reference to gear restrictions if NMFS has not conducted any detailed assessment of gear technology?

Response: Section 118 of the MMPA sets forth strict guidelines for implementing a take reduction plan. Despite the fact that a consensus plan was not provided by the TRT, NMFS is mandated to implement a plan based on its own findings and available data within the timetable prescribed by the MMPA. NMFS has considered all of the deliberations of the TRT in deciding what should be included in the interim

final rule. In addition, NMFS convened the Large Whale Gear Advisory Group in early June and received additional input from the fishing industry. Precisely because gear modification requirements as contained in the proposed rule had not been fully tested in all areas under all operating conditions, NMFS has decided to reduce or eliminate many of those requirements unless or until there is more evidence that the gear modification in question has a reasonable chance of reducing the impact of entanglement without unduly compromising the ability of a fishing vessel to operate its gear. The measures in the interim final rule are based on the best scientific data available and are reasonably calculated to result in a reduction in fishing gear interactions and to meet MMPA objectives. Members of the public will have the opportunity to further comment on this rule because it is being published as an interim final rule. NMFS has the opportunity to modify this plan based on observable data on entanglements, which it will collect during the implementation of this rule. NMFS will reconvene the TRT to review the effectiveness of this rule, based on those data, and to provide additional recommendations.

Comment 25: There needs to be a clear definition of "serious injury." Even the best designed breakaway gear could result in line or net fragments remaining on the animals, or within a whale's mouth. These fragments might eventually cause injury. Without a clear definition of "serious injury," the industry remains vulnerable to closures even if fishermen develop and accept radical gear modifications.

Response: NMFS agrees. On April 1-2, 1997, NMFS held a workshop to receive advice from experts on developing a system to assess serious injury. NMFS intends to publish draft guidelines for determining serious injury in the fall of 1997. For additional information, see description above.

Comment 26: Several comments were received urging NMFS to move quickly toward adopting a final quantitative definition for ZMRG.

Response: NMFS issued a proposed definition for the ZMRG, which has subsequently been reviewed by a panel of population biologists. Based on their recommendations and public comment, NMFS is currently preparing the final rule outlining the quantitative definition and expects to publish that rule in August 1997.

Comment 27: Since any adopted ALWTRP, along with its implementing regulations, amounts to a *de facto* permit to take whales through

entanglement, NMFS should not allow any said regulations and plan to be implemented until a sufficient monitoring program has been adopted and funding guaranteed that can detect when any entanglement of a northern right, and other endangered whales, has occurred. This conservation group also requests that NMFS detail the ALWTRP's monitoring program and certify its effectiveness and commitment for its funding, before adopting the ALWTRP and its implementing regulations.

Response: NMFS is mandated to implement a ALWTRP within the time period prescribed in the 1994 amendments of the MMPA. The ALWTRP and its implementing regulations are not intended to permit the taking of whales entangled in fishing gear. The ALWTRP and implementing regulations establish measures designed to reduce the likelihood of entanglements and mitigate the damage caused by entanglements to below PBR levels. All applicable take restrictions remain in effect. Further, monitoring will be on-going activity and, if necessary, the ALWTRP can be modified to address any appropriate circumstances.

Comment 28: The MMPA requires the Secretary of Commerce to consider the effect of regulations on "the economic and technological feasibility of implementation." (16 U.S.C. 1373(b)(5)). In presenting the proposed rules, the Secretary has failed to comply with the express requirements of the MMPA. Economic considerations of a fishery are to be taken into account under the MMPA, including not only development of a long-term goal under section 118(f)(2), but also the short-term PBR standard, as defined and applied in the Act. In the PBR standard, the Act implicitly acknowledges that any attempt to achieve a "true zero" figure is too costly given the economic considerations relevant to the cost of avoiding the "improbable situation" of incidental mortality or serious injury caused by commercial fisheries. In the development of a PBR value, there is a clear recognition that the expenditure of unlimited resources towards the avoidance of a single marine mammal take is unacceptable.

Response: Section 118 (16 U.S.C. 1387) of the MMPA, not Section 103 (16 U.S.C. 1373), governs the promulgation of the interim final rule. Nevertheless, NMFS is required to consider the economic and technological feasibility of implementation. This was accomplished in the Environmental Assessment and the Regulatory Flexibility Analysis. The final rule has

been substantially changed in part due to public comments on the economic and technological feasibility of the proposed rule. NMFS disagrees that the calculation of the PBR level requires that economic considerations be taken into account. NMFS acknowledges that the MMPA requires that in implementing measures to achieve incidental take levels approaching zero mortality and serious injury rates, it must take into account the economics of the fishery, among other considerations. As discussed above, such economic considerations have been considered in developing this rule.

Comment 29: The proposed rules will cause an increase in the number of vertical lines used by lobstermen in Maine. An increase in the number of vertical lines would lead to an increase in the incidents of Atlantic whales becoming entangled in lobster gear, thus resulting in a greater number of incidental deaths of Atlantic whales. Accordingly, since NMFS's proposed rules would increase the number of Atlantic whale deaths, the implementation of the regulations would violate the ESA by effectively taking an endangered species. Even if NMFS were to argue taking of Atlantic whales, there can be no question that the regulations would add significantly to the endangerment of the right whale population.

Response: The interim final rule is substantially changed from the proposed rule. The interim final rule has eliminated requirements that arguably could have resulted in an increase of vertical lines used by lobster fishers in Maine.

Comment 30: What is the definition of U.S. vessels? Do MMPA regulations apply to vessels that do not have Federal permits or to vessels in state waters? Does Section 118 apply only to commercial fishing vessels? Commercial fisheries licensed and regulated by state governments in areas under their state jurisdiction are not "commercial fisheries" as used in Section 118. It is unlawful for NMFS to consider the taking of marine mammals by state fisheries to be allowed any of the take exemptions provide under Section 118. Only federally licensed and regulated marine fisheries are regulated by Section 118 of the MMPA. The NMFS here attempts to regulate state marine fisheries out of a political desire to protect the state fisheries from the enforcement of the prohibition of the Endangered Species Act and the MMPA for their entanglement of whales in their fisheries operations.

Response: The MMPA grants legal authority to NMFS to regulate any

vessel allowed to engage in commercial fishing in all U.S. waters, including both state and Federal waters. This interim final rule, promulgated under authority of the MMPA, applies to any person or vessel in the fisheries and areas encompassed by the rule, regardless of whether the person or vessel has a Federal permit, and regardless of whether the person fishes exclusively in state waters, unless otherwise specified in the rule. The MMPA's legal authority applies without regard to whether a fishery occurs in state waters or Federal waters. Section 118 of the MMPA does not make a distinction between Federal or state fisheries but applies to any fishery that interacts with marine mammal stocks.

5. Comments on Geographic Scope of Regulations

Comment 31: One conservation group requested that NMFS require in the ALWTRP, and implementing regulations, the elimination of all vertical lines in lobster gear and complete banning of gill nets, both fixed and drift, in the northeast.

Response: NMFS disagrees that measures of this severity are necessary to meet either the initial PBR goal, or the long term goal.

Comment 32: Numerous comments were received objecting to what appeared to be "one-size-fits-all" regulations for huge areas and requesting that measures be fine-tuned for different geographical areas.

Response: In acknowledging the comment, NMFS has devised a system of choosing 1 or 2 options from separate gear modification lists for lobster pot gear (with specialized options for inshore and offshore gear) and gillnet gear that allows fishers the flexibility to choose gear modifications appropriate for their region.

Comment 33: Comments were received regarding both the need to implement restrictions equally from the southernmost points of the migratory pathway up through the northernmost points up in Canada, as well as questioning whether protective measures were necessary in various areas along the U.S. East Coast because of an apparent lack of right whale sightings in those areas.

Response: Because fishing operations are tremendously diverse and variable, it is not possible to require similar modifications in every area. Furthermore, the measures in this plan must address entanglement of humpback, finback, and minke whales as well as right whales. However, NMFS does not believe it necessary to require gear modifications where there is no

clear overlap between whales and gear. This interim final rule considers those comments and establishes a plan that covers the full range of the species (Florida to Maine) while exempting certain near-shore, shallow areas where whales do not overlap with gear. Therefore, the plan adequately addresses all areas which represent significant overlap between the fisheries and whales considered in the large whale take reduction plan.

Comment 34: One conservation group supported the need for gear modification of lobster gear as described for use in the Stellwagen Bank/Jeffreys Ledge area, but felt that the area was inappropriately defined. Requirement for these types of gear modifications extending to the beach and northward to a point north of where the bulk of right whale sightings have occurred seems unduly restrictive. Another commenter supported the definition as proposed.

Response: Based on examination of whale sighting information, the definition of the Stellwagen Bank/Jeffreys Ledge (SB/JL) area has been modified in this interim final rule. The northern boundary has been changed from 43°30'N lat. to 43°15'N lat. to reflect whale concentrations, and the area only relates to Federal waters to reflect the lack of near-shore whale sightings. It should be noted that the waters no longer included in the SB/JL area are not exempted, but are part of the other northeast waters area which require certain gear modifications.

Comment 35: NMFS intends to include all state and Federal waters. It would be better to allow States to address this issue as needed in their waters. The Commonwealth of Massachusetts, which has a critical habitat within its waters, already has a plan on line for that area. The State needs to be able to make adjustments and improvements in a timely fashion, which it can do as needed. This would be difficult if Federal rules are in the way for the same area.

Response: NMFS is aware of the difficulties of having both state and Federal regulations in the same area. The Federal Government has the responsibility of implementing the MMPA. However, NMFS intends to work actively with the Commonwealth of Massachusetts, with which NMFS has a cooperative agreement under the Endangered Species Act, to ensure that both sets of regulations are consistent and responsive. The requirements in this interim final rule mirror the current regulations of the Commonwealth.

Comment 36: Many comments were received stating that the 41°N lat. line boundary designation used to separate

the lobster fishery appeared to be arbitrary and created problems in southern New England, particularly western Long Island Sound.

Response: NMFS has moved the line north to 41°30'N lat. and has exempted certain near-shore waters, including Long Island Sound.

Comment 37: As a portion of the migratory route of the northern right whale is in the waters of Canada, Greenpeace urges the NMFS to commence bilateral talks with Canada to encourage the implementation of similar fishing restrictions by Canada in order to protect the northern right whale throughout its migratory range.

Response: NMFS agrees with the importance of working with Canada to reduce marine mammal bycatch problems in both countries. Bilateral discussions with Canada are ongoing. The Northeast Implementation Team has DFO as a member to consider recovery action for both right and humpback whales. Canada will also remain an advisor to the Large Whale TRT and thus be part of that process. The Regional Administrator meets regularly with Canada and other counter parts on issues of regional importance of which marine mammal issues are always a part. NMFS will forward this plan to DFO officials and urge Canada to take similar steps.

6. Comments on the Process

Comment 38: One commenter urged that the emphasis be shifted to those measures that are measurable and more likely to succeed without jeopardizing the industry. Above all, the commenter urged NMFS to immediately invest more resources for surveillance and monitoring to increase the likelihood of detecting the rare entanglement. Surveillance and monitoring will provide critically important data regarding right whale biology and movements, and information needed for stock assessments.

Response: NMFS intends to continue and expand the surveillance in the New England Early Warning System (EWS) instituted in January 1997. NMFS will have access to additional information on scarification analysis and population biology once results of studies that are already underway or completed are available. We will be working with the States and USCG on ways to increase disentanglement efforts, monitoring systems, and outreach and education programs designed to determine where whales and fishing gear overlap on a timely basis.

Comment 39: The State of Maine recommended that the Take Reduction

Plan should be implemented as an interim plan for one year.

Response: The MMPA directs NMFS to publish a 5-year plan; therefore, a 1-year interim plan would not meet the standards in the MMPA. However, the plan is being published as an interim final rule allowing a further public comment period, and calls for the phasing in of many of the gear requirements. Furthermore, the plan will be reviewed periodically in consultation with the TRT and adjusted as necessary.

Comment 40: Maine proposes that a Coordinator position for a Whale Response team be established. This position will be contracted with the Center for Coastal Studies, Provincetown, MA, and funded in full by the NMFS. This position will have three primary areas of responsibility: Outreach and Education, Surveillance/Sighting reporting, and First Response and Disentanglement.

Response: Although NMFS cannot guarantee that it can contribute funds for such a position, it will be working with the States and USCG on ways to increase disentanglement efforts, monitoring systems, gear research and outreach and education programs and will be coordinating these efforts with the States.

Comment 41: Several commenters requested that NMFS hold additional public hearings, with an increased level of advertisement, because adequate notice was not given for the hearings that were held. One commenter also noted that the first round of public hearings were held prior to the availability of the economic analysis data and recommendations of the Large Whale Gear Advisory Group. Another commenter requested that hearings be held after gear specifications are finalized.

Response: NMFS held 12 public hearings and extended the comment period to obtain more public input. In addition, NMFS convened the Gear Advisory Group specifically to gather more advice on the difficult issue of gear modifications. Therefore, NMFS believes that adequate notice of the public hearings was given as evidenced by the large turnout at many of the public hearings, and that every opportunity was given for public comment and input to be provided to this administrative process even for those who did not participate in the first round of public hearings. NMFS is taking public comment on this interim final rule prior to its effectiveness. NMFS will attempt to ensure maximum public participation in all future deliberations concerning the Take

Reduction Plan and its implementing regulations.

Comment 42: The proposed rule has caused fishermen to become unwilling to assist in efforts to save whales. The proposal will alienate fishermen. NMFS needs the cooperation of fishermen for a take reduction plan to work.

Response: NMFS agrees that cooperation of the fishing industry is essential. NMFS has substantially modified the proposed rule in response to the public's concerns to stimulate continued industry cooperation and participation in solving the problem.

Comment 43: NMFS rulemaking authority under MMPA should not provide a basis to relieve NMFS of concurrent federal responsibilities as mandated under provisions of the National Environmental Policy Act of 1969 (NEPA—42 U.S.C.A. 4321 to 4370D) and the Administrative Procedures Act (APA—5 U.S.C.A. Chapter 5).

Response: NMFS has fully complied with NEPA and the APA.

Comment 44: One commenter requested that before any implementation of the final rule, NMFS provide documentation of compliance with the provisions of the Regulatory Flexibility Act and the Small Business Growth and Administrative Accountability Act.

Response: NMFS has complied with all applicable law. (See the Classification section of this rule).

7. Gear Marking

Comment 45: The proposal to place identifying marks on gear met with generally favorable reviews. There was general agreement that it would be useful to know what type of gear was entangling whales and where that gear was set, although several commenters warned that it might be difficult to interpret data from marked gear. A chief concern was that the proposed system of marking was too complicated, too costly and time consuming. Also, many comments were received stating that marking ground lines were too costly, time consuming and the marks would not last long because of chafing.

Response: NMFS agrees that there is great value in marking gear, for it will eventually help document where and in what fishery entanglement are occurring. However, NMFS also recognizes that there are many unanswered questions concerning the accuracy of the data that can be obtained and the technology involved with marking gear. As a result of these concerns, the interim final rule calls for a simpler, quicker method of marking gear that will keep the general

concept of identifying anchored gillnet, lobster and driftnet gear, but it substantially reduces the number of areas that are to be designated. Also, NMFS has decided to defer implementation of the requirement to mark groundlines and will seek the advice of the TRT and the Gear Advisory Group.

Comment 46: Several commenters stated that Canadian gear should be marked.

Response: NMFS does not have authority to require marking on Canadian gear. Information on the U.S. marking system will be provided to Canadian managers for their information in considering a system. Canada already requires some marking of gear, such as lobster trap tags.

Comment 47: In order to determine if whales are endangered by Maine fishermen, all lines should be marked by a color-coded piece of twine no less than 6" long attached within 6' of the buoy or marker. The state lobster fishery is divided into seven in-shore zones and seven off-shore zones. Each fisherman should mark their gear with the color code assigned to the area in which they are fishing.

Response: NMFS acknowledges this suggestion and will discuss this with the TRT, Gear Advisory Group, and the state of Maine.

8. 30-Day Inspection Requirement

Comment 48: Numerous comments were received questioning the feasibility of requiring all fishing vessels to bring their gear to shore for inspection every 30 days and the capability of NMFS to enforce such a measure.

Response: The proposed regulation was widely misunderstood. The intention was to eliminate the practice of "wet storage" of gear by requiring that all vessels tend all their gear at least once every 30 days. The provision has been clarified in this rule.

9. Comments on Closures and Effort Reduction Measures

Comment 49: One conservation group supported NMFS emphasis on gear modification as a major means of reducing the severity and number of entanglement events on the following grounds: The only way to be sure that a whale will not become entangled in fishing gear is to remove interacting gear from the water. However, because of the low entanglement rate, uncertainties as to where entanglements actually occur, and the whereabouts of most of the right whale population during most of the year, a mitigation strategy based on fishing closures seems insupportable. The exception to this would be

designated critical habitat areas during high use times (as proposed by NMFS). However, measures such as the closure of critical habitats are, by themselves, insufficient.

Response: NMFS agrees with this approach particularly since measures in the Large Whale Take Reduction Plan are intended to reduce takes of humpback, finback, and minke whales as well as right whales.

Comment 50: The Marine Mammal Commission recommended that: (a) the proposal to close Cape Cod Bay to gillnet gear during the area's peak right whale season (1 January through 15 May) be expanded to include lobster gear, which is now used only at extremely low levels at that time of year; and (b) the proposal to close all of the Great South Channel critical habitat to lobster gear and most, but not all of that area to gillnet gear during the area's peak right whale season (1 April through 30 June) be changed to include the "sliver area" within the critical habitat that NMFS proposed to exclude from the closure for purposes of gillnet fishing. Eliminating entangling gear at times and in areas that right whales are known to be present will not only reduce entanglement risks for this species, but also will assure that fishing effort at those critical times does not increase in the future.

Response: NMFS believes that the current plan will reduce serious injuries and mortalities of large whales to below the PBR levels, and therefore does not believe this step is necessary at this time. However, NMFS will consider it in future deliberations and will urge the TRT to discuss these options as steps to continue progress toward ZMRG.

Comment 51: The most effective management measure for the Studds-Stellwagen Bank Sanctuary would be closure during the months of January through April or May, with a contingency for longer closures when the whales remain in the area, as they did in 1986. However, it is also recognized that the Sanctuary, because of its considerable observer effort, history of entanglements, and proximity to trained disentanglement teams could be a very appropriate site for testing fishing gear modified to reduce the threat of entanglement, provided that appropriate safeguards are put in place to insure that if an animal becomes entangled in modified gear, disentanglement teams could be deployed to free the animal from that gear. Therefore, perhaps somewhat paradoxically, closure may not be in the best interest of the long term recovery of either right whales or humpbacks.

Response: NMFS appreciates the understanding of the complexity of this issue.

Comment 52: One commenter felt that the proposed time-area closures did not address the actual risk to the whales, because they ignored the fact that whales are often found in the critical habitats during other times when the level of fishing effort in the area is substantially greater. The commenter recommended a year-round ban on all fishing in critical habitat or in marine sanctuaries. Another commenter suggested that the Jeffreys Ledge area be closed to fixed gear to reduce entanglement risk.

Response: NMFS agrees that in the Gulf of Maine there is a year-round risk to large whales from fishing gear and that critical habitat and the Stellwagen Bank/Jeffreys Ledge area are of higher risk than other waters and should be treated more carefully. However, NMFS does not believe that year-round closures are required. During the summer months in the Cape Cod Bay critical habitat and in the Stellwagen Bank/Jeffreys Ledge area, the opportunities are particularly good for sighting entangled whales and for getting a team out to disentangle a whale, so risk is not necessarily a direct relationship to the number of lines and whales in an area. NMFS will forward the commenter's suggestion to the TRT for further consideration.

Comment 53: Several commenters indicated that they did not support area closures until more information is available about the effectiveness of gear marking and the impact of using modified gear.

Response: NMFS maintains that closures in high risk areas for right whales are still necessary at this time and that the need to protect the species cannot wait for more information from gear marking and modified gear use.

Comment 54: One commenter concurred with the proposed area of closure of Sebastian Inlet, FL, to Savannah, GA, from shore out to 80° W long., but recommended the area north of Sebastian Inlet remain closed from November 1 through April 15.

Response: An Early Warning System is in place to reduce ship strikes of right whales off the coast of Florida and Georgia. Daily surveillance flights are used to locate whales in the area, and any whale sightings are transmitted to warn vessels transiting the area to keep a close look-out for the whales. These daily reconnaissance flights are currently conducted by The New England Aquarium from December 1 through March 31 and have provided detailed information on whale

abundance and distribution in the areas and times covered. The Georgia Department of Natural Resources surveys coastal waters off Georgia for right whales prior to the December start of the EWS in the SEUS. Very few whales have been recorded in the area before late November or after mid-March. Therefore, NMFS proposes to close this area from November 15 through March 31.

Comment 55: A net ban put into place in Florida has improved the health of the ecosystem in marine waters there. This would also help the whales if such a ban were put into place where the whales exist.

Response: NMFS has proposed to restrict the use of certain types of nets in areas considered high use areas by right whales off the coast of Florida and Georgia. It is expected that these restrictions will reduce the potential for entanglement of large whales in fishing gear in these areas.

Comment 56: Several commenters stated that NMFS did not recognize the legitimacy and timeliness of fishing effort control measures being considered in other plans as effective, logical whale entanglement risk reduction measures. Suggestions were provided for expansion of the vessel buy-back program to include Category I fisheries, moratoria on new entrants into the fisheries of concern, trap limits, gillnet caps, and buoy caps.

Response: NMFS acknowledges that other efforts to control gillnet and lobster fishing effort may be beneficial in reducing entanglements (see section on "other entanglement reduction measures not part of this plan"). However, the MMPA requires that NMFS produce a plan to reduce serious injuries and mortalities to below the PBR level within 6 months. NMFS cannot plan on the completion of any of these other effort reduction measures within that time frame, although they may be useful in achieving the long-term goal of the plan.

Comment 57: The State of Maine was concerned that NMFS, while acknowledging that current and anticipated fishery management effort control measures will significantly reduce likelihood of an entanglement of whales, would proceed to propose the rule subject to this proceeding without first ascertaining the degree to which entanglement is reduced by the ancillary management measures above.

Response: The MMPA set a strict timetable for producing a draft plan, which was developed based on the information available in the 1996 Stock Assessment report. That report shows that current measures have not yet

reduced bycatch to below the PBR level. While the measures referred to by the State of Maine are expected to help achieve the ZMRG, they cannot be counted on to achieve the 6-month goal. There are currently no effort reduction measures in the lobster fishery for both state and Federal waters though they have been under discussion for several years and strongly advocated by NMFS.

Comment 58: The offshore lobster industry recommended that Groundfish Management Closure Area I be similarly closed to fishing with lobster gear that poses a threat of entanglement to whales from April through June as a means to avoid the development of a lobster fishery in close proximity to the Great South Channel Critical Habitat.

Response: Except for the portion of Groundfish Management Closure Area I that lies within the Great South Channel critical habitat, there is little evidence that an additional closure is needed at this time, since right whales are rarely seen in the area proposed to be closed. However, NMFS will ask the TRT to discuss this option.

Comment 59: A gillnet industry association recommended that NMFS close the critical habitat area east of the LORAN line with a northwest boundary at 13710/43950 and a southwest boundary of 13710/43650 to all gillnetting and lobster gear from March 1—May 31.

Response: NMFS appreciates this suggestion. As with the closure proposed by the lobster industry of Groundfish Management Area I, this measure does not seem necessary at this time, but could be useful in the future if adjustments to the ALWTRP are determined to be necessary to meet ZMRG.

Comment 60: Discussion in the proposed plan indicates that the rationale for excluding the sliver area from the proposed Great South Channel spring gillnet closure is that only three percent of the historical right whale sightings in the critical habitat have occurred in the sliver area. It also notes that, unlike lobster traps that would be excluded from the sliver area in spring because of their potential to entangle whales, gillnets must be tended regularly. The statement implies that this would significantly reduce entanglement risks compared to lobster traps, presumably because of a greater likelihood of detecting and avoiding whales. Finally, the discussion notes that the area is economically important to the sink gillnet fishery. Data and analyses in support of these points are not provided and, in some cases, the conclusion seems questionable.

Response: Data on where whales are entangled and what factors reduce the risk of entangling whales are scant. It is not possible to demonstrate conclusively in advance that the NMFS risk assessment is correct. NMFS will monitor this situation closely, including having regular surveys in this area throughout the high right whale use time. NMFS will present the survey data and entanglement data to the TRT for its review.

Comment 61: The Marine Mammal Commission noted that the sliver area excluded from the closure has a higher proportion of right whale sightings than other parts of the right whale critical habitat that the NMFS proposes to include in the closure.

Response: NMFS agrees that there are other areas that could be excluded from the closure on strictly biological grounds. However, the gillnet industry has only expressed interest in the sliver area. NMFS will continue to monitor the sliver and other areas to determine if other measures are necessary.

10. Dynamic Management

Comment 62: The Commonwealth of Massachusetts supports surveillance-based management. For example on May 7, 1997, the Massachusetts Division of Marine Fisheries suspended gear restrictions within the Cape Cod Bay critical habitat nine days prior to the May 16, 1997, scheduled date, because whales were well-documented to have departed the area. NMFS is urged to establish a process where changes to the regulations or actions taken under a surveillance-based management plan could be enacted without inordinate delays.

Response: NMFS has the flexibility to lift the closure or other restrictions if warranted based on surveillance in the New England Early Warning system. However, consideration must be given to effects on the other three whale species protected by this plan. The regulations implemented by NMFS this Spring were intended for right whale protection. The Great South Channel is part of right whale critical habitat; however, it is also a high-use area for other whale species protected by this plan.

Comment 63: Because unpredictable combinations of oceanographic conditions can cause whales to congregate unpredictably in areas of previously low use, support was given in principle for the provision of the NMFS regulations calling for identification of, and local action in these areas of short term, localized concentrations of whales. The risk evaluation and the decision on an

appropriate course of action should involve fishermen who work in the region, and scientists familiar with whales in the region, rather than allowing this decision to the discretion of Federal officials remote from and unfamiliar with the region. This will help to assure that the measures taken are most likely to be effective, and by including the fishing community in the decision process, the compliance will be high.

Response: NMFS agrees that it is desirable to involve local expertise in designing flexible management for small areas that must be implemented quickly and efficiently, and it will work with the States to develop contingency measures for unusual right whale distributions. The final decision as to measures to be taken must reside with the agency by law.

Comment 64: Many comments were received suggesting that NMFS use radio beacons, sonar, or other acoustic deterrent devices or fences to exclude whales from areas of the coast where they might become entangled in gear.

Response: Large scale exclusion of whales from their habitat is not an option for reducing incidental takes in fishing gear. NMFS must find solutions to the entanglement problem that involve a minimum of disruption to the whales. Acoustic deterrent devices on a smaller scale (i.e., at the level of each piece of gear) have been proposed as an option for research and development, as such a system has proven effective to reduce entanglements of harbor porpoise in sink gillnets in certain times/areas.

11. Other Right Whale Critical Habitat Measures

Comment 65: Several comments were received in support of NMFS proposed gear modification measures for lobster gear in the Cape Cod Bay right whale critical habitat during the January 1–May 15 period and proposed closure measure for the Great South Channel during the April 1–June 30 period.

Response: NMFS has retained most of the critical habitat measures. However, some of the gear modification requirements have not been included due to insufficient information on operational feasibility.

Comment 66: Given the need to reduce entanglement risks for humpback whales as well as right whales, the Marine Mammal Commission recommends that the NMFS require the same gear restrictions proposed for Cape Cod Bay between 16 May and 31 December (i.e., Type 2 lobster gear) for at least the Stellwagen Bank portion of the area. Much of

Stellwagen Bank has a sandy bottom where sinking line should pose a minimal risk of chafing or snagging on rocks. Requiring Type 2 gear for the area would avoid different sets of restrictions for people who fish in both Cape Cod Bay and adjacent Stellwagen Bank areas, provide right whales with protection comparable to that in Cape Cod Bay, and offer an added measure of protection for at least one key humpback whale habitat during a peak humpback whale occurrence period.

Response: NMFS agrees that sinking groundline has the potential to decrease entanglement risk in certain areas and has included this modification as an option in the lobster gear technology list.

Comment 67: One commenter stated support for the special provision for strikenets in the proposed rule, but recommended that observers be required to be on board vessels operating with strikenets in the SEUS restricted area during the closed period.

Response: A correction to the regulatory text regarding the special provisions for strikenets is warranted. Section (e)(3)(iii) Special provision for strikenets now reads: "Fishing with strikenet gear is exempt from the restriction under paragraph (e)(3)(i) of this section if:

(A) No nets are set at night or when visibility is less than 500 yards (457.2 m);

(B) Each set is made under the observation of a spotter plane;

(C) No net is set within 3 nautical miles of a right, humpback or fin whale; and

(D) If a right, humpback or fin whale moves within 3 nautical miles of the set gear, the gear is removed immediately from the water." This correction allows for an exemption from the closed areas, provided the special provisions are met, but will not allow an exemption for strikenets from the observer requirement in Section (e)(3)(ii).

Comment 68: One commenter supported excluding the shark driftnet fishery in designated right whale habitat areas during high use times of the year and recommended that NMFS extend the critical habitat areas based on current aerial data.

Response: NMFS is currently funding additional surveys to assess the necessity of extending currently designated right whale critical habitat. Current data suggest that the critical habitat expansion to the south and east may be warranted. However, insufficient data preclude a decision at this time.

Comment 69: The preamble to the rule states that the restriction of the

shark fishery in the southeast extends to the east to the 80° W long. line. However, in the implementing regulations, the restrictions appear confined to critical habitat. This is not appropriate and is less restrictive than was agreed to by the Atlantic Large Whale Take Reduction Team.

Response: NMFS agrees. The regulatory text has been amended to reflect that the restricted area extends out to the 80°00' W long. line.

12. Contingency Measures

General Comments

Comment 70: The State of Maine questioned several aspects of the proposed rule concerning operational aspects of the fisheries subject to the plan. The State was not confident that the NMFS would exercise sound judgement in assessing an entanglement, selecting an appropriate and reasonable response to an entanglement, or in determining what constitutes an appropriately sized area to close in the event of an atypical assemblage of right whales. Therefore, the State insisted that this measure be modified to ensure that contingency measures, closures or other restrictions be made jointly by the NMFS and the affected state or states, that advice and guidance from affected fishermen, marine mammalogists familiar with the species and its behavior, and gear technologists.

Response: As noted above, NMFS will work with the States to develop contingency measures for quicker responses to entanglements and unexpected entanglement risks. However, the MMPA does not contain provisions to allow NMFS to confer decision-making authority to States or affected fishermen.

Unusual Right Whale Distribution Contingency

Comment 71: Several commenters recommended that NMFS establish a protocol to evaluate and verify sighting information to be used as the basis of a contingency closure. There were concerns about the size of a closure that could come into effect in the case of unusual right whale distributions. (The boundaries of such a closure were not specified in the proposed plan.) Where or when appropriate, modifications to gear or fishing practices should be considered as an alternative to closures. Additionally, NMFS should develop a clear procedure for reopening areas.

Response: NMFS agrees that a clear protocol for implementing and lifting contingency closures would be necessary in order to expedite their use.

The proposed contingency closure based on unusual right whale distributions is not included in the final plan, however. Further, the interim final rule contains measures to reopen any closed area. As better gear technology is available it will be placed on the gear technology list.

Comment 72: Offshore lobster gear is hauled about every 8 to 12 days; by the time a fisherman is notified that his gear must be moved due to the presence of right whales, (and he can get to the gear to do so), it is likely that the whales will have moved on. This may have the undesired result of putting gear back in the whales' path in an attempt to avoid them. Also, the most likely place to move gear will be around the perimeter of the closure, creating a more condensed gear area through which the whales will have to pass in order to leave.

Response: NMFS agrees that the timely closing of an area would have been difficult. This is one of the reasons why this measure was not implemented.

Gear Modification Failure Contingency

Comment 73: One commenter supported the proposal to either close areas during restricted periods or impose additional gear modifications or alternative fishing practices in the event of an entanglement, serious injury, or mortality of a right whale in an interaction with modified gear in critical habitat and recommended that NMFS convene or consult with the TRT after each such event.

Response: NMFS has retained this category of contingency in this rule. It will inform the TRT of any such event.

Comment 74: The Commonwealth of Massachusetts suggested that the threat of closures based on entanglements in modified gear would discourage fishermen from reporting sightings of entangled whales. It also cautioned that injuries and mortalities are so rare that reacting to the next one by instituting a closure will not provide the conservation benefits that are implied.

Response: NMFS agrees that the possibility of a fishery being closed is a strong disincentive to report entanglements. It has not retained that contingency in this plan, except in critical habitats. In critical habitat surveillance efforts and research cruises may compensate for any decrease in reporting by fishermen.

Comment 75: That the NMFS reserved for the Federal Government the sole judgment as to whether an entanglement was "attributable to modified gear" or the failure thereof to perform as expected was patently offensive to the State of Maine.

Response: NMFS is aware that it is not sole expert on entanglements or on any aspect of whale conservation. As it has in the past, it will seek advice of the TRT (on which the State of Maine had two representatives) and of the Gear Advisory Group (on which the State of Maine had one representative) on matters relating to gear and entanglements of large whales. As stated before, final authority for implementing the MMPA rests with NMFS and cannot be delegated.

13. Gear Modifications

General Comments

The vast majority of the comments submitted addressed the proposed gear modifications and specifically stated that the proposed regulations would have resulted in gear that was too weak to withstand the normal operational needs of the fishing industry. Additional concerns were raised regarding increased potential for entanglement that could result from changes in fishing practices in response to the proposed modifications or from increased ghost gear. As proposed, NMFS created a Large Whale Gear Advisory Group (LWGAG) that met June 4-5, 1997, in Peabody, Massachusetts. Twenty members of the fishing industry, four representatives of states, three researchers, and nine NMFS employees attended all or part of the meeting. NMFS provided the LWGAG with summaries of written and oral public comments, which had been received to date regarding gear modifications. After an update on gear studies and a brief discussion of whale entanglement, three teams were formed to brainstorm ways to reduce the possibility of entanglement. The participants divided themselves into teams representing inshore lobstermen, gillnetters and offshore lobstermen. The inshore lobster team had representatives from Rhode Island to downeast Maine. Gillnetters included fishermen from New Jersey to Maine, while offshore lobstermen from southern New England, the mid-shelf, and east to the Hague Line were represented. Each group produced a list of suggested options, broken down into immediate and future options, and an extensive list of research and development needs. These recommendations were considered in the drafting of this final rule.

Numerous comments were received on specific aspects of the gear modifications proposed in the proposed regulations. The following comments are representative of the comments received and address the concerns raised by the commenters. NMFS

acknowledges the practical limitations of the proposed gear modifications raised by the public and believes that this interim final rule recognizes different hydrological conditions that affect fishing practices and gear and provides measures more compatible with commercial fishing practices, while still achieving mandates under the MMPA. NMFS intends to continue this cooperative effort by involving the Large Whale Gear Advisory Group and Large Whale Take Reduction Team in future development of gear modifications and research.

Comment 76: The NMFS LWGAG Inshore Lobster subgroup recommended the following options for immediate implementation in the inshore (i.e., inside Lobster Management Area 3) lobster fishery: (1) Prohibition on buoy lines greater than 7/16", (2) prohibition on line floating on the surface, (3) requirement for breakaways (at buoy; all within 1100 lb; breakaways can consist of swivels, 6 thread line (min. 1 fathom), plastic weak-links, staples, or hog rings; (4) recommend remove ban on poly/floating line from proposed rule; (5) light colored buoy lines; (6) require gear tending at least every 30 days (to ensure no wet storage); (7) credit given for use of fewer vertical lines; and (8) fewer knots.

Response: Many of the suggestions that were provided to NMFS at the Gear Advisory meeting have been included in the interim final rule. Other suggestions that were given need further evaluations and in subsequent meetings of the LWGAG and the TRT. These will be discussed and if determined to be effective measure to reduce entanglements they will be added to options list for use by fishermen.

Comment 77: The NMFS LWGAG Offshore Lobster subgroup recommended the following measures to be required for immediate implementation in the offshore (i.e., outside Lobster Management Area 3) lobster fishery: (1) Vessels fishing south of 41° N lat. are exempt from these regulations except during the months of December through March; (2) the Great South Channel Critical habitat area will be closed to lobster gear during the months of April through June; (3) there shall be no line floating at the surface of the water; (4) there shall be a weak link at the top of the buoy line. The maximum strength of the weak link shall be no more than that of 1/2" polypropylene rope or 3/4 the diameter of the buoy line; (5) there shall be no knots in the buoy line except above the weak link (to tie on surface gear); and (6) there shall be no more than 2 buoy lines per trawl.

Response: See response to comment 76.

Comment 78: The LWGAG offshore lobster subgroup also recommended the following options as suggested, not mandatory, fishing practices: (1) Buoy lines should be no more than 2.5 times the water depth; (2) traps should be no more than 25 fathoms apart on the groundlines; (3) fishers should make their trawls as long as legally possible to reduce the number of buoy lines within their strings of gear; and (4) gear should be tended no less than once a month.

Response: See response to comment 76.

Comment 79: The NMFS Large Whale Gear Advisory Group Gillnet subgroup recommended the following options for immediate implementation in the gillnet fishery: (1) Anchor the gear with the holding power of a 22 lb danforth style anchor, or a 50 lb dead weight at each end, or rig net with greater than 100 lb lead line; (2) the buoy line will not be rigged to float on the surface (excluding the tide ball & high flyer); (3) top buoy line breakaway system not to exceed 1100 lb, resulting in a bitter end not exceeding 1.5 inches in diameter;

Response: See response to comment 76.

Comment 80: Several commenters suggested that the current fishing practices might be sufficient to keep entanglement rates at acceptable levels and questioned whether proposed gear modification requirements might increase entanglement rates. A particular concern raised was the potential for increased amounts of ghost gear in which whales could become entangled.

Response: NMFS disagrees that current practices are sufficient to reduce risk to whales. Although there is no evidence to suggest that entanglements, particularly those which result in serious injury or mortality, involve ghost gear, NMFS agrees that the increase in ghost gear is a concern not only for whales but also for other marine life. NMFS agrees that the requirements of the proposed rule may have resulted in substantial amounts of lost gear. It believes that the potential for increased ghost gear which could result from this interim final rule is minimal.

Comment 81: Devices should not have to be proven to reduce whale entanglement prior to widespread use, but they should be able to meet reasonable expectations for substantially reducing risk (e.g., a decrease in breaking strength that resulted in the gear retaining 75 percent of its original characteristics would not constitute a

substantial reduction in the risk of entanglement).

Response: NMFS appreciates this suggestion of a standard for risk reduction.

Comment 82: The minimal gear modifications proposed for the Studds-Stellwagen Bank National Marine Sanctuary area may not be sufficient to insure that further entanglements are avoided. While a rare event, two (possibly three) northern right whale entanglements, and a considerable number of entangled humpbacks, have been observed within the Sanctuary since 1985. While one cannot be sure that these entanglements actually occurred in the Sanctuary, neither can one say with any certainty that they occurred elsewhere.

Response: NMFS had proposed extensive modifications for this area that are calculated to provide a realistic potential of reducing serious entanglement to levels required by the MMPA. NMFS agrees that the Sanctuary is a high risk area, however, and that it is important to provide adequate protection for all four whale species in the area, particularly right and humpback whales.

Comment 83: NMFS should work toward long-term gear solutions that might include developing new gear types or shifting fishermen over to existing gear that would be less risky to marine mammals. For example, if bottom longlining proves to be an acceptable alternative for the harvest of certain groundfish species (groundfish: cod, haddock, pollock) and spiny dogfish, then gillnetters should be encouraged to shift to this gear type in areas of high risk to large whales. The three-month closure in the Great South Channel and the 4.5 month closure in Cape Cod Bay could provide opportunities for fishermen to shift to other gear types, and this should be encouraged.

Response: NMFS appreciates this suggestion. It will continue to examine alternative measures and ask the TRT to consider ways to encourage alternate fishing practices that may pose less risk of marine mammal entanglements.

Comment 84: Since the disbanding of the Take Reduction Team, concerns have been raised by right whale scientists that a top breakaway in the buoy line may be less appropriate than a bottom breakaway, but clearly both should be tested operationally. It may be that a phased approach to implementation would accommodate the need for field testing before requiring broad use of breakaways throughout the EEZ.

Response: NMFS agrees that a bottom breakaway could be useful in mitigating certain types of entanglements. The function of top breakaways versus bottom breakaways are different and would address different aspects of entanglement. The operational constraints on bottom breakaways are much greater than breakaways at the buoy, thus technological solutions would require extensive testing. Some progress has been made in developing a bottom breakaway (see next comment), but NMFS does not have any information at this time on feasibility of this device for implementation in fixed gear fisheries.

Comment 85: A conservation group suggested that failing to require a breakaway link at the bottom of buoy lines ensures that potential solutions will not be developed. This group suggests that NMFS require the development and use of such a link as soon as it becomes operationally feasible. Gear without such a device would still represent a significant entanglement risk to whales, and such gear should not be allowed into sensitive areas such as critical habitat. A device that could be used as a bottom breakaway is being developed.

Response: NMFS acknowledges this information on progress toward developing a bottom weak link and will consider such recommendations for future evaluation. NMFS will ask the TRT and LWGAG to evaluate innovative technological solutions that are presented for consideration to add to the Take Reduction Technology Lists.

Comment 86: One conservation group suggested that a weak link with a breaking strength of 400 lb might work in Cape Cod Bay critical habitat, based on operational testing. Alternatively, to make the use of weaker link devices more acceptable to industry, NMFS might explore the development of a stronger accessory device that could be placed on gear when severe storms are predicted for an area.

Response: NMFS acknowledges this timely information. However, concern remains that, although 400 lb may be promising for Cape Cod Bay, this breaking strength may not be sufficient for all areas where gear is deployed. Therefore, NMFS has used a 1100 lb breaking strength as proposed by the Large Whale Gear Advisory Group until further testing can be conducted to determine the lowest breaking strength that can be used in particular areas. It will seek a discussion in the TRT and LWGAG about the feasibility of developing an alternative device that could be placed on gear when storms are predicted, although it would be

difficult to regulate the use of such a device.

Comment 87: Splicing is not likely to make a difference in saving whales.

Response: Splicing is no longer required in the interim final rule, although NMFS encourages its use, on the grounds that a splice is less likely than a knot to snag on a whale.

Comment 88: Floating line is preferred in many fishing areas to reduce chafing caused by contact with pots or with the bottom and the actual degree to which line floats between pots is unknown. Nevertheless, to reduce the potential for a high profile in the groundline and therefore reduce the risk of entanglement, this conservation group supports requiring sinking groundline in areas identified as high-use areas for large whales.

Response: NMFS agrees that sinking groundline has the potential to decrease entanglement risk in certain areas and has maintained this modification as an option in the lobster gear technology list.

Comment 89: One commenter suggested that a workable alternative to requiring sinking groundline would be to require vessels to set lobster pot trawls in the direction of "fair tide", or down tide with the current pushing the vessel, to keep ground lines taut and low between traps. This was also discussed by the LWGAG.

Response: NMFS acknowledges this suggestion of an alternative fishing practice but further research is necessary to determine if this practice is consistent in different types of hydrological conditions.

14. Comments on Strategies for Implementing Gear Modifications

Comment 90: One commenter stated that the measures in the NMFS proposed plan may be appropriate as emergency measures for critical habitat and some high risk habitats, but that it is premature to require major, untested gear modifications over large areas outside of the highest risk areas. In particular, these modifications could cause unforeseen problems for whales, such as the increase of ghost gear. Other commenters recommended that any modifications implemented should be phased in and should be operationally sound, enforceable, and affordable.

Response: NMFS agrees with these concerns given the current lack of technological solutions and has substantially revised the proposed rule in response to these concerns.

Comment 91: One conservation group suggested that expensive modifications should have an economic phase-in period. This group suggested a system of

phasing in gear modifications beginning in the right whale critical habitat areas in 1997 and ending with the wider areas in 2002, proceeding in annual increments of 1/3 of the gear each vessel has in each area. Modifications required in each of the succeeding years would be consistent with technology current at that time. The commenter suggested that existing and proposed gillnet and trap tag programs would facilitate enforcement of this strategy.

Response: The changes in this final rule reduce the costs significantly. Flexibility has been built into the interim final rule to adopt a phased-in approach for gear modification as they are developed. As new gear is determined to be operational and effective in reducing entanglements it will be added to the gear technology list described in this rule for use by fishermen.

Comment 92: One conservation group recommended that gear modifications not be allowed in closed or restricted areas until they could be demonstrated to reduce the risk of serious injury or mortality to whales to levels approaching zero.

Response: It is not clear how any management measure could be demonstrated to reduce the risks of entanglements to levels approaching zero. It will be the combinations of all the parts of the plan that will reduce the risk of entanglements. In general, hypotheses can be disproved but not proved. However, as new technology is developed, NMFS will seek advice of the TRT and the LWGAG as to whether it appears a feasible for reducing entanglement risk to deploy.

Comment 93: The NMFS should develop criteria for certifying individuals and institutions as qualified to design, evaluate, and approve modifications for use consistent with the ALWTRP. The basis for approval of any given technique or technology should be that it is judged to be equal to or superior to current practice.

Response: The design of gear modifications could be done by anyone with a good idea. No concept should be rejected just because a person is not certified. Evaluation will be done by NMFS gear specialists, the LWGAG and the TRT and by fishermen involved in testing the gear. NMFS cannot delegate authority to individuals or institutions to approve gear for use.

Comment 94: Any examination or review of gear modifications must fully address the issue of HOW whales become entangled in fishing gear. Pending the availability of scientific research that explains this phenomena, no gear modifications can or should be

tested in the natural environment on endangered or other whales.

Response: NMFS agrees that knowledge of the mechanics of entanglement is important to resolve the entanglement problem. However, since so few entanglements have been witnessed, NMFS believes it is unreasonable to require this standard for allowing the use of certain gear modifications.

Comment 95: Several commenters requested that NMFS subsidize the fishing industry for modifying their gear.

Response: At this time, NMFS has no authority or funding from Congress to subsidize the fishing industry for gear modifications.

Comment 96: Several members of the fishing industry offered to test experimental gear provided by NMFS rather than be asked to experiment with gear that they need to make a living.

Response: The suggestion is appreciated and will be discussed with the Gear Advisory Team.

15. Comments on the Social and/or Economic Impact and Associated Analyses

Comment 97: Numerous comments were received expressing the opinion that the proposed rule would have a devastating effect not only on the fishing industry, but also on the entire coastal community, and that the economic impact outweighed the potential benefit to right whales.

Response: NMFS has responded to these concerns and believes that this interim final rule represents a plan that will achieve the goals established in the MMPA with an economic impact substantially reduced from that which would have resulted from the proposed rule.

Comment 98: The economic analysis should include the costs of labor that it would require to paint and rig the gear.

Response: The economic analysis did not ignore labor costs. The labor costs were acknowledged to be substantial in several instances throughout the Environmental Assessment prepared for the proposed rule. At the time, however, insufficient information was available to provide a quantitative estimate of labor costs. To the extent practicable, NMFS included labor costs in the final EA for the ALWTRP.

Comment 99: Economic analysis is an underestimate.

Response: The economic analysis was conducted with the best scientific and commercial data available at the time, and when data were lacking, qualitative assessments were made about the likely costs.

Comment 100: The State of Maine prepared an alternative economic analysis to challenge implementation of the ALWTRP on grounds of severe economic impact to the Maine lobster fishery.

Response: NMFS agrees in concept with the State of Maine's overall conclusion that the proposed regulations would have imposed a substantial economic impact on the Maine lobster fishery. NMFS has responded to this concern in developing a final rule that provides maximum flexibility to affected Maine lobster fishermen in meeting the gear modification requirements as a way to significantly reduce the economic impact. In the majority of instances, the suite of options in the lobster take reduction technology list are consistent with fishing practices commonly used by Maine lobstermen and serve to minimize compliance costs with the ALWTRP. Consequently, the original economic analysis is no longer valid for this interim final rule. Nevertheless, NMFS is not, in agreement with several assertions made by the State of Maine, nor is it in agreement with several aspects of its economic analysis. NMFS will provide a discussion of the Maine analysis upon request.

16. Regulation of Other Fisheries Which May Pose an Entanglement Risk to Large Whales

Comment 101: Several comments were received regarding NMFS's proposal to regulate several fisheries other than the four proposed to be regulated by the ALWTRP based on the fact that those other fisheries either have or may entangle large whales. Comments were received recommending that NMFS consider revising the classification of these fisheries from Category III to Category II and consider imposing gear marking requirements on these fisheries. Other comments recommended against imposing additional gear requirements or restrictions until such time as NMFS has evidence indicating that these fisheries pose an entanglement threat to large whales.

Response: A summary of historical entanglement information for the "other fisheries" was presented in the Draft Take Reduction Team Plan submitted by the TRT. Several of the other fisheries listed have documented takes of one or more of the four whale species protected by this plan. Therefore the potential for take in the future exists. In addition, as explained in the proposed rule, the other fisheries for which take has not yet been documented may represent a similar threat because gear types are

similar. For example, all gear types which use vertical lines in areas where whales occur may represent an equal entanglement threat. The proposed list of fisheries for 1998 is currently out for public comment and NMFS solicits comments on the reclassification of these "other fisheries". Note that section 118 of the MMPA gives the AA the authority to classify a fishery based on analogy with similar fisheries.

17. Comments on Expansion of Disentanglement Effort

Comment 102: One commenter cited a case where a whale was seen entangled and not disentangled because the entanglement did not appear to be life threatening. That whale eventually died, and the cause of death was attributed to the entanglement. The commenter contended that this case demonstrates that disentanglement efforts could help resolve the problem and regulators should put stock in the efforts to reduce serious injury and mortality, especially since this may convince fishermen to cooperate with government to report right whale sightings.

Response: NMFS agrees that disentanglement can be an effective measure for reducing the chances of serious injury or mortality from those entanglements that have already occurred and happen to be seen and reported in time to maximize the chances of a successful disentanglement. This is a major aspect of the plan. NMFS believes that measures are necessary, both to prevent whales from becoming entangled in the first place and to minimize the impacts on those whales that become entangled and are never disentangled.

Comment 103: Several comments were received supporting the expansion of the disentanglement effort while stating that disentanglement does not substitute for the need to modify or restrict gear. One conservation group noted the lack of any data to show that disentanglement has contributed to the long term survival of any animal (particularly right whales) that has been entangled in fishing gear.

Response: NMFS agrees that measures other than disentanglement must be taken. Although no research on long term survival of disentangled animals has been conducted, analyses are underway that may provide information on this issue. Several years of data are available, since organized disentanglement has been conducted in the northeast since 1984.

Comment 104: Several comments were received indicating that the fishing industry must be involved in the

disentanglement network for it to have any hope of succeeding. One commenter noted that it is vital to get the most possible benefit from "first responders". Often they are the only ones in the position to act effectively, and are able to provide valuable information on the particulars of the entanglement.

Response: NMFS agrees that the commercial fishing industry is a vital component of the disentanglement network. In fact, many whale entanglement records received by NMFS have originated from reports by commercial fishers. The chances of a successful disentanglement are maximized when the individuals monitoring an entangled whale are familiar with the needs of the disentanglement team and can stay with the whale to feed information to the primary team and assist the primary team on scene. NMFS hopes to increase the network of individuals trained to provide first response.

Comment 105: One commenter stated that well-intentioned but untrained and uninformed boaters and fishermen might unnecessarily injure either themselves or the whales they are attempting to help and suggested that fishermen and other interested boaters receive training in identifying whales and evaluating entanglements, as well as the basic do's and don'ts of disentanglement. Another commenter suggested that hotline telephone numbers be established and the numbers given to fishermen to expedite help for whale entanglements/problems.

Response: NMFS agrees that this is a concern. Information on how to report an entanglement, including hotline numbers, and on what not to do, has been provided to vessel operators in the past. NMFS is working with Sea Grant to develop an outreach and education program that will provide information to the commercial fishing industry on these and other issues. As a result of a meeting at the Maine Fishermen's Forum this spring, NMFS, the authorized disentanglement team (led by the Center for Coastal Studies) the State of Maine, and the Commonwealth of Massachusetts have developed outreach materials which will be distributed to the fishing industry and other small vessel operators over the coming months.

Comment 106: One lobster fisherman suggested that NMFS provide a \$1,000,000 life insurance policy for fishers to release whales and a \$1,000 reward for successful releases.

Response: No funds have been appropriated for NMFS for such purposes. NMFS cautions all boaters that releasing an entangled whale

requires expertise about the whale's behavior and is extremely dangerous. NMFS is not convinced that it would be in the whales' interest or the fishermen's interest to encourage fishermen to conduct disentanglements on their own.

Comment 107: Because there are no whales in Maine waters, disentanglement teams are obviously not necessary and are a waste of taxpayers' money.

Response: NMFS disagrees. Entanglements of all four whale species protected by this plan have occurred in Maine's near-shore waters. In addition, sightings of entangled whales for which original point of entanglement is unknown have also occurred in Maine waters and satellite tracking studies have documented right whale migratory paths through nearshore and offshore waters of Maine and the other New England states.

18. Legal Issues Regarding Whale Entanglement and Compliance with the Take Reduction Plan Regulations

Comment 108: Several commenters stated concern about a fisherman's legal liability in connection with reporting entanglements of whales in his/her gear. Some commenters believed that without immunity from legal liability there would be no incentive to report. Other commenters believed that immunity from liability would not increase likelihood of reporting entanglements. Most commenters on this subject encourage NMFS to exercise judicious prosecutorial discretion in deciding whether to hold a fisherman liable for entanglements in his gear if he/she reports such entanglements.

Response: NMFS is sensitive to concerns raised in this comment. This rule does not provide immunity to fishermen whose gear entangles whales and who report the entanglement because NMFS believes that such a provision would inappropriately dilute its enforcement responsibilities under the MMPA and ESA. Moreover, as one commenter suggested, neither the ESA or the MMPA provide explicit authority to provide such immunity without issuing incidental-take permits which cannot be issued as discussed in a response in an earlier comment. The agency intends to exercise prosecutorial discretion on a case by case basis for reported entanglements, taking into account factors such as the unavoidability of the entanglement, the fisherman's compliance with this rule and other applicable law and the cooperativeness of the fisherman.

19. Comments on Enforcement of the Plan

Comment 109: Several commenters stated that the proposed rules would be unenforceable or difficult to enforce, at least at sea, particularly with respect to gear requirements such as breaking strength.

Response: As with any regulation, the agency recognizes that certain measures within the interim final rule may, in limited instances, prove difficult to enforce. However, the agency believes that overall compliance with these measures will be high, because they generally reflect current fishing practices and are drafted with sufficient precision to enable effective enforcement in the event of a violation.

20. Comments on Education and Outreach to the Fishing Industry

Comment 110: One commenter suggested that outreach and awareness programs detailing species identification and cetacean specific problems should be mandatory for all commercial fishermen. Other commenters suggested that outreach materials be made available prior to January 1, 1998.

Response: NMFS will consider this recommendation in developing the education and outreach program. NMFS staff are currently exploring alternatives for conducting education and outreach for all take reduction plans on the U.S. Atlantic coast. NMFS agrees that it is desirable to conduct education and outreach prior to the implementation of the Take Reduction Plan regulations. The outreach program is scheduled to begin this fall.

21. Comments on Monitoring of the Plan

Comment 111: How will NMFS demonstrate, with varying time frames, the success of the act in reducing the mortality of whales, especially when a frequent occurrence is defined as an event that occurs once every 5 years? What scientific evidence is necessary to support these measures? What is relevant data, the source of this data, and is it peer-reviewed?

Response: NMFS will publish annually a Stock Assessment Report that provides estimates of serious injuries and mortalities of each species of large whale for the most recent year for which data are available and for the five-year period ending with that year. Estimates of serious injuries are compiled from data supplied by fisheries observers and by stranding and entanglement reports submitted to NMFS by those who observe such events. The Stock Assessment Reports

are peer reviewed and are submitted for public comment before finalizing them as well.

Comment 112: NMFS states that "it will be difficult to establish whether the goal of reducing incidental takes of right whales to below the PBR level is achieved within 6 months of when the plan is implemented." NMFS's rationale for this statement is "if more than two serious injuries or mortalities incidental to commercial fishing operations occur within 5 years after the plan is promulgated, then the PBR goal will not have been achieved." This logic is baffling. The MMPA establishes two goals: (1) To reduce the serious injury and mortality in commercial fishing operations to levels less than the PBR level within 6 months of implementation of a take reduction plan; and (2) to reduce the serious injury and mortality to levels approaching a zero mortality and serious injury rate in 5 years. It makes absolutely no sense to monitor serious injury and mortality for 5 years and use this data to evaluate the immediate 6-month PBR goal. This commenter contends that if there are no serious injuries or mortalities incidental to commercial fishing operations during the first six months to a year after implementation, then the plan has met its first goal. The logic NMFS describes is more appropriate in evaluating the 5-year ZMRG goal.

Response: NMFS agrees that if no serious injuries or mortalities incidental to commercial fishing operations occur during the first six months of the plan, the plan will have met its short-term goal. Because not all entanglements are observed, it will be impossible to establish with surety that the 6-month goal has been met. The MMPA implies that the level of serious injuries or mortalities should not only reach the PBR level in 6 months but should be maintained at or below that level as efforts to further reduce bycatch continue. Therefore, NMFS will continue to evaluate the rate of serious injury or mortality from entanglements relative to the PBR level over the course of this plan.

Comments 113: The proposed rule states that because of the small population size of right whales and the current procedure for calculating the PBR level over five years, it will be difficult to know if the 6-month goal is met. Although this may be true if no right whales die, it is not true if one does die. If one right whale suffers serious injury or mortality incidental to commercial fishing in the first six months, then the 6-month goal of less than 0.4 takings per year is simply not

met. At that rate, more than 2 mortalities can be projected per year. Given the precariousness of the right whale species, NMFS must err on the side of protection in determining whether its goals are being met.

Response: NMFS agrees.

Comment 114: It will be impossible to determine whether the Zero Mortality Rate Goal has been reached in 5 years.

Response: NMFS agrees that it will be impossible to determine with surety that ZMRG has been met. However, NMFS will assume ZMRG is met if the frequency of known cases of serious injuries or mortalities meets the ZMRG criteria.

Comment 115: Since witnessed entanglements will most likely continue to be rare, it will probably be necessary to rely on scarification data to verify success. If true, it will be especially important for NMFS to a) assess current scarification levels in humpback whales as a baseline for comparison; and b) start a series of annual or biennial reviews of new scarification rates, especially among juvenile humpback and right whales. This data, combined with other research suggested in the notice, will be important in furthering our knowledge of when and where entanglements may and/or do take place.

Response: An analysis of scarification could provide useful information about rates of entanglement, but it is unlikely to be sufficient to verify success in achieving the PBR level or ZMRG. First of all, such analyses will take considerable time and may not be available quickly enough to allow modification of the plan if it is not working. In addition, determining the rate of acquiring new scars is likely to be difficult, and interpretation of the analysis will be complicated by questions about what percentage of scars represent serious injuries.

Comment 116: Several commenters, as well as the TRT and Gear Advisory Group supported the proposal of maintaining a central repository for gear removed from whales for gear identification and to evaluate any information on the performance of modified gear and/or implications for future gear modifications.

Response: NMFS has taken action on this recommendation and has collected gear taken off whales beginning in 1994 and up to the present and intends to make some form of the materials available to the LWGAG and TRT and the public. In some cases, gear is returned to vessel owners once the gear is photographed and/or described in detail.

Comment 117: NMFS states that: "A decrease in entanglements of humpback whales will be taken as supportive evidence that risk of entangling right, fin, and minke whales has been reduced." Discussion during the Take Reduction Team deliberations indicated that NMFS must evaluate more than the entanglement rate. NMFS must also assess the severity of the entanglement, the amount of gear entangling the whales, and the whale's survivorship. This assessment is necessary because whale entanglements may actually increase if whales encountering gear are more successful, due to gear modifications, in breaking free from gear rather than merely drowning and going undetected. A reduction in the severity of entanglement or injury, the amount of entangling gear, and the presence of entanglement scarring in juveniles may be a better indicator as to whether gear modifications and fishing effort reduction have reduced the incidence of entanglement resulting in scars (it is assumed that if an animal can break away before getting wrapped in the gear, there should be little to no evidence of scarring).

Response: NMFS appreciates this analysis and intends to consider these factors in evaluating future entanglement events.

Comment 118: The proposed monitoring plan is inadequate, because it does not include a component relating the amount of sampling to a statistical model for evaluating whether the goals of the plan are being achieved.

Response: NMFS will determine whether the goals of the plan are being achieved based on known cases of serious injury or mortality due to entanglements. This is not a controlled sampling regime, and the analysis may be complex. NMFS will use the best scientific information available to evaluate the plan.

Comment 119: There is no time table presented specifying when proposed analyses will be completed, except the general statement that evaluations will occur at future team meetings. At a minimum, the plan should require that the TRT meet annually. It should also specify clearly what data will be reviewed.

Response: The interim final rule discusses this concern and NMFS will reconvene the TRT to discuss the interim final rule and possible modifications. No date has been set for this meeting but it is expected that the TRT will be reconvened before the end of the comment period. NMFS expects to reconvene the TRT at least once each year for the duration of the plan.

Comment 120: Although the plan acknowledges the need for additional data collection, there is no concomitant acknowledgment of the increase in resources needed to complete the analyses of the data, such as advanced image recognition software and personnel to do the identification and scarring rate analysis. Such details should be included in the ALWTRP.

Response: NMFS places high priority on carrying out this plan, but it cannot commit resources in advance of budget allocations. The value of advanced image recognition software and scarring rate analyses has not yet been determined.

Comment 121: Any monitoring program for the northern right whale, by NMFS own requirements, must be able to tell if a single entanglement of a northern right whale even occurs. Yet NMFS' proposal for a monitoring program is the *status quo*, which by its own admission comes nowhere close to meeting this goal. The proposed monitoring program comes down to nothing more than a token effort. The Draft ALWTRP plan for the monitoring programs for the other listed species of whales are similarly deficient.

Response: NMFS disagrees. In the past year NMFS has created the Early Warning System which monitors whale activities in the Critical Habitat area. NMFS will be expanding that program by inviting states, the commercial fishing industry, whale watch vessels to participate in the network and broaden the area of surveillance to other high use areas. NMFS will also be establishing an outreach and education program that should help significantly in reporting sightings of large whales.

Comment 122: Considering the seriousness of the regulatory actions and extremes that are mentioned within the proposed rules this gillnet industry association feels that promulgating regulations of this magnitude should be based on entanglement recording from irrefutable sources. The ability to recognize cetaceans species and the gear associated with an entanglement is critical in considering actions to be taken.

Response: NMFS agrees that these are essential elements to interpreting entanglement reports. Even though the number of entanglement reports received is considered to be a minimum, many of these reports are excluded from analysis due to insufficient information on species identification and/or gear type.

Comment 123: The Take Reduction Team's report also recommends that whale photographs collected as part of population studies continue to be

analyzed for evidence of fishing gear interactions. This analysis is not mentioned explicitly among the NMFS's proposed list of monitoring actions and, if the NMFS is not already planning to do so, the Marine Mammal Commission (MMC) recommends that NMFS include such analyses in its monitoring strategy. The proposed plan also notes that NMFS is considering expanding field surveys to assess the population abundance and distribution of the relevant whale stocks. Given that such surveys are the principal source of photographs for analyzing entanglement scars, the Marine Mammal Commission recommends that the Service expand the discussion in this section to identify the priority areas and approaches where expanded population survey efforts would be most helpful with regard to assessing entanglement rate trends.

Response: NMFS intends to continue monitoring the large whale populations as it has in the past. As noted above, analyzing whale photographs for evidence of fishing gear interactions could provide useful information on entanglement rates. NMFS is not yet convinced that this should be a part of the plan, however, as there are questions about the gathering, analysis and interpretation of the data. NMFS intends to seek a fuller discussion of these points at the TRT.

Comment 124: Because of the need to consider the anatomy, behavior, and ecology of large whales in evaluating potential fishing techniques and gear modifications that would reduce entanglement risks, the MMC recommends that the NMFS expand the proposed membership of the gear advisory group to include whale biologists with direct knowledge of the whale species of concern. Because of the need to consider the conservation benefits of potential gear modifications, we also believe the group should include a representative of environmental organizations.

Response: The Gear Advisory Team membership already includes three whale biologists. NMFS will consider adding a fourth.

Comment 125: The State of Maine and the Maine lobster fishing industry expressed a willingness to place on-board observers aboard our vessels, as is required under the law for any Category I Fishery.

Response: NMFS appreciates the assistance offered by the State of Maine and the Maine lobster fishing industry, and will discuss this option once the outreach and education program is operational.

Comment 126: A gillnet industry organization recommended continued

observer coverage on all fixed gear vessels operating in the Great South Channel critical habitat from March 1–June 30. This additional month for observer coverage is to determine if whales are sighted and if entanglements do occur.

Response: NMFS appreciates this suggestion and will try to arrange additional observer coverage in this area if extra observer days are available when the allocations of observer effort are made.

Comment 127: Several commenters recommended that NMFS incorporate a system of gear loss reporting into the monitoring of the entanglement problem. If reporting were instant, disentanglement teams would have information on whether gear loss was reported in an area where an entangled whale was seen. In addition, gear lost to gear conflicts or user-group conflicts would be appropriately identified as ghost gear in the event that same piece of gear was found on a whale.

Response: NMFS appreciates this suggestion, which will be considered in future evaluations.

Comment 128: Several commenters supported the need to expand field surveys to determine differential use of the area by right whales and humpback whales. Additional effort directed to surveys in and around critical habitat may also assist in efforts to implement dynamic management measures.

Response: NMFS will further expand field surveys as funding is available. It is committed to continuing the Early Warning System, which may provide information useful for dynamic management.

Comment 129: Concern over the need to assess the efficacy of gear modifications and to correctly assign cause of mortality in whales underscores the need to prioritize examination of carcasses to determine cause of death.

Response: NMFS agrees that an examination of whale carcasses can provide important information on how entanglements occur and on the cause of death of a whale.

Comment 130: An active right whale patrol should be established on a daily basis probably in conjunction with other United States Coast Guard activities.

Response: NMFS has instituted a right whale Early Warning System in cooperation with numerous state and Federal regulatory agencies, including the Coast Guard, first in the southeast and more recently in the northeast. These surveys focus on right whale critical habitat areas and disseminate timely information on right whale movements to the marine community.

22. Comments on Market Incentives to Reduce Bycatch

Comment 131: One conservation group stated that they support NMFS's decision to postpone the designation of a team to investigate the development of market incentives.

Response: This comment reflects NMFS's position at this time. This option was discussed by the TRT, and additional information on their recommendations can be found in the TRT report.

23. Comments on Definitions

Comment 132: With regard to gillnet modifications, incorrect terminology has been used. Gillnets have "lead line", not "foot ropes"; and they have "float lines" not "head ropes". The terms "foot rope" and "head rope" refer primarily to draggers (trawlers) and the use of these terms is inappropriate when referring to gillnets.

Response: NMFS had used these terms to avoid confusion between surface buoys (also called "floats") and net floats and between the buoy line (sometimes called "lead line", i.e., by the alternate pronunciation of the word) and the weighted line at the bottom of the string of nets. However, in response to the industry's request for clarification, the definitions have been changed in this rule.

Comment 133: It was recommended that the term "modified sinking buoy line" be defined to include sinking line, or polypropylene line with lead sinkers hammered on, as is the practice in many areas to sink buoy line.

Response: In this interim final rule, the term "modified sinking buoy line" is not used. NMFS will ask the TRT to discuss the appropriateness of using lead sinkers to cause polypropylene rope to sink.

Comment 134: The definition of a buoy should also be clarified. Lobstermen commonly "stack" buoys together to form a "float" for one buoy line. A buoy could also be comprised of two buoys separated by a length of line, one at the surface and one subsurface.

Response: This interim final rule clarifies that if more than one buoy is attached to a buoy line, or if a buoy and a high flyer are attached to a buoy line, the weak link, if used, should be between the buoy line and the buoy closest to the fishing gear.

Comment 135: NMFS should specify whether "breaking strength" refers to tensile strength or safe working load.

Response: The breaking strength described in the proposed rule refers to ultimate tensile strength, not safe working load. The term "breaking

strength" is defined in the interim final rule.

Classification

This rule has been determined to be significant for purposes of E.O. 12866. In formulating this rule, NMFS considered a number of alternatives, including no action, wide-spread closures, requiring specific gear modifications as in the proposed rule, and the current rule.

Inaction would have entailed no cost to the industry but would not reduce the serious injury or mortality to right whales from commercial fishing gear to below the Potential Biological Removal Level and therefore was deemed insufficient to comply with the MMPA. While it is impossible to quantify the benefit of protecting endangered species, protecting one of the rarest species in the world, the northern right whale, is a goal that would appear to have high value. Protecting species from extinction may convey significant future benefits in terms of maintaining the balance of an ecosystem or in valuable biological insights. Furthermore, protecting a species for its own sake is of high value to many people. For example, in an effort to quantify the value of a related marine mammal species, a recent study of households in Massachusetts found that they would be willing to pay between \$176 to \$364 per household to eliminate the deaths by entanglement of 1000 harbor porpoises. If these numbers are applied to the total population of Massachusetts households, the lower bound of the total value households in Massachusetts alone would be willing to pay for harbor porpoise conservation is \$395 million. Harbor porpoises are not endangered species. Economic theory would predict that people would be willing to pay even more to protect right whales.

Widespread closures, although they might achieve the goals of the MMPA, would be economically costly. Such huge economic costs would not be necessary if disentanglement efforts and gear modifications are successful in reducing bycatch to MMPA standards.

This document presents a number of reasons why the original rule proposed by NMFS on April 7 was not acceptable (see "Changes from the proposed rule"). In brief, the original proposal contained a number of untested ideas that would have entailed significant costs to the industry. Although these costs would have been less burdensome than a full-scale closure, the expected costs would have been in the tens of millions of dollars. While this level of expenditure might be justifiable if the conservation benefits to large whales could be

determined, there was no guarantee that these costly measures would achieve the stated goals. In some cases, the proposed regulation might have made the situation worse for whales. For example, there may have been an increase in the amount of lost gear in the water that would also pose an entanglement threat.

The estimated maximum ten-year costs for this proposal in present value terms, using a 7% discount rate, is \$20.7 million. This is based on the assumption that vessels will use the costliest alternative (i.e., whipping) to meet their gear marking requirements. The year-one cost based on the same assumptions is \$10.3 million. If paint is used to apply marks, the costs will be substantially less. While the cost of these measures is substantial, the benefit they are expected to bring is reducing serious injuries and mortalities to large whales to a more sustainable level (i.e., below the potential biological removal level) within six months and to insignificant levels within 5 years. These measures are expected to assist in the recovery of endangered species of large whales in the North Atlantic, a goal that would seem to have intrinsic biological and social value, since marine mammals have proven themselves to be resources of great international significance, esthetic and recreational as well as economic.

The gear marking requirements in section 229.32 (b), (c)(1), (d)(1), (e)(1), and (f)(1) constitute a collection of information. Each gear mark referred to below consists of a two-color code. This collection of information is being submitted to the Office of Management and Budget (OMB) for review and approval under the Paperwork Reduction Act. Estimates shown below do not include any estimates of the time burden required for the recreational lobster fleet because the amount of gear fished by this sector is unknown. The analysis also does not include additional time required by vessels that may switch between different fishing areas during the year, such as shifting from inshore to offshore lobster fishing. Therefore, the estimates below are likely to be a lower bound on the actual time required to comply with the gear marking requirements.

The time it takes a vessel to comply with the gear marking requirements depends on the method they choose. Painting is estimated to take 30 seconds per mark, and whipping is estimated to take 10 minutes per mark. Assuming these are the minimum and maximum times required per mark, a range of values will be reported. The average reporting requirements for painting

these marks is estimated to be 0.067 hours per trawl or gillnet string. This would equal a total of 4,127 hours to place the required marks, or 1.38 hours per firm. For whipping, the average reporting requires 1.33 hours per string or trawl. This would equal a total of 477,200 hours to place all the required marks, or 153 hours per firm. Marks that are whipped will last 3 years, while painted marks are expected to last one year. Firms will pick the method which minimizes their costs, which makes it likely that the vast majority will paint their lines because of the lower labor costs.

Driftnets used in the shark driftnet fishery operating in the Southeastern U.S. Atlantic waters may be up to 6493 feet (2000 meters) in length. An average net with 2 buoy lines and 4870 feet (1500 meters) in length would require approximately 100 marks that could be placed in approximately 2.5 hours per vessel. In most years, 12 vessels participate in the shark driftnet fishery, therefore there would be a total of approximately 1200 marks equaling approximately 30 hours of reporting for the entire fishery. After 1999, marks must be renewed as they deteriorate. Annual replacement or repair of gear is anticipated in the shark driftnet fishery, therefore the estimate of marking time given above is likely to reflect the annual reporting burden.

An increase in the gear used or a decrease in the life expectancy of the markings would result in a linear increase in the total hours.

Send comments regarding these burden estimates or any other aspect of the collection of information, including suggestions for reducing the burdens, to NMFS and OMB (see ADDRESSES).

Notwithstanding any other provision of law, no person is required to respond to nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

NMFS prepared an Initial Regulatory Flexibility Analysis that described the impact the proposed rule was expected to have on small entities, but changes to that proposed rule contained in this interim final rule are expected to minimize those impacts. NMFS prepared a Regulatory Impact review for this interim final rule and concluded that a Final Regulatory Flexibility Analysis was unnecessary. NMFS standards for Regulatory Flexibility Analysis determinations are: five percent loss of revenue for 20 percent of the participants; 10 percent increase in

operations costs for 20 percent of the participants; and two percent of participants cease operations.

The need for, and objectives of this interim final rule and a summary of the significant issues are described elsewhere in this preamble. The American lobster pot, New England multispecies sink gillnet, Mid-Atlantic coastal gillnet, and Southeast driftnet fisheries are directly affected by the proposed action and are composed primarily of small business entities. The number of state and Federal permit lobster holders is estimated to be 13,000. The numbers of vessels in the New England multispecies sink gillnet, Mid-Atlantic coastal gillnet, and Southeast shark driftnet fisheries are estimate to be 350, 650, and 12, respectively. However, about 4,500 lobster firms and about 320 gillnet firms will be affected by this interim final rule. This interim final rule includes reporting or recordkeeping requirements, since it requires that fishing gear be marked. It also requires that gear be modified in various ways to reduce potential interactions with large whales. In certain cases, area closures are required. No special skills are required beyond those necessary to conduct the above fishing operations.

Currently, the American Lobster Fishery, the New England Multispecies Fishery, the weakfish and striped bass portion of the mid-Atlantic coastal gillnet fishery, and the Atlantic shark fishery are subject to Federal regulations under 50 CFR Part 649, Subpart F of Part 648, Part 697, and Part 678, respectively. This interim final rule is designed to complement those existing regulations and fishery management objectives by reducing the bycatch of large whales in these fisheries. A variety of regulatory alternatives were considered, including no action, area closures, and various gear modifications and restrictions as discussed above. With respect to some critical habitat areas, area closures are being initiated in order to provide the necessary level of protection for the critically endangered northern right whale. In most cases, however, gear modifications represent the preferred alternative; the plan was designed to achieve the goals of the MMPA while minimizing the economic impact on small entities.

In this interim final rule, NMFS has taken the following steps to minimize the significant economic impact on small entities: (1) It has exempted waters where the risk of entangling right whales is low. This action eliminates any economic cost for a large portion of the coastal lobster industry. (2) It will not require any untested gear to be

deployed. This will eliminate costs for lost gear beyond usual wear and tear. (3) It will not require any expensive gear modifications at this time. NMFS will allow fishermen to choose from a menu of gear characteristics that have been tested in the field and which are thought to be helpful in reducing entanglements. Most of the items currently on the menus represent current best fishing practices, which many fishermen already use. (4) Some possible closures have been eliminated, such as the closure contingent upon the unusual presence of four or more right whales in an area. This will allow fishermen to plan better and will eliminate the potential cost of lost revenue should such a closure have been instituted. (5) It has devised a simpler, quicker and less expensive system for marking gear. Painting line is now allowed, which should minimize the time and cost required to mark gear. A discussion of the reasons for selecting these alternatives and a review of other significant regulatory alternatives can be found in the EA prepared for this action.

As a result of this analysis, NMFS has determined that no Regulatory Flexibility Analysis was required. The costs of the measures required by this interim final rule have been determined to be relatively low on a per firm basis, and none of the NMFS standards for Regulatory Flexibility Analysis determinations are anticipated to be met. Therefore, NMFS believes that this interim final rule will not have a significant impact on a substantial number of small entities.

The Assistant Administrator for Fisheries, NOAA, prepared an environmental assessment (EA) for this interim final rule under the National Environmental Policy Act. The EA concludes that this plan is not likely to have a significant impact on the human environment. In addition, NMFS has prepared a Biological Opinion to review this action for compliance with Section 7 of the Endangered Species Act. The Biological Opinion concludes that implementation of the plan and continued operation of fisheries conducted under the American Lobster and Multispecies Fishery Management Plans and the Southeastern shark gillnet component of the Shark Fishery Management Plan, may adversely affect, but are not likely to jeopardize the continued existence of any species of large whales or sea turtles listed under the Endangered Species Act. A copy of the EA and the Biological Opinion is available upon request (see ADDRESSES).

References

Waring, G.T. *et al.* 1996. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. In preparation.

Team Report. 1997. Draft Atlantic Large Whale Take Reduction Report. Report prepared by the Atlantic Large Whale Take Reduction Team and submitted to the National Marine Fisheries Service February 4, 1997. 79pp.

List of Subjects in 50 CFR Part 229

Administrative practice and procedure, Confidential business information, Fisheries, Marine mammals, Reporting and recordkeeping requirements.

Dated: July 15, 1997.

Rolland Schmitten,

Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 229 is amended to read as follows:

PART 229—AUTHORIZATION FOR COMMERCIAL FISHERIES UNDER THE MARINE MAMMAL PROTECTION ACT OF 1972

1. The authority citation for part 229 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.*

2. In § 229.2, definitions of "American lobster or lobster", "Anchored gillnet", "Assistant Administrator", "Breaking Strength", "Bridle", "Buoy line", "Driftnet, drift gillnet or drift entanglement net", "Fish with or fishing with", "Float-line", "Gillnet", "Groundline", "Inshore lobster waters", "Lead-line", "Lobster pot", "Lobster pot trawl", "Mid-Atlantic coastal waters", "Northeast waters", "Offshore lobster waters", "Operator", "Sink gillnet", "Sinking line", "Southeast waters", "Spotter plane", "Stellwagen Bank/Jeffreys Ledge area", "Strikenet or to fish with strikenet gear", "Tended gear or tend", "U.S. waters", and "Weak link" are added in alphabetical order to read as follows:

§ 229.2 Definitions.

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American lobster or lobster means *Homarus americanus*.

Anchored gillnet means any gillnet gear, including sink gillnets, that is set anywhere in the water column and which is anchored, secured or weighted to the bottom.

Assistant Administrator means the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration.

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Breaking strength means the highest tensile force which an object can withstand before breaking.

Bridle means the lines connecting a gillnet to an anchor or buoy line.

Buoy line means a line connecting fishing gear in the water to a buoy at the surface of the water.

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Driftnet, drift gillnet, or drift entanglement gear means gillnet gear that is not anchored, secured or weighted to the bottom.

Fish with or fishing with means to use, set, or haul back gear or allow gear that is set to remain in the water.

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Float-line means the rope at the top of a gillnet from which the mesh portion of the net is hung.

Gillnet means fishing gear consisting of a wall of webbing or nets, designed or configured so that the webbing or nets are held approximately vertically in the water column designed to capture fish by entanglement, gilling, or wedging. Gillnets include gillnets of all types such as sink gillnets, other anchored gillnets, and drift gillnets.

Groundline, with reference to lobster pot gear, means a line connecting lobster pots in a lobster pot trawl, and, with reference to gillnet gear, means a line connecting a gillnet or gillnet bridle to an anchor or buoy line.

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Inshore Lobster waters means all state and Federal waters between 36°33'00.8"N lat. (the Virginia/North Carolina border) and the U.S./Canada border that is shoreward of the area designated below as "offshore lobster waters."

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Lead-line means the rope, weighted or otherwise, to which the bottom edge of a gillnet is attached.

* * * * *

Lobster pot means any trap, structure or other device that is placed on the ocean bottom and is designed to or is capable of catching lobsters.

Lobster pot trawl means two or more lobster pots attached to a single groundline.

Mid-Atlantic coastal waters means waters bounded by the line defined by the following points: The southern shoreline of Long Island, New York at 72°30'W, then due south to 33°51'N lat., thence west to the North Carolina/South Carolina border.

* * * * *

Northeast waters means those U.S. waters east of 72°30'W and north of 36°33'00.8"N lat. (the Virginia-North Carolina border).

* * * * *

Offshore lobster waters includes all U.S. waters seaward of the following lines except for waters in the Great South Channel critical right whale habitat: Beginning at the international boundary between the U.S. and Canada; thence southerly along the boundary to the LORAN C 9960-Y-44400 line; thence southwesterly along the 44400 line to 70°W long.; thence south along the 70° meridian to the LORAN C 9960-W-13700 line; thence southeasterly to the intersection with the LORAN C 9960-Y-43700 line; thence westerly to the intersection with the LORAN C 9960-W-14610 line; thence southerly along the 14610 line to the intersection with the LORAN C 9960-Y-43700 line; thence southwesterly to the intersection of the LORAN C lines 9960-Y-43500 and 9960-X-26400; thence southerly to the intersection of the LORAN C lines 9960-Y-42600 and 9960-X-26550; thence southerly to the intersection of the LORAN C lines 9960-Y-42300 and 9960-X-26700; thence southerly to the intersection of the LORAN C lines 9960-Y-41600 and 9960-X-26875; thence southerly in a line toward the intersection of LORAN C lines 9960-Y-40600 and 9960-X-26800 but stopping at 36°33'00.8"N lat. (the North Carolina/Virginia border); thence due west to the shore.

Operator, with respect to any vessel, means the master, captain, or other individual in charge of that vessel.

* * * * *

Sink gillnet has the meaning specified in 50 CFR 648.2.

Sinking line means rope that sinks and does not float at any point in the water column. Polypropylene rope is not sinking line unless it contains a lead core.

Southeast waters means waters south of a line extending due eastward from 33°51'N lat. (the North Carolina/South Carolina border).

Spotter plane means a plane that is deployed for the purpose of locating schools of target fish for a fishing vessel that intends to set fishing gear on them.

Stellwagen Bank/Jeffreys Ledge area means all Federal waters in the Gulf of Maine, except those designated as right whale critical habitat, that lie south of the 43°15'N lat. line and west of the 70° W long. line.

* * * * *

Strikenet or to fish with strikenet gear means a gillnet, or a net similar in construction to a gillnet, that is designed so that when it is deployed, it encircles or encloses an area of water either with the net, or by utilizing the

shoreline to complete encirclement, or to fish with such a net and method.

* * * * *

Tended gear or tend means active fishing gear that is physically attached to a vessel or to fish so that active gear is attached to the vessel.

U.S. waters means both state and Federal waters to the outer boundaries of the U.S. exclusive economic zone along the east coast of the United States from the Canadian/U.S. border southward to a line extending eastward from the southernmost tip of Florida on the Florida shore.

* * * * *

Weak link means a breakable device that will part when subject to a certain tension load.

3. In § 229.3, paragraphs (g) through (j) are added to read as follows:

§ 229.3 Prohibitions.

* * * * *

(g) It is prohibited to fish with lobster pot gear in the areas and for the times specified in § 229.32 (c)(4) through (c)(10) unless the lobster pot gear meets the marking requirements specified in § 229.32(c)(1) and complies with the closures, modifications, and restrictions specified in § 229.32 (c)(2) through (c)(10).

(h) It is prohibited to fish with anchored gillnet gear in the areas and for the times specified in § 229.32 (d)(3) through (d)(8) unless that gillnet gear meets the marking requirements specified in § 229.32(d)(1) and complies with the closures, modifications, and restrictions specified in § 229.32 (d)(2) through (d)(8).

(i) It is prohibited to fish with drift gillnets in the areas and for the times specified in § 229.32(e)(2) unless the drift gillnet gear meets the marking requirements specified in § 229.32(e)(1) and complies with the restrictions specified in § 229.32(e)(2).

(j) It is prohibited to fish with shark driftnet gear in the areas and for the times specified in § 229.32(f) (2) and (3) unless the gear meets the marking requirements specified in § 229.32(f)(1) and complies with the restrictions and requirements specified in §§ 229.32 (f)(2) and (f)(3).

4. A new § 229.32 is added to subpart C to read as follows:

Subpart C—Take Reduction Plan Regulations and Emergency Regulations

§ 229.32 Atlantic large whale take reduction plan regulations.

(a)(1) *Regulated waters*. The regulations in this section apply to all U.S. waters except for the areas

exempted in paragraph (a)(2) of this section.

(2) *Exempted waters.* The regulations in this section do not apply to waters landward of the following lines:

Maine and New Hampshire

44° 49.52'N 66° 56.10'W TO 44° 48.90'N 66° 57.00'W

44° 38.60'N 67° 11.50'W TO 44° 36.26'N 67° 15.70'W

44° 36.26'N 67° 15.70'W TO 44° 27.80'N 67° 32.85'W

44° 27.80'N 67° 32.85'W TO 44° 26.48'N 67° 36.00'W

44° 26.48'N 67° 36.00'W TO 44° 21.75'N 67° 51.85'W

44° 21.75'N 67° 51.85'W TO 44° 19.60'N 68° 03.00'W

44° 19.45'N 68° 02.00'W TO 44° 14.40'N 68° 11.55'W

44° 14.15'N 68° 11.90'W TO 44° 13.25'N 68° 20.20'W

44° 13.25'N 68° 20.20'W TO 44° 13.71'N 68° 28.31'W

44° 13.21'N 68° 28.92'W TO 44° 10.48'N 68° 35.80'W

44° 10.48'N 68° 35.80'W TO 44° 08.80'N 68° 40.80'W

44° 08.80'N 68° 40.80'W TO 44° 02.25'N 68° 48.25'W

44° 02.10'N 68° 48.40'W TO 43° 51.75'N 69° 17.10'W

43° 51.75'N 69° 17.10'W TO 43° 48.15'N 69° 35.90'W

43° 48.15'N 69° 35.90'W TO 43° 42.00'N 69° 51.10'W

43° 42.00'N 69° 50.10'W TO 43° 33.47'N 70° 12.35'W

43° 33.47'N 70° 12.35'W TO 43° 21.90'N 70° 24.90'W

Rhode Island

41° 22.41'N 71° 30.80'W TO 41° 22.41'N 71° 30.85'W (Pt. Judith Pond Inlet)

41° 21.31'N 71° 38.30'W TO 41° 21.30'N 71° 38.33'W (Ninigret Pond Inlet)

41° 19.90'N 71° 43.08'W TO 41° 19.90'N 71° 43.10'W (Quonochontaug Pond Inlet)

New York

West of the line from the Northern fork of the eastern end of Long Island, NY (Orient Pt.) to Plum Island to Fisher's Island to Watch Hill, RI. (Long Island Sound)

41° 11.40'N 72° 09.70'W TO 41° 04.50'N 71° 51.60'W (Gardiners Bay)

40° 50.30'N 72° 28.50'W TO 40° 50.36'N 72° 28.67'W (Shinnecock Bay Inlet)

40° 45.70'N 72° 45.15'W TO 40° 45.72'N 72° 45.30'W (Moriches Bay Inlet)

40° 37.32'N 73° 18.40'W TO 40° 38.00'N 73° 18.56'W (Fire Island Inlet)

40° 34.40'N 73° 34.55'W TO 40° 35.08'N 73° 35.22'W (Jones Inlet)

New Jersey

39° 45.90'N 74° 05.90'W TO 39° 45.15'N 74° 06.20'W (Barnegat Inlet)

39° 30.70'N 74° 16.70'W TO 39° 26.30'N 74° 19.75'W (Beach Haven to Brigantine Inlet)

38° 56.20'N 74° 51.70'W TO 38° 56.20'N 74° 51.90'W (Cape May Inlet)

39° 16.70'N 75° 14.60'W TO 39° 11.25'N 75° 23.90'W (Delaware Bay)

Maryland/Virginia

38° 19.48'N 75° 05.10'W TO 38° 19.35'N 75° 05.25'W (Ocean City Inlet)

37° 52.50'N 75° 24.30'W TO 37° 11.90'N 75° 48.30'W (Chincoteague to Ship Shoal Inlet)

37° 11.10'N 75° 49.30'W TO 37° 10.65'N 75° 49.60'W (Little Inlet)

37° 07.00'N 75° 53.75'W TO 37° 05.30'N 75° 56.50'W (Smith Island Inlet)

North Carolina to Florida

All marine and tidal waters landward of the 72 COLREGS demarcation line (International Regulations for Preventing Collisions at Sea, 1972), as depicted or noted on nautical charts published by the National Oceanic and Atmospheric Administration (Coast Charts 1:80,000 scale), and as described in 33 CFR part 80.

(b) *Gear marking provisions*—(1) *Gear marking required for specified gear*—(i) *Specified gear.* Specified fishing gear consists of lobster pot gear in inshore and offshore lobster waters, anchored gillnet gear in northeast waters and in mid-Atlantic coastal waters; drift gillnet gear in mid-Atlantic coastal waters; and shark driftnet gear in southeast waters.

(ii) *Requirement.* From January 1, 1998, and as otherwise required in paragraphs (c)(1), (d)(1), (e)(1), and (f)(1) of this section, any person who owns or fishes with specified fishing gear must mark that gear as specified in paragraphs (b)(2) and (b)(3) of this section, unless otherwise required by the Assistant Administrator under paragraph (g) of this section.

(2) *Color code.* Gear must be marked as specified with the appropriate colors to designate gear-types as follows:

Lobster pot gear in inshore lobster waters—red and green

Lobster pot gear in offshore lobster waters—red and blue

Anchored gillnet gear in northeast waters—green and yellow

Anchored gillnet gear in mid-Atlantic waters—green and black

Mid-Atlantic driftnet gear—blue and yellow

Shark driftnet gear—blue and black

(3) *Markings.* Each color of the color codes must be permanently marked on or along the line or lines specified under paragraphs (c)(1), (d)(1), (e)(1), and (f)(1) of this section. Each color mark of the color codes must be clearly visible when the gear is hauled or removed from the water. Each mark must be at least 4 inches (10.2 cm) long. The two color marks must be placed within 6 inches (15.2 cm) of each other. (For example, buoy lines of inshore lobster pot gear must have a red mark and a green mark, each at least 4 inches long, with the red and green marks placed within 6 inches of each other.) If the color of the rope is the same or similar to a color code, a white mark may be substituted for that color code. In marking or affixing the

color code or associated neutral band, the line may be dyed, painted, or marked with thin colored whipping line, thin colored plastic or heat shrink tubing, or other material, or thin line may be woven into or through the line, or the line may be marked as approved in writing by the Assistant Administrator. If the Assistant Administrator revises the gear marking requirements under paragraph (g) of this section, the gear must be marked in compliance with those requirements.

(c) *Restrictions applicable to lobster pot gear in regulated waters*—(1) *Gear marking requirements.* No person may fish with lobster pot gear in regulated waters unless that gear is marked by gear type and region according to the gear marking code specified under paragraph (b) of this section. From January 1, 1998, all buoy lines used in connection with lobster pot gear must be marked within 2 ft (0.6 m) of the top of the buoy line (or 2 ft below a weak link) and midway along the length of the buoy line.

(2) *No line floating at the surface.* No person may fish with lobster pot gear that has any portion of the buoy line floating at the surface at any time, except that, if there are more than one buoy attached to a single buoy line or if there are a high flyer and a buoy used together on a single buoy line, floating line may be used between these objects.

(3) *No wet storage of gear.* No person may leave lobster pot gear in the water without hauling it out of the water at least once in 30 days.

(4) *Cape Cod Bay Restricted area.*—(i) *Area.* The Cape Cod Bay restricted area consists of the Cape Cod Bay Critical Habitat area specified under 50 CFR 216.13(b), unless the Assistant Administrator extends that area in accordance with paragraph (g) of this section.

(ii) *Winter restricted period.* The winter restricted period for this area is from January 1 through May 15 of each year, unless the Assistant Administrator revises the restricted period in accordance with paragraph (g) of this section. The Assistant Administrator may waive the restrictions of these paragraphs through a document in the **Federal Register** if it is determined that right whales have left the critical habitat and are unlikely to return for the remainder of the winter restricted period. During the winter restricted period, no person may fish with lobster pot gear in the Cape Cod Bay Restricted Area unless that person's gear complies with the following requirements:

(A) *Weak links.* All buoy lines are attached to the buoy with a weak link.

The breaking strength of this weak link must be no more than 1100 lb;

(B) *Multiple pot trawls.* All pots are set in trawls of four or more pots. Single pots and two or three pot trawls are not allowed.

(C) *Sinking buoy lines.* All buoy lines are sinking line except the bottom portion of the line, which may be a section of floating line not to exceed 1/3 the overall length of the buoy line.

(D) *Sinking ground line.* All ground lines are made entirely of sinking line.

(iii) *Other restricted period.* From May 16 through December 31 of each year, no person may fish with lobster pot gear in the Cape Cod Bay Restricted Area unless that person's gear complies with at least two of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this restricted period in accordance with paragraph (g) of this section.

(5) *Great South Channel Restricted Lobster Area.*—(i) *Area.* The Great South Channel restricted area consists of the Great South Channel Critical Habitat area specified under 50 CFR 216.13(a) unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section.

(ii) *Spring closed period.* The spring closed period for this area is from April 1 through June 30 of each year unless the Assistant Administrator revises the closed period in accordance with paragraph (g) of this section. During the spring closed period, no person may fish with or set lobster pot gear in the Great South Channel restricted lobster area unless the Assistant Administrator specifies gear modifications or alternative fishing practices in accordance with paragraph (g) of this section and the gear or practices comply with those specifications.

(iii) *Other restricted period.* From July 1 through March 31 no person may fish with lobster pot gear in the Great South Channel Restricted Lobster Area unless that person's gear complies with at least two of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this restricted period in accordance with paragraph (g) of this section.

(6) *Stellwagen Bank/Jeffreys Ledge Restricted Area.*—(i) *Area.* The Stellwagen Bank/Jeffreys Ledge restricted area consists of all Federal waters of the Gulf of Maine that lie to the south of the 43°15'N lat. line and west of the 70° W long. line, except for right whale critical habitat, unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section.

(ii) *Gear Requirements.* No person may fish with lobster pot gear in the Stellwagen Bank/Jeffreys Ledge Restricted Area unless that person's gear complies with at least two of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this requirement in accordance with paragraph (g) of this section.

(7) *Northern offshore lobster waters.*—

(i) *Area.* The northern offshore waters area includes all offshore lobster waters north of 41°30'N lat., except for areas included in the Great South Channel Critical Habitat.

(ii) *Gear requirements.* No person may fish with lobster pot gear in the northern offshore lobster waters area unless that person's gear complies with at least one of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this requirement in accordance with paragraph (g) of this section.

(8) *Southern offshore lobster waters.*—

(i) *Area.* The southern offshore waters area includes all offshore lobster waters south of 41°30'N lat., except for areas included in the Great South Channel Critical Habitat.

(ii) *Gear requirements.* From December 1 through March 31, no person may fish with lobster pot gear in the southern offshore lobster waters area unless that person's gear complies with at least one of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this requirement in accordance with paragraph (g) of this section.

(9) *Northern inshore lobster waters.*—

(i) *Area.* Northern inshore lobster waters consist of all inshore lobster waters north of 41°30'N lat., except the Cape Cod Bay restricted area, Great South Channel restricted area and the Stellwagen Bank/Jeffreys Ledge restricted area.

(ii) *Gear requirements.* No person may fish with lobster pot gear in the northern inshore lobster waters area unless that person's gear complies with at least one of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this requirement in accordance with paragraph (g) of this section.

(10) *Southern inshore lobster waters.*—(i) *Area.* The southern inshore

lobster waters consist of all inshore lobster waters south of 41°30'N lat., except the Great South Channel restricted area.

(ii) *Gear requirements.* From December 1 through March 31, no person may fish with lobster pot gear in the southern inshore lobster waters area unless that person's gear complies with at least one of the characteristics of the Lobster Take Reduction Technology List in paragraph (c)(11) of this section. The Assistant Administrator may revise this requirement in accordance with paragraph (g) of this section.

(11) *Lobster Take Reduction Technology List.* The following gear characteristics comprise the Lobster Take Reduction Technology List:

(i) All buoy lines are 7/16 inches in diameter or less.

(ii) All buoys are attached to the buoy line with a weak link having a maximum breaking strength of up to 1100 lb. Weak links may include swivels, plastic weak links, rope of appropriate diameter, hog rings, rope stapled to a buoy stick, or other materials or devices approved in writing by the Assistant Administrator.

(iii) For gear set in offshore lobster areas only, all buoys are attached to the buoy line with a weak link having a maximum breaking strength of up to 3780 lb.

(iv) For gear set in offshore lobster areas only, all buoys are attached to the buoy line by a section of rope no more than 3/4 the diameter of the buoy line.

(v) All buoy lines are composed entirely of sinking line.

(vi) All ground lines are made of sinking line.

(d) *Restrictions applicable to anchored gillnet gear in regulated waters.*—(1) *Marking requirements.* No person may fish with anchored gillnet gear in northeast or mid-Atlantic waters unless that gear is marked according to the gear marking code specified under paragraph (b) of this section. From January 1, 1998, all buoy lines used in connection with anchored gillnets must be marked within 2 ft (0.6 m) of the top of the buoy line (or two ft below a weak link) and midway along the length of the buoy line.

(2) *No line floating at the surface.* No person may fish with anchored gillnet gear that has any portion of the buoy line floating at the surface at any time, except that, if there are more than one buoy attached to a single buoy line or if there are a high flyer and a buoy used together on a single buoy line, floating line may be used between these objects.

(3) *Cape Cod Bay restricted area.*—(i) *Area.* The Cape Cod Bay restricted area consists of the Cape Cod Bay Critical Habitat area specified under 50 CFR 216.13(b), unless the Assistant Administrator extends that area under paragraph (g) of this section.

(ii) *Winter restricted period.* The winter restricted period for this area is from January 1 through May 15 of each year, unless the Assistant Administrator revises the restricted period under paragraph (g) of this section. During the winter restricted period, no person may fish with anchored gillnet gear in the Cape Cod Bay restricted area unless the Assistant Administrator specifies gear modifications or alternative fishing practices under paragraph (g) of this section and the gear or practices comply with those specifications. The Assistant Administrator may waive this closure for the remaining portion of any year through a notification in the **Federal Register** if NMFS determines that right whales have left the critical habitat and are unlikely to return for the remainder of the season.

(iii) *Other restricted period.* From May 16 through December 31 of each year, no person may fish with anchored gillnet gear in the Cape Cod Bay Restricted Area unless that person's gear complies with at least two of the characteristics of the Gillnet Take Reduction Technology List in paragraph (d)(9) of this section. The Assistant Administrator may revise this restricted period in accordance with paragraph (g) of this section.

(4) *Great South Channel restricted gillnet area*—(i) *Area.* The Great South Channel restricted gillnet area consists of the area bounded by lines connecting the following four points: 41°02.2' N/69°02' W., 41°43.5' N/69°36.3' W., 42°10' N/68°31' W., and 41°38' N/68°13' W., unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section. This area includes the Great South Channel critical habitat area specified under 50 CFR 216.13(a), except for the "sliver area" identified below.

(ii) *Spring closed period.* The spring closed period for this area is from April 1 through June 30 of each year unless the Assistant Administrator revises the closed period in accordance with paragraph (g) of this section. During the spring closed period, no person may set or fish with anchored gillnet gear in the Great South Channel restricted gillnet area unless the Assistant Administrator specifies gear modifications or alternative fishing practices in accordance with paragraph (g) of this section and the gear or practices comply with those specifications.

(iii) *Other restricted period.* From July 1 through March 31 no person may fish with lobster pot gear in the Great South Channel restricted gillnet area unless that person's gear complies with at least two of the characteristics of the Gillnet Take Reduction Technology List in

paragraph (d)(9) of this section. The Assistant Administrator may revise this restricted period in accordance with paragraph (g) of this section.

(5) *Great South Channel sliver restricted area*—(i) *Area.* The Great South Channel sliver restricted area consists of the area bounded by lines connecting the following points: 41°02.2' N/69°02' W., 41°43.5' N/69°36.3' W., 41°40' N/69°45' W., and 41°00' N/69°05' W., unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section.

(ii) *Gear requirements.* No person may fish with anchored gillnet gear in the Great South Channel sliver restricted area unless that person's gear complies with at least two of the characteristics of the Gillnet Take Reduction Technology List in paragraph (d)(9) of this section. The Assistant Administrator may revise these requirements in accordance with paragraph (g) of this section.

(6) *Stellwagen Bank/Jeffreys Ledge restricted area*—(i) *Area.* The Stellwagen Bank/Jeffreys Ledge restricted area consists of all Federal waters of the Gulf of Maine that lie to the south of the 43°15' N. lat. line and west of the 70° W long. line, except right whale critical habitat, unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section.

(ii) *Gear requirements.* No person may fish with anchored gillnet gear in the Stellwagen Bank/Jeffreys Ledge restricted area unless that person's gear complies with at least two of the characteristics of the Gillnet Take Reduction Technology List in paragraph (d)(9) of this section. The Assistant Administrator may revise these requirements in accordance with paragraph (g) of this section.

(7) *Other northeast waters area*—(i) *Area.* The other northeast waters area consists of all northeast waters except for the Cape Cod Bay restricted area, the Great South Channel restricted gillnet area and Great South Channel sliver restricted areas and the Stellwagen Bank/Jeffreys Ledge restricted area.

(ii) *Gear requirements.* No person may fish with anchored gillnet gear in the other northeast waters area unless that person's gear complies with at least one of the characteristics of the Gillnet Take Reduction Technology List in paragraph (d)(9) of this section. The Assistant Administrator may revise these requirements in accordance with paragraph (g) of this section.

(8) *Mid-Atlantic coastal waters area.*—(i) *Area.* The mid-Atlantic coastal waters area is defined in § 229.2.

(ii) *Gear requirements.* From December 1 through March 31, no person may fish with anchored gillnets in mid-Atlantic coastal waters area unless that person's gear complies with at least one of the characteristics of the Gillnet Take Reduction Technology List in paragraph (d)(9) of this section. The Assistant Administrator may revise these requirements in accordance with paragraph (g) of this section.

(9) *Gillnet Take Reduction Technology List.* The following gear characteristics comprise the Gillnet Take Reduction Technology List:

(i) All buoy lines are $\frac{7}{16}$ inches in diameter or less.

(ii) All buoys are attached to the buoy line with a weak link having a maximum breaking strength of up to 1100 lb. Weak links may include swivels, plastic weak links, rope of appropriate diameter, hog rings, rope stapled to a buoy stick, or other materials or devices approved in writing by the Assistant Administrator.

(iii) Gear is anchored with the holding power of a 22 lb. danforth-style anchor at each end.

(iv) Gear is anchored with a 50 lb dead weight at each end.

(v) Nets are attached to a lead line weighing 100 lb or more per 300 feet.

(vi) Weak links with a breaking strength of up to 1100 lb are installed in the float rope between net panels.

(vii) All buoy lines are composed entirely of sinking line.

(e) *Restrictions applicable to mid-Atlantic driftnet gear.*—(1) *Gear marking requirements.* No person may fish in mid-Atlantic coastal waters with drift gillnet gear unless that gear is marked by gear type and region according to the gear marking code specified under paragraph (b) of this section. From January 1, 1998, all buoy lines used in connection with driftnet gear in the mid-Atlantic must be marked within 2 ft (0.6 m) of the top of the buoy line and midway along the length of the buoy line according to gear type and region.

(2) *Restrictions.* From January 1, 1998, during the winter/spring restricted period, no person may fish at night with driftnet gear in the mid-Atlantic coastal waters area unless that gear is tended. Before a vessel returns to port, all driftnet gear set by that vessel in the mid-Atlantic coastal waters area must be removed from the water and stowed on board the vessel. The winter/spring restricted period for this area is from December 1 through March 31 unless the Assistant Administrator revises that restricted period in accordance with paragraph (g) of this section.

(f) *Restrictions applicable to shark driftnet gear.*—(1) *Gear marking*

requirements. No person may fish with drift gillnet gear in southeast waters unless that gear is marked according to the gear marking code specified under paragraph (b) of this section. From November 1, 1998, all buoy lines must be marked within 2 ft (0.6 m) of the top of the buoy line and midway along the length of the buoy line. From November 1, 1999, each net panel must be marked along both the float line and the lead line at least once every 100 feet (30.8 m).

(2) *Management areas.*—(i) *SEUS restricted area.* The southeast U.S. restricted area consists of the area from 32°00' N lat. (near Savannah, GA) south to 27°51' N lat. (near Sebastian Inlet, FL), extending from the shore eastward to 80°00' W long., unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section.

(ii) *SEUS observer area.* The SEUS observer area consists of the SEUS restricted area and an additional area along the coast south to 26°46.5' N lat. (near West Palm Beach, FL) and extending from the shore eastward out to 80°00' W long., unless the Assistant Administrator changes that area in accordance with paragraph (g) of this section.

(3) *Restrictions.*—(i) *Closure.* Except as provided under paragraph (f)(3)(iii) of this section, no person may fish with driftnet gear in the SEUS restricted area during the closed period. The closed period for this area is from November 1 through March 31 of the following year, unless the Assistant Administrator changes that closed period in accordance with paragraph (g) of this section.

(ii) *Observer requirement.* No person may fish with driftnet gear in the SEUS observer area from November 1 through March 31 of the following year unless the operator of the vessel calls the SE Regional Office in St. Petersburg, FL, not less than 48 hours prior to departing on any fishing trip in order to arrange for observer coverage. If the Regional Office requests that an observer be taken on board a vessel during a fishing trip at any time from November 1 through March 31 of the following year, no person may fish with driftnet gear aboard that vessel in the SEUS observer area unless an observer is on board that vessel during the trip.

(iii) *Special provision for strikenets.* Fishing with strikenet gear is exempt from the restriction under paragraph (e)(3)(i) of this section if:

(A) No nets are set at night or when visibility is less than 500 yards (460 m).

(B) Each set is made under the observation of a spotter plane.

(C) No net is set within 3 nautical miles of a right, humpback, or fin whale.

(D) If a right, humpback or fin whale moves within 3 nautical miles of the set gear, the gear is removed immediately from the water.

(g) *Other provisions.* In addition to any other emergency authority under the Marine Mammal Protection Act, the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, or other appropriate authority, the Assistant administrator may take action under this section in the following situations:

(1) *Entanglements in critical habitat.* If a serious injury or mortality of a right whale occurs in the Cape Cod Bay critical habitat from January 1 through May 15, in the Great South Channel

restricted areas from April 1 through June 30, or in the SEUS restricted area from November 1 through March 31 as a result of an entanglement by gear types allowed to be used in those areas and times, the Assistant Administrator shall close that area to that gear type for the rest of that time period and for that same time period in each subsequent year, unless the Assistant Administrator revises the restricted period in accordance with paragraph (g)(2) of this section or unless other measures are implemented under paragraph (g)(2) of this section.

(2) *Other special measures.* The Assistant Administrator may revise the requirements of this section through publication of a rule in the **Federal Register** if:

(i) NMFS verifies that certain gear characteristics are both operationally effective and reduce serious injuries and mortalities of endangered whales;

(ii) New gear technology is developed and determined to be appropriate;

(iii) Revised breaking strengths are determined to be appropriate;

(iv) New marking systems are developed and determined to be appropriate;

(v) NMFS determines that right whales are remaining longer than expected in a closed area or have left earlier than expected;

(vi) NMFS determines that the boundaries of a closed area are not appropriate;

(vii) Gear testing operations are considered appropriate; or

(viii) Similar situations occur.

[FR Doc. 97-18997 Filed 7-21-97; 8:45 am]

BILLING CODE 3510-22-P