

**REGULATORY ALTERNATIVES****CHAPTER 3**

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The Atlantic Large Whale Take Reduction Plan (ALWTRP) includes a combination of fishing gear modifications and time/area closures to reduce the risk that whales will be killed or seriously injured as a result of entanglement in commercial fishing gear. The nature of the gear modification requirements varies by location and time of year, maximizing reduction in entanglement risk based on whale movements. NMFS complements these gear modification requirements with prohibitions on fishing at times and in places where whale aggregations are greatest, and therefore entanglement risk may be particularly high.

NMFS is considering various alternatives for modifying existing ALWTRP requirements. The alternatives under consideration seek to reduce large whale entanglement by increased traps per trawl, requiring gear marking and the use of weak links and/or vertical lines of lower breaking strength. These changes are designed to address ongoing right, humpback, and fin whale entanglements resulting in serious injury or mortality. The measures under consideration are designed to address entanglement risk posed by fisheries in U.S. waters; however, NMFS recognizes that entanglement risks occur throughout the range of these species. NMFS will continue to work with the Government of Canada toward the development of similar protective measures for large whales in Canadian waters.

NMFS has identified a preferred alternative (Alternative 5) from those considered. Below, we describe the regulatory alternatives under consideration (Section 3.1). We then discuss the alternatives that NMFS has considered but rejected (Section 3.2).

**3.1 ALTERNATIVES CONSIDERED**

NMFS has identified six regulatory alternatives for consideration and has identified a preferred alternative (Alternative 5) from those considered. The requirements under these alternatives supplement existing ALWTRP requirements, unless otherwise noted. The alternatives introduce new gear restrictions for fisheries already included under the ALWTRP. NMFS also proposes adding new gear marking requirements and making regulatory language changes that would apply across all the alternatives, with the exception of the No Action Alternative (Alternative 1).

The alternatives examined in this DEIS are the product of extensive outreach conducted by NMFS. In response to the continued risk of serious injury or mortality of large whales from entanglement in commercial fishing gear, NMFS determined that additional modifications to the ALWTRP were warranted. Therefore, the ALWTRT was asked by NMFS to consider and develop additional options for addressing incidental interactions between commercial fisheries and large whales. Particular emphasis was placed on those options designed to reduce the potential for entanglements and minimize adverse impacts if entanglements occur.

In 2009, the ALWTRT agreed on a schedule to develop conservation measures for reducing the risk of serious injury and mortality of large whales that become entangled in vertical lines. As provided in the schedule, NMFS committed to publishing a final rule to address vertical line entanglement by 2014. Unlike the broad-scale management approach taken to address entanglement risks associated with groundlines, the approach for the vertical line rulemaking will focus on reducing the risk of vertical line entanglements in finer-scale high impact areas. Using fishing gear characterization data and whale sightings per unit effort (SPUE) data, NMFS developed a model to determine the co-occurrence of fishing gear density and whale density to serve as a guide in the identification of these high risk areas.

NMFS convened a meeting of the ALWTRT's Northeast Subgroup and the Mid-Atlantic/Southeast Subgroup in November 2010 and April 2011, respectively. The subgroups reviewed the co-occurrence model and discussed its implications toward the overall vertical line management strategy. The ALWTRT agreed that NMFS should use the model to develop suites of conservation measures that would ultimately serve as options for the ALWTRT to consider when identifying management alternatives for the EIS. The conservation measures would address vertical line fishery interactions with large whales by reducing the potential for entanglements and minimizing adverse effects if entanglements occur. The results of the model showed that the trap/pot industry accounts for a larger number of vertical line in the water column than the gillnet industry. Therefore the proposed gear modifications and setting requirements target just the trap/pot industry; although, the proposed gear marking scheme would affect both industries.

On June 14, 2011, NMFS published a Notice of Intent (NOI) in the *Federal Register* to announce the agency's intent to prepare an Environmental Impact Statement (EIS) (76 FR 34654). In the NOI, NMFS requested comments and announced multiple public scoping meetings along the east coast to solicit comments on the range of issues to be considered during the preparation of the EIS. In addition to public scoping meetings NMFS solicited proposals from stakeholder groups on where, when, and how to achieve vertical line risk reduction based on the output of the co-occurrence model.

These stakeholder proposals were then presented to the ALWTRT at a January 2012 Full Team meeting. Each proposal was analyzed to determine the level of vertical line and co-occurrence reduction that would be achieved as a result of the proposed measures. The Alternatives are based upon information gathered during public scoping meetings, TRT meetings, and through our state partners. Stakeholders also submitted Vertical Line Risk Reduction Proposals, and the alternatives incorporated some portions of these proposals.

Exhibit 3-1 summarizes the key gear components of the proposed alternatives, arranging the requirements by lobster management area and geographic region (where appropriate). The discussion below describes each alternative in greater detail, highlighting the differences among alternatives as well as their similarities.

**Exhibit 3-1**  
**PROPOSED ALWTRP MANAGEMENT ALTERNATIVES 2-6**  
**(Requirements in addition to current ALWTRP requirements (i.e., No Action alternative))**

Location	Component	Alternative 2***	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Northeast Region (Proposed Management measures include increasing the number of traps/trawl and/or closures and gear marking)</b>						
Maine State waters		2 to 4	2	= Alt. 2	= Alt. 3	= Alt. 3
Maine (3-12 mile)		5 or 10	-----	= Alt. 2	= Alt. 3	= Alt. 3
Maine (12+ mile)		10 or 20	15	= Alt. 2	= Alt. 3	= Alt. 3
Maine (3-6 mile)		-----	3	= Alt. 2	= Alt. 3	= Alt. 3
Maine (6-12 mile)		-----	5 or 10	= Alt. 2	= Alt. 3	= Alt. 3
MA State Waters		3	= Alt. 2	= Alt. 2	= Alt. 2	2
NH State Waters		3	Exempt	= Alt. 2	= Alt. 3	= Alt. 3
LMA 1 (0-3 mile)		3	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
LMA 1 (3-12 mile)		10	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
LMA 1 (12+ mile)		20	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
LMA1/OC overlap (0-3 mile)		2	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
OC (0-3 mile)		2	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
OC (3-12 mile)		10	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
OC (12+ mile)		20	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
LMA 2 (0-3 mile)		3	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
LMA 2 (3-12 mile)		10	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
LMA 2 (12+ mile)		20	15	= Alt. 2	= Alt. 3	= Alt. 3
LMA 2/3 Overlap (12+mile)		20	= Alt. 2	= Alt. 2	=Alt. 2	=Alt. 2
LMA 3 (3-		10	= Alt. 2	= Alt. 2	=Alt. 2	=Alt. 2

Location	Component	Alternative 2***	Alternative 3	Alternative 4	Alternative 5	Alternative 6
12 mile)						
LMA 3 (12+ mile)		20	= Alt. 2	= Alt. 2	=Alt. 2	=Alt. 2
<i>Closure Areas</i>						
Jordan Basin (LMA 3, 12+ mile)		20	20	Closed Nov. 1- Jan. 31**	Closed Nov. 1- Jan. 31**	20
Jeffreys Ledge (LMA 1, 3-12+ mile)		10 or 20	10 or 20	Closed Oct. 1- Jan 31 **	Closed Oct. 1- Jan 31**	10 or 20
Cape Cod Bay (LMA 1, 3-12+ mile)		10 or 20	Closed Feb 1- April 30 **	Closed Jan 1- April 30** (includes portion of OC and abuts GSC)	Closed Jan 1- April 30** (includes portion of OC and abuts GSC)	Closed Jan 1- April 30** (includes portion of OC)
<b>Mid-Atlantic Region</b>						
New York, New Jersey, Delaware, Maryland, Virginia, North Carolina		Gear Mark/Monitor	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
<b>Southeast Region (Measures would apply in the area defined as Southeast US Restricted Area North)</b>						
Florida State waters	Weak links	≤ 200 lbs	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
	Vertical Line	Breaking strength ≤ 1,500 lbs, must be sinking line and free of objects	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
	Other	Must use one buoy line with one trap, gear mark	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
Georgia State waters	Weak Links	≤ 600 lbs	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
	Vertical Line	Breaking strength ≤ 2,200 lbs, must be sinking line and free of objects	= Alt. 2	= Alt. 2		= Alt. 2
	Other	Must use one buoy line with one trap, gear mark	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
South Carolina State waters	Weak links	≤ 600 lbs	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
	Vertical Line	Breaking strength ≤ 2,200 lbs, must be sinking line	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2

Location	Component	Alternative 2***	Alternative 3	Alternative 4	Alternative 5	Alternative 6
		and free of objects				
	Other	Must use one buoy line with one trap, gear mark	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
Federal waters	Weak links	Status Quo	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
	Vertical Line	Must be sinking line and free of objects	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
	Other	Must use one buoy line with one trap, gear mark, bring gear back to shore at conclusion of trip	= Alt. 2	= Alt. 2	= Alt. 2	= Alt. 2
<p>** all fisheries (gillnet and trap/pot)</p> <p>*** trawls with 5 or less traps will have 1 endline. 'Or' is based on Maine Zone</p> <p>OC = Outer Cape</p> <p>GSC = Great South Channel</p>						

### 3.1.1 Non-Regulatory Components

NMFS will pursue a number of non-regulatory actions outside of the proposed rulemaking described here. Continued outreach and enforcement efforts are necessary to ensure that fishermen understand the regulations and to improve compliance. In addition to continued and enhanced outreach and enforcement, NMFS will continue to request that their state partners provide gear characterization reports on an annual basis. This will allow NMFS to continue to monitor the amount, location, and type of gear in the water. This will be important so that NMFS can monitor what effects, if any, the action has on fishing effort.

### 3.1.2 Alternative 1: No Action Alternative

Under Alternative 1, NMFS would continue with the status quo, i.e., the baseline set of ALWTRP requirements currently in place. A description of the current requirements can be found in Chapter 2.

Exhibit 3-2 summarizes the current and proposed gear marking scheme.

Exhibits 3-3 and 3-4 present the current management areas for trap/pot and gillnet fisheries.

### 3.1.3 Alternative 2

Alternative 2 would modify the ALWTRP in a number of ways varying by region.

#### *Northeast Region:*

- Increase the number of traps per trawl based on area fished and miles fished from shore [(0-3), (3-12), and (12+)] within current lobster management areas (Exhibit 3-4).
  - Maine waters are managed based on zone and the proposed number of traps per trawl differ based on Maine zone.

#### *Southeast Region:*

- Propose to use a current gillnet area boundary as the boundary for new trap/pot management area (Exhibit 3-5).
- In state waters traps must be set with one buoy line and not multiple-trap trawls. The breaking strength of the weak link between the buoy and vertical line does not exceed 600 lbs (Georgia/South Carolina) and 200 lbs (Florida). The breaking strength of the vertical line would not exceed 1,500 lbs. The whole buoy/vertical line (from trap/pot to buoy) should be the same diameter and free of objects (i.e.

knot-free, splice-free, etc.) and the buoy/vertical line must be made of sinking line.

- In Federal waters must be set with one buoy line with one trap and not multiple-trap trawls. Trap/pot gear must be brought back to shore at the conclusion of each trip. The whole buoy/vertical line (from trap/pot to buoy) should be the same diameter and free of objects (i.e. knot-free, splice-free, etc.) and is made of sinking line.

*Coastwide:*

- Robust gear marking. See Section 3.1.7 for description of the proposed gear marking scheme.
- Regulatory language changes to better define and clarify previously implemented requirements. See Exhibit 3-6 for description of language changes.

### 3.1.4 Alternative 3

*Northeast Region:*

- A combination of NMFS proposed traps per trawl (Exhibit 3-5) and ideas from our State partners.
  - Maine Department of Marine Resources provided a proposal for traps per trawl based on Maine zones and distance from shore that differ from NMFS [(0-3), (3-6), (6-12), and (12+)] (Exhibit 3-7).
  - Massachusetts Division of Marine Fisheries proposed a closure in the Cape Cod Bay Critical Habitat area for all trap/pot and gillnet fisheries from February 1 through April 30<sup>th</sup>.
  - Rhode Island Department of Environmental Management requested a minimum 15 trap per trawl requirement in LMA 2 (12+) as opposed to NMFS' 20 trap per trawl limit.
  - New Hampshire Department of Fish and Game requested that New Hampshire state waters be exempt from the proposed trap per trawl limits (Exhibit 3-8) and all current requirements under the Plan.
  - NMFS proposal (Alternative 2) is in effect in all waters and times of year that are not covered by the State proposals.

*Southeast Region:* Alternative 2 measures apply.

*Coastwide:* Alternative 2 gear marking scheme and regulatory language changes apply.

### 3.1.5 Alternative 4

*Northeast Region:*

- The same as Alternative 2 with the addition of closures in certain areas as proposed by the Conservation/Scientist stakeholder group.
- Three closures for all trap/pot and gillnet fisheries are included in this proposal (Exhibit 3-9):
  - Jordan's Basin (Nov 1 to Jan 31)
  - Jeffreys Ledge (Oct 1 to Jan 31)
  - Massachusetts Restricted Area #1: Area of Cape Cod Bay and Outer Cape to Great South Channel (Jan 1 to April 30)
- NMFS proposal (Alternative 2) is in effect in all waters and times of year that are not covered by the closures.

*Southeast Region:* Alternative 2 measures apply.

*Coastwide:* Alternative 2 gear marking scheme and regulatory language changes apply.

### 3.1.6 Alternative 5 (Preferred)

*Northeast Region:*

- Alternative 5 is a combination of Alternatives 3 and 4. Where the proposed Cape Cod Bay Critical Habitat and Massachusetts Restricted Area #1 closures overlap, the larger closure (Massachusetts Restricted Area #1) in time and area is proposed.
- NMFS proposal (Alternative 2) is in effect in all waters and times of year that are not covered by the state proposals or closures.

*Southeast Region:* Alternative 2 measures apply.

*Coastwide:* Alternative 2 gear marking scheme and regulatory language changes apply.

### 3.1.7 Alternative 6

*Northeast Region:*

- Alternative 6 is similar to Alternative 5 but only includes one of the three closures proposed in Alternative 5 and it is a smaller area than proposed in previous Alternatives (i.e., Massachusetts Restricted Area #2: Cape Cod Bay and Outer Cape Area instead of Cape Cod Critical Habitat or Massachusetts Restricted Area #1).
- NMFS proposal (Alternative 2) is in effect in all waters and times of year that are not covered by the closures.
- NMFS proposal is modified in all Massachusetts state waters to include trawling up to 2 traps per trawl.

*Southeast Region:* Alternative 2 measures apply.

*Coastwide:* Alternative 2 gear marking scheme and regulatory language changes apply.

### 3.1.8 Proposed Gear Marking Scheme

The current gear marking strategy (implemented in 1997) is inadequate and should be improved. From 1997-2008 there were 364 large whale entanglement events. Gear was retrieved in 129 of these cases; of the cases where gear was retrieved, gear marking led to 36 cases where fishery, location, and date were known. A stronger gear marking strategy would help answer questions such as when and where entanglements occur. Current regulations require one 4" colored mark midway along the buoy line and surface buoys to identify the vessel or fishery. Colors correspond to specific ALWTRP management areas.

The proposed gear marking scheme would maintain the current color combinations but increase the size and frequency of the mark. The new mark must equal 12” in length and buoy lines must be marked three times (top, middle, bottom). A mark for the Maine exempted waters would be also required. A mark for the new Southeast US Restricted Area North would be required for both state and Federal water. This proposal would continue to allow multiple methods for marking line (paint, tape, rope, etc).

The table below outlines the proposed gear marking colors. The line must be marked three times and each mark must total 12” in length. If the mark consists of two colors then each color mark can be 6” for a total mark of 12”.

**Exhibit 3-2  
PROPOSED GEAR MARKING**

<b>ALWTRP Mgmt Area</b>	<b>***Lobster Mgmt Area</b>	<b>Color</b>
<i>Trap/Pot gear</i>		
Cape Cod Bay Restricted Area	LMA1	Red
Northern Nearshore	LMA1, LMA2, and Outer Cape	Red
Northern Inshore State	LMA1, LMA 2, LMA 2/3, and Outer Cape	Red
Stellwagen Bank/Jeffreys Ledge Restricted Area	LMA1	Red
Great South Channel Restricted Area overlapping with LMA 2 and/or Outer Cape	LMA2 and Outer Cape	Red
Southern Nearshore	LMA 4, LMA 5, LMA 6	Orange
Southeast US Restricted Area North*	State Waters	Blue and Orange
Southeast US Restricted Area North*	Federal Waters	Green and Orange
Offshore	LMA 2/3 and LMA 3	Black
Great South Channel Restricted Area overlapping with LMA 2/3 and/or LMA 3	LMA 2/3 and LMA 3	Black
New Hampshire* and Maine** Exemption Area	LMA 1	Red and Blue

ALWTRP Mgmt Area	***Lobster Mgmt Area	Color
<i>Gillnet gear excluding shark gillnet</i>		
Cape Cod Bay Restricted Area	-----	Green
Stellwagen Bank/Jeffreys Ledge Restricted Area	-----	Green
Great South Channel Restricted Area	-----	Green
Great South Channel Sliver Restricted Area	-----	Green
Other Northeast gillnet waters	-----	Green
New Hampshire* and Maine** Exemption Area	-----	Red and Blue
Mid/South Atlantic Gillnet waters	-----	Blue
Southeast US Restricted Area South	-----	Yellow
Other Southeast Gillnet waters	-----	Yellow
<i>Shark Gillnet (with webbing of 5" or greater)</i>		
Southeast US Restricted Area South	-----	Green and Blue
Southeast Monitoring Area	-----	Green and Blue
Other Southeast Waters	-----	Green and Blue

\* New trap/pot management area

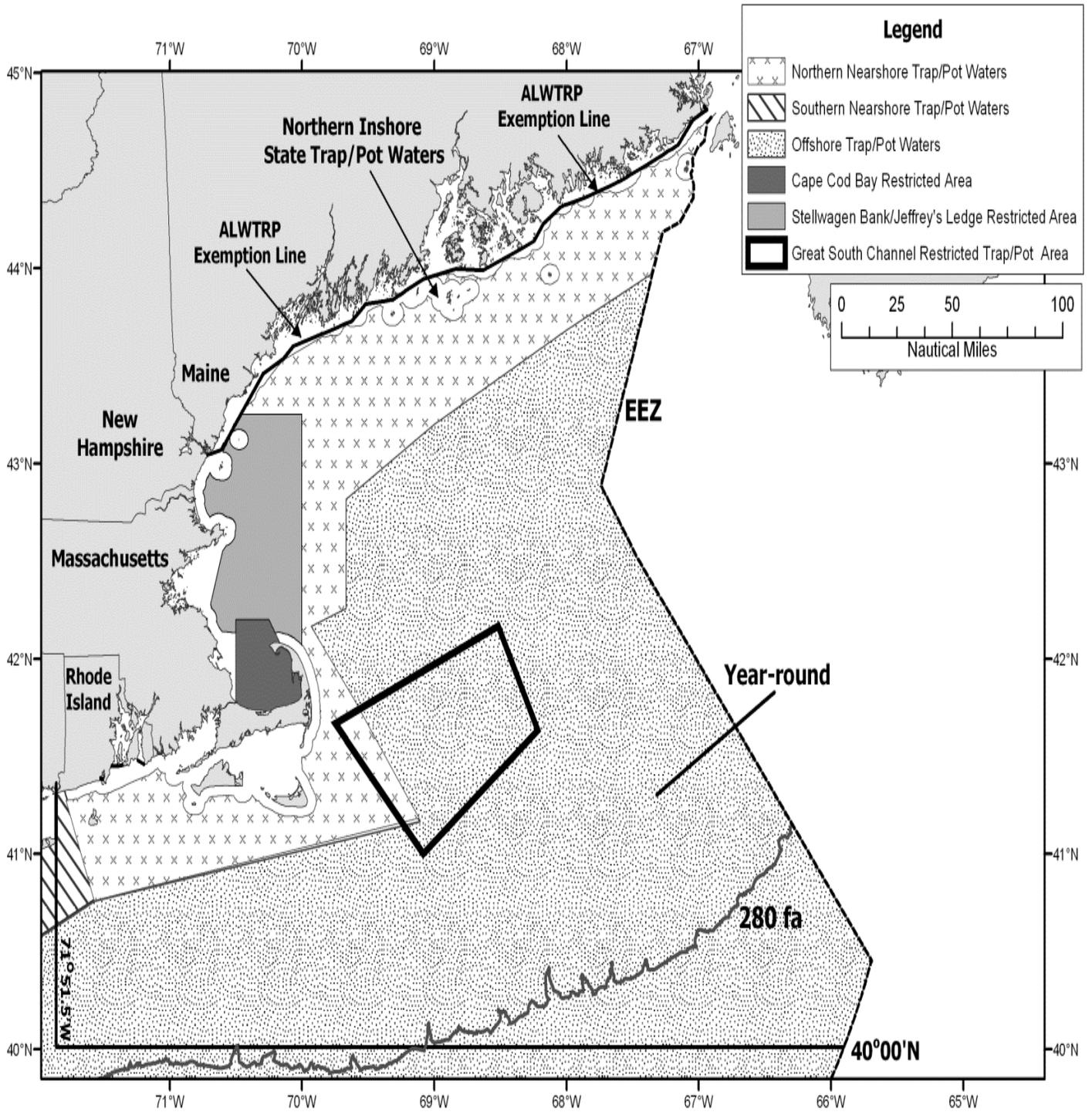
\*\*Mark for the Maine exemption area does not currently exist.

\*\* \*LMA is identified if new traps per trawl scenarios have been proposed in these areas.

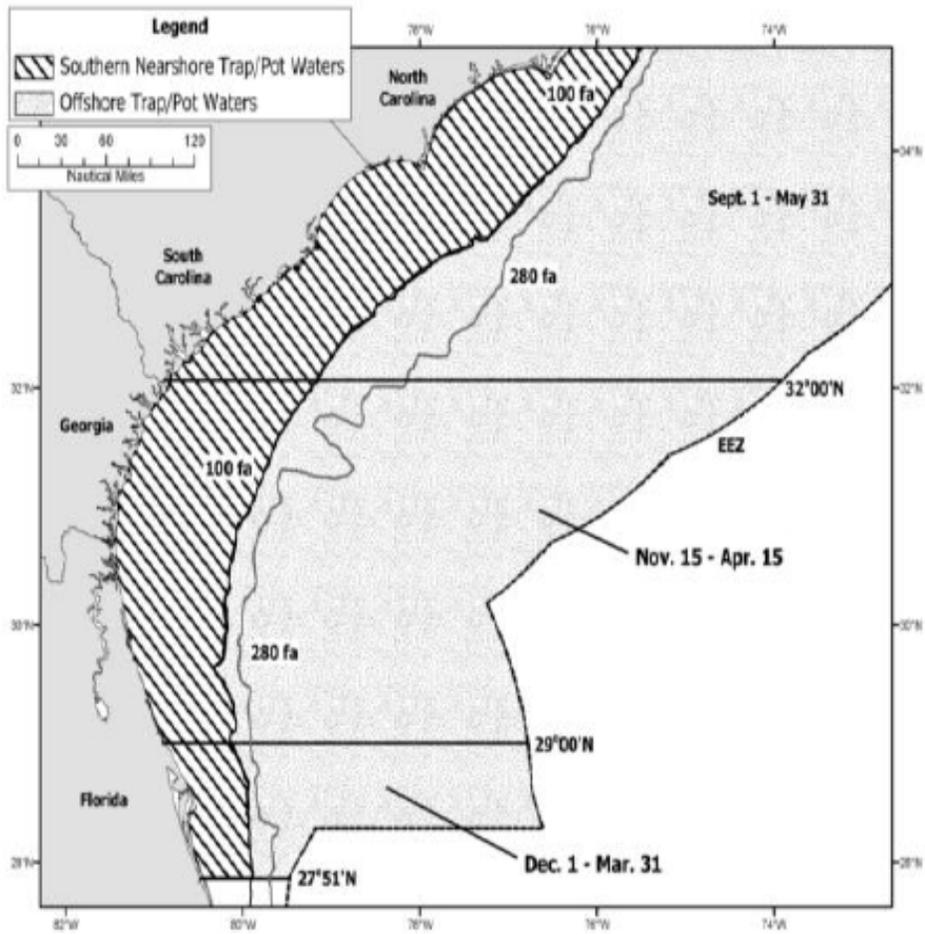
Exhibit 3-3

MANAGEMENT AREAS UNDER ALTERNATIVE 1 (No Action Alternative)

Northeast Region Trap/Pot Management Areas



Southeast Region Trap/Pot Management Areas

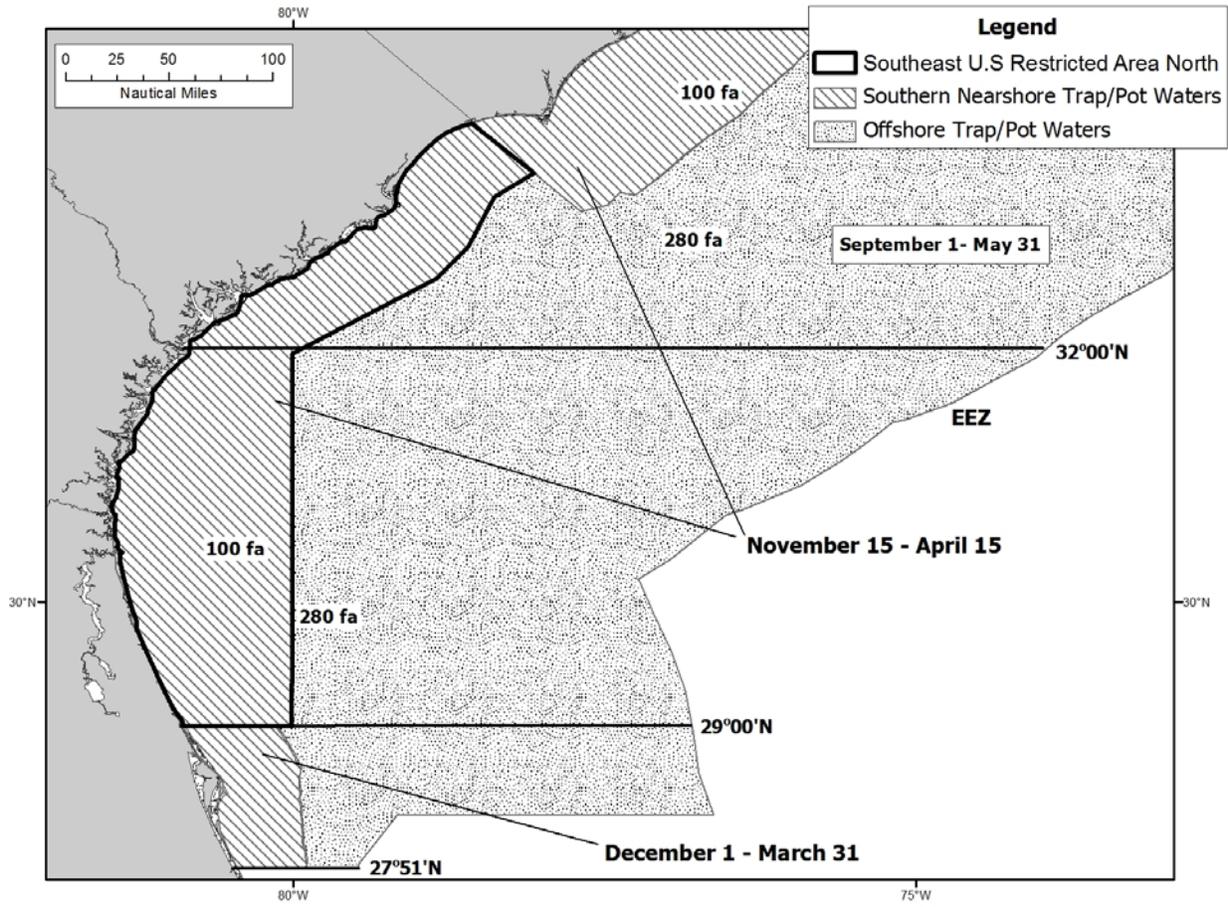


**Exhibit 3-4  
NORTHEAST REGION TRAPS PER TRAWL PROPOSAL UNDER ALTERNATIVES 2 AND 4**

<b>Northeast Area (miles)</b>	<b>Minimum Traps/Trawl</b>	<b>Number of Endlines</b>
Maine A (non-exempt state waters)	2	1
Maine B (non-exempt state waters)	3	1
Maine C (non-exempt state waters)	3	1
Maine D (non-exempt state waters)	3	1
Maine E (non-exempt state waters)	2	1
Maine F (non-exempt state waters)	4	1
Maine G (non-exempt state waters)	2	1
Maine A (3-12)	5	1
Maine B (3-12)	5	1
Maine C (3-12)	5	1
Maine D (3-12)	5	1
Maine E (3-12)	5	1
Maine F (3-12)	10	2
Maine G (3-12)	10	2
Maine A (12+)	10	2
Maine B (12+)	10	2
Maine C (12+)	10	2
Maine D (12+)	10	2
Maine E (12+)	10	2
Maine F (12+)	20	2
Maine G (12+)	20	2
LMA 1 (0-3)	3	1
LMA 1 (3-12)	10	2
LMA 1 (12+)	20	2
LMA1/OC Overlap (0-3)	2	1
OC (0-3)	2	1
OC (3-12)	10	2
OC (12+)	20	2
LMA 2 (0-3)	3	1
LMA 2 (3-12)	10	2
LMA 2 (12+)	20	2
LMA 2/3 Overlap (12+)	20	2
LMA 3 (3-12)	10	2
LMA 3 (12+)	20	2

Exhibit 3-5

PROPOSED SOUTHEAST REGION TRAP/POT MANAGEMENT AREAS (Under Alternatives 2-6)



**Exhibit 3-6**  
**REGULATORY LANGUAGE CHANGES FOR ALTERNATIVES 2-6**

1. For the definition of ground line referring to gillnet remove reference to 'or buoy line'
2. Clarify exempted waters language
3. Clarify the definition of the restricted period for the Southeast US Monitoring Area
4. Clarify other special measures language

**Exhibit 3-7**  
**MAINE DEPARTMENT OF MARINE RESOURCES TRAPS PER TRAWL PROPOSAL UNDER ALTERNATIVES 3, 5, AND 6**

Maine Zone	Non-Exempt State Waters	3-6 Miles	6-12 Miles**	12+ Miles
<b>A</b>	2	3	5	15
<b>B</b>	2	3	5	15
<b>C</b>	2	3	5	15
<b>D</b>	2	3	10	15
<b>E</b>	2	3	10	15
<b>F</b>	2	3	10	15*
<b>G</b>	2	3	10	15*

\* Zone F and G in the 12+ miles range will go to a 20 trap per trawl minimum with 2 endlines from November through February

\*\* Five trap per trawl minimum in Zones A-C in the 6-12 mile area will have one endline, 10 trap per trawl and 15 trap per trawl will have 2 endlines

**Exhibit 3-8  
PROPOSED EXEMPT WATERS UNDER ALTERNATIVES 3, 5, AND 6**

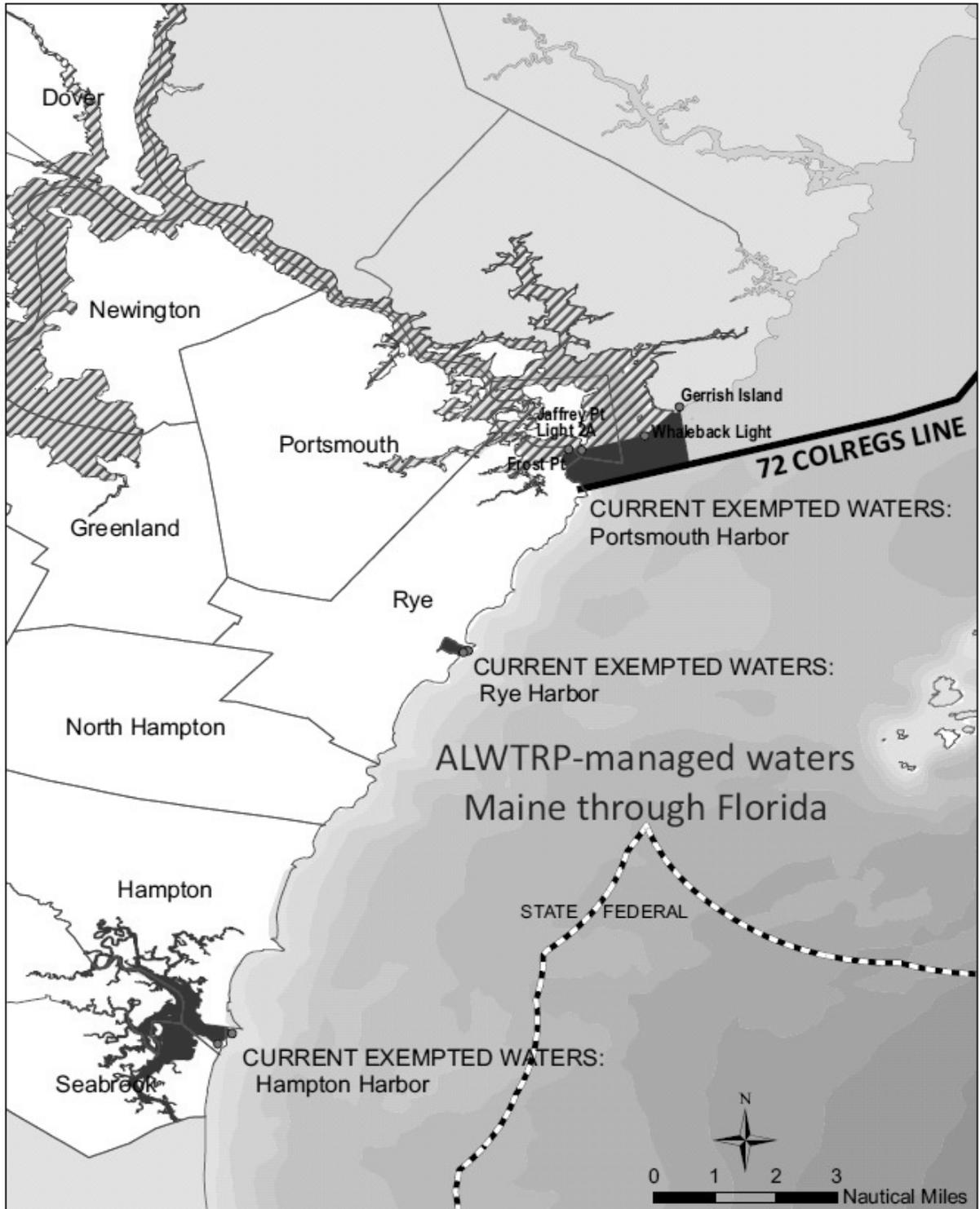
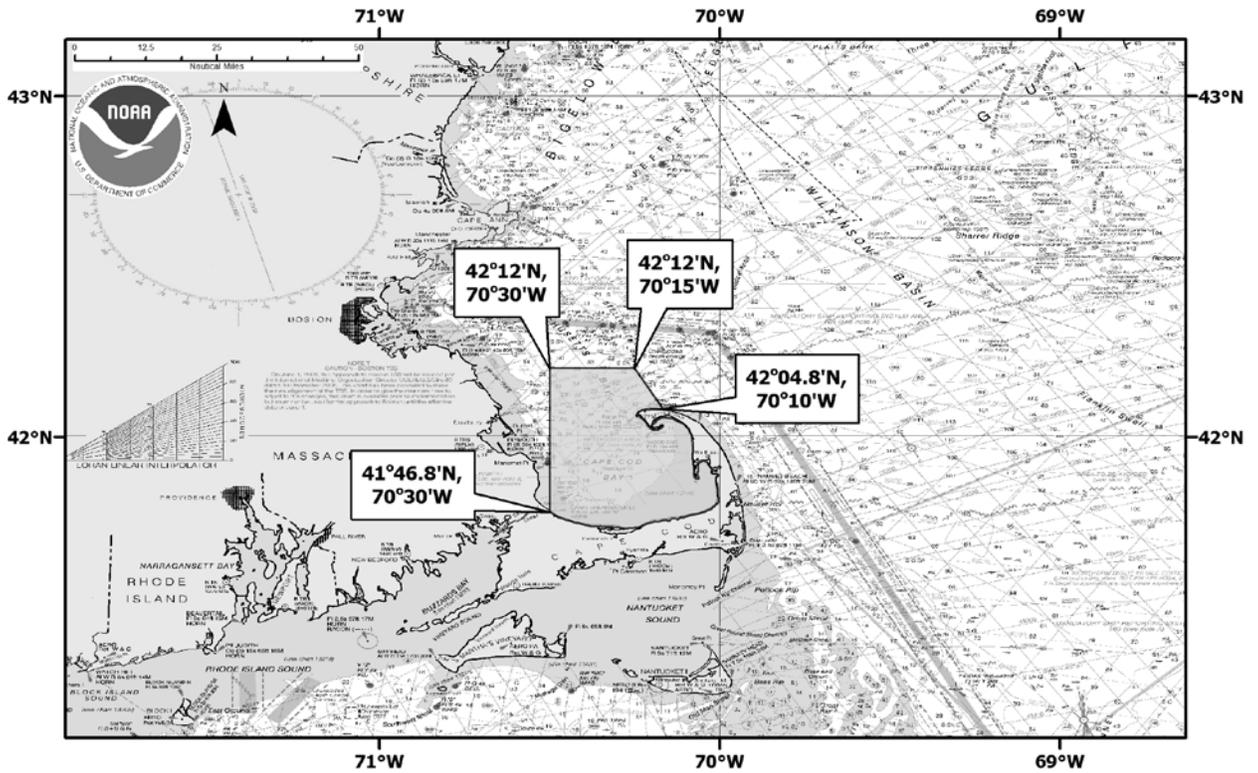


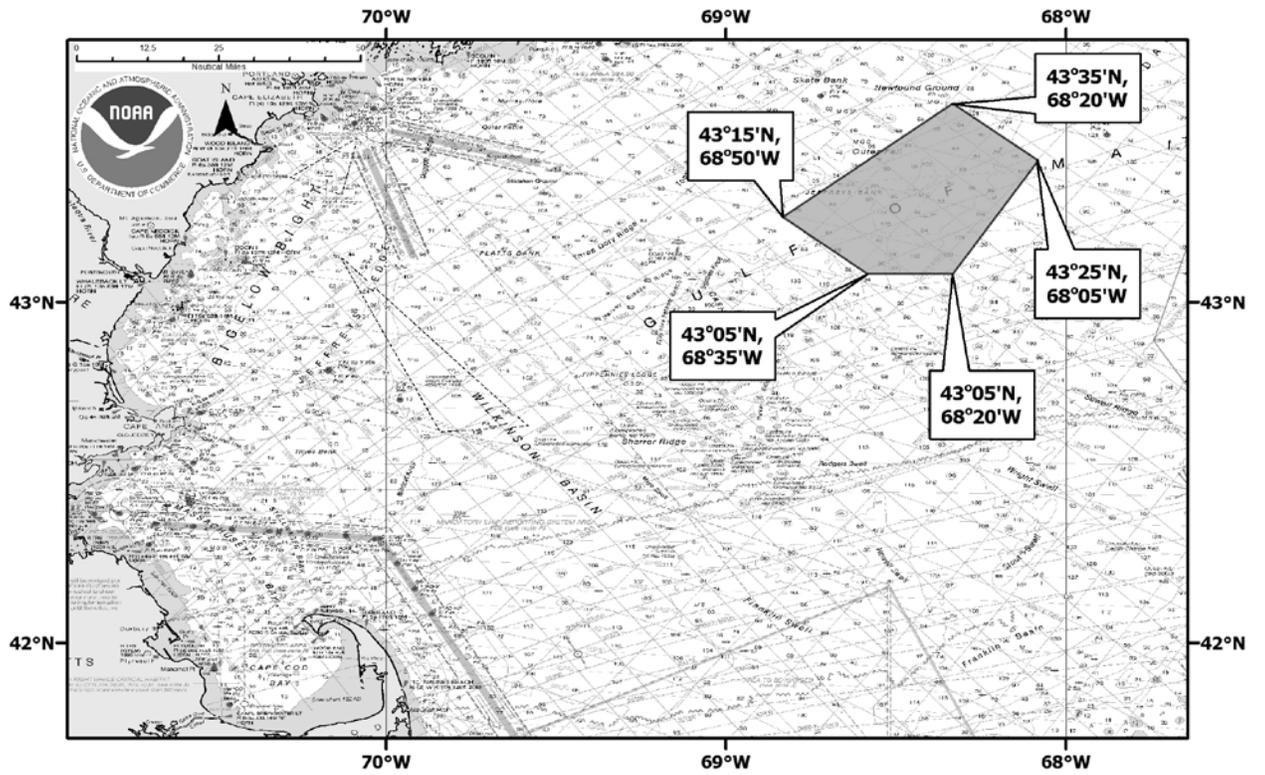
Exhibit 3-9  
PROPOSED CLOSURES UNDER ALTERNATIVES 3, 4, 5, AND 6

Cape Cod Bay Restricted Area (Alternative 3)  
Closed to ALL trap/pot and gillnet gear from February 1 through April 30

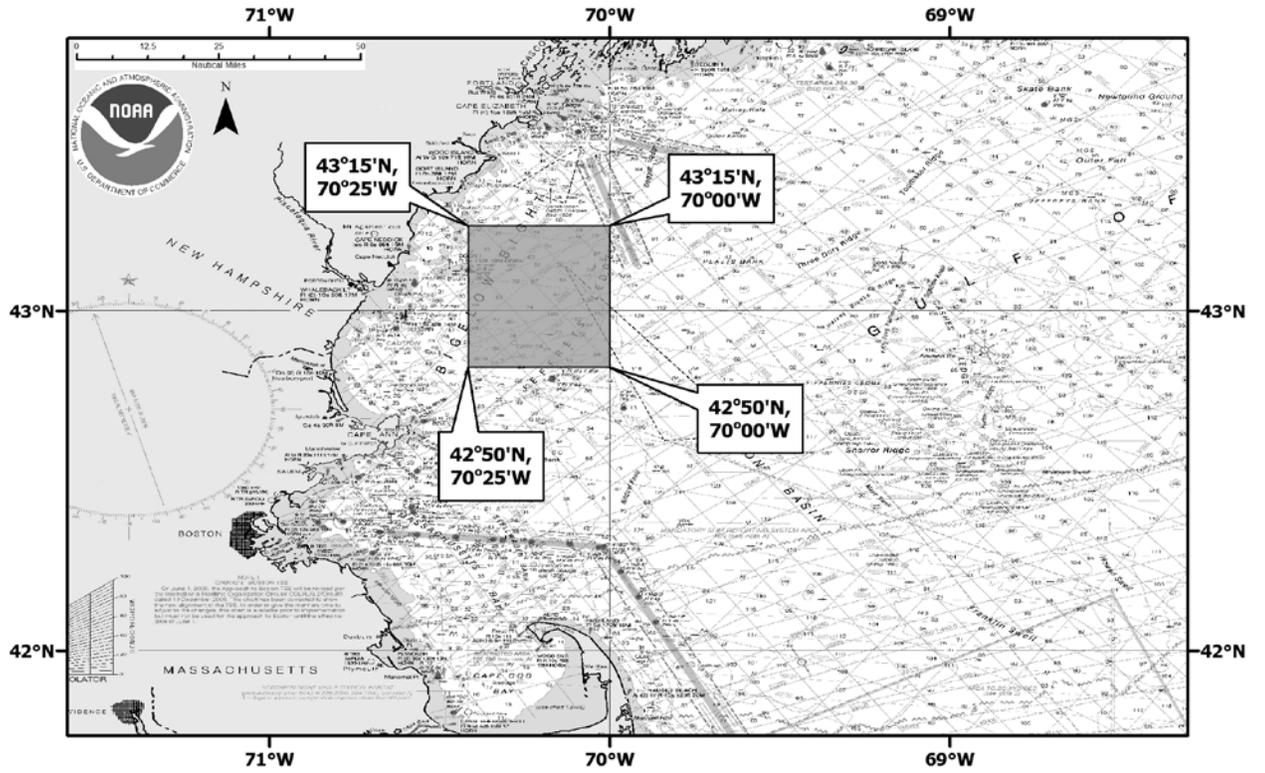


Jordan's Basin (Alternative 4 and 5)

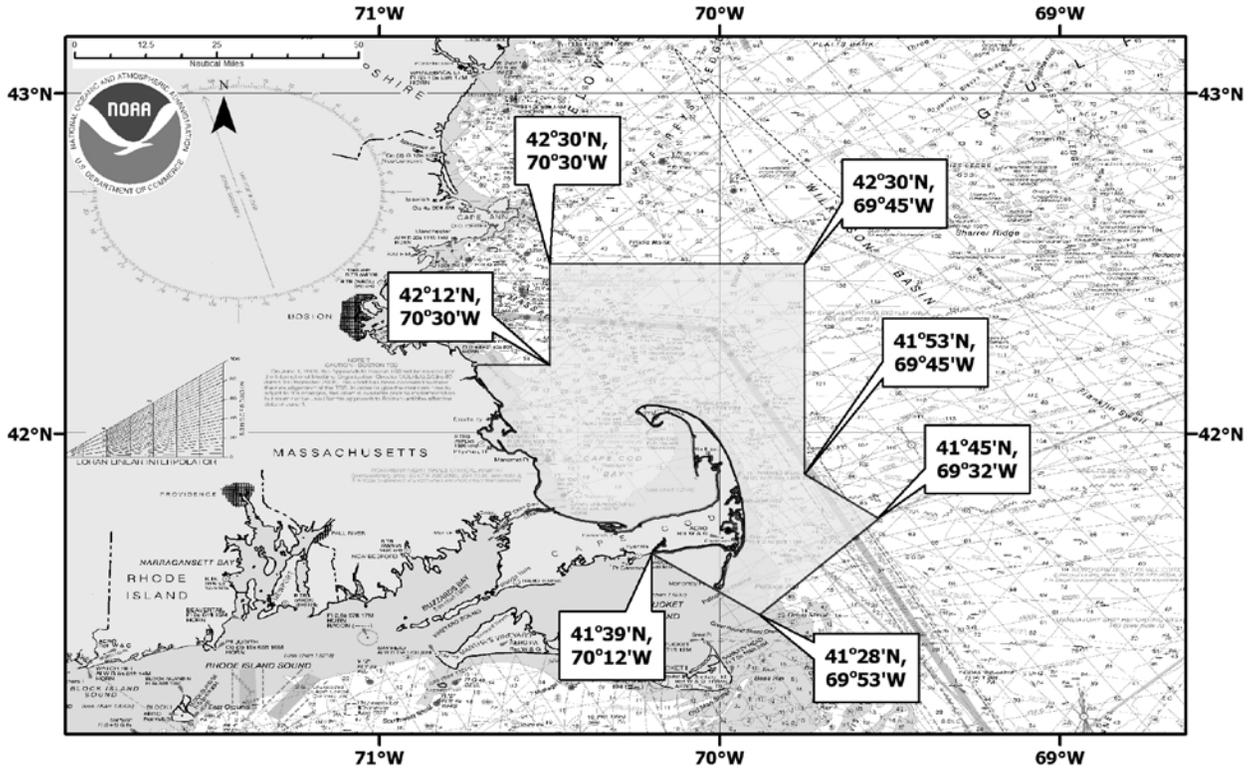
Closed to ALL trap/pot and gillnet gear from November 1 through January 31



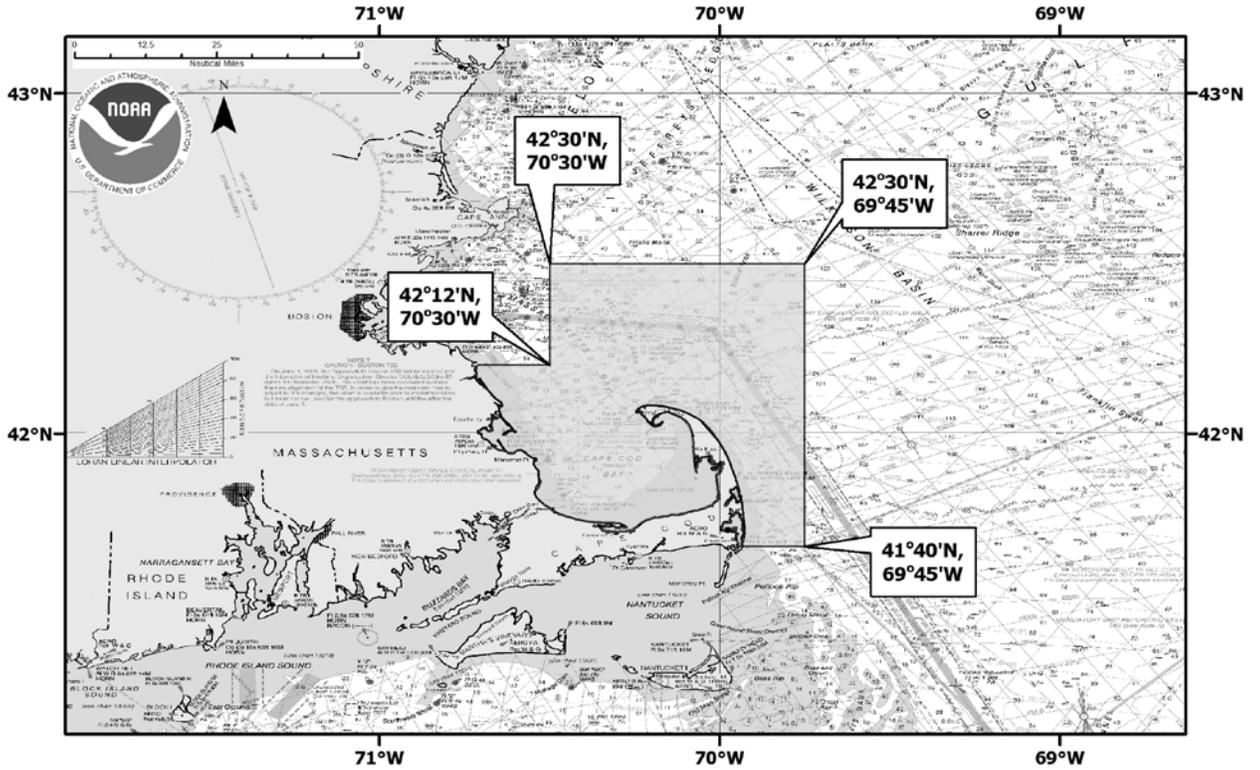
**Jeffreys Ledge (Alternative 4 and 5)  
Closed to ALL trap/pot and gillnet gear from October 1 through January 31**



**Massachusetts Restricted Area #1 (Alternative 4 and 5)  
Closed to ALL trap/pot and gillnet gear from January 1 through April 30**



**Massachusetts Restricted Area #2 (Alternative 6)**  
**Closed to ALL trap/pot and gillnet gear from January 1 through April 30**



## 3.2 ALTERNATIVES CONSIDERED BUT REJECTED

In the scoping efforts conducted for this rulemaking, stakeholders recommended a variety of approaches for reducing entanglement risk to large whales. Scoping discussions included the meeting of the full Take Reduction Team as well as a series of public meetings held at key locations on the Atlantic coast.

While NMFS solicited and considered all input from stakeholders, a number of approaches were rejected in the formulation of alternatives. Exhibit 3-10 summarizes these approaches and briefly explains why NMFS chose not to integrate the approach into the regulatory alternatives under consideration. The rejected approaches are organized by fishery and region. Stakeholders identified many approaches that would apply to more than one fishery or region; hence, many of the concepts are repeated in the table. The alternatives described are not mutually exclusive; i.e., some were recommended in combination, despite the fact that they are listed and addressed separately in the table.

The rejected alternatives are wide-ranging in content. Concepts that recur frequently in the alternatives include the following:

- Requiring increased traps per trawl on a seasonal basis
- Suggesting reductions in traps equal reductions in number of end lines
- One endline on trawls with more than five traps
- Maintain status quo until see if current requirements are working
- Managing gillnets under this vertical line rule

**Exhibit 3-10  
ALTERNATIVES CONSIDERED BUT REJECTED**

<b>Topic</b>	<b>Alternative Considered but Rejected</b>	<b>Rational for Rejection</b>
<i>Seasonal measures</i>	Adopt seasonal increase in traps per trawl as opposed to year round measures.	During our scoping meetings we heard that the public favored year round measures with the exception of the Southeast. Measures in the Southeast would be on a seasonal basis due to the seasonal shift in distribution of right whales.
<i>Gear marking</i>	Maintain status quo	The current marking scheme is ineffective and therefore needs to be modified. Status Quo is not an option.
	Mark by State and by fishery	This scheme would be too complex and create undue hardship on those vessels fishing in multiple states.
	Mark groundline and endline differently	Groundline is required to be sinking groundline and therefore the risk of entanglement from groundline has decreased. This rule focuses on decreasing the risk of vertical line and as such the proposed gear marking should be focused on vertical line only.
<i>Reduction in trap allocations</i>	Maintaining status quo and relying on proposed reductions in trap allocations to account for reductions in vertical lines.	A reduction in traps does not necessarily equate to a reduction in vertical line and therefore would not meet our goal of reducing the risk of vertical lines.
<i>Vertical line</i>	Require one endline for all trawls with greater than five traps.	During our scoping meetings we heard that fishing for longer trawls with one endline was extremely dangerous.
<i>Closures</i>	Implement closure for gillnet in Great South Channel Sliver Area	There is little fishing effort in this area so the benefit would not outweigh the potential economic burden on industry.
<i>Gillnets</i>	Including management measures for gillnets under this rule	See Appendix 3-A

**Appendix 3-A**

**RATIONALE FOR REJECTING PROPOSED GILLNET MEASURES**

Following implementation of the ground line rule, the NMFS and the ALWTRT turned focus to vertical line risk reduction, consistent with the decision of the ALWTRT in 2003. At the 2009 ALWTRT meeting, the Team agreed on a schedule to develop a management approach to reduce the risk of serious injury and mortality due to vertical line. The approach for the vertical line rule focuses on reducing the risk of vertical line entanglements in high impact areas versus a wide-broad scale management scheme. Using fishing gear survey data and whale sightings per unit effort (SPUE), a model was developed to determine the co-occurrence of fishing gear density and whale density. The ALWTRT Northeast Subgroup met in November 2010 and the Mid-Atlantic/Southeast Subgroup met in April 2011 to review the co-occurrence model and consider its implications for an overall management strategy to address vertical line entanglements. The Team agreed NMFS should use the model to consider and develop possible options to address fishery interactions with large whales by reducing the potential for entanglements, minimizing adverse effects if entanglements occur, and mitigating the effects of any unavoidable entanglements.

The gear characterization information in the model shows the majority of the vertical lines coastwide are from lobster trap/pot and other trap/pot fisheries (Exhibit 3A-1). For this reason, NMFS decided to focus this rule making on trap/pot gear only.

**Exhibit 3A-1  
Trap/Pot vs Gillnet Gear**

<i>Annual Average Number of FTE Active Vessels<sup>1</sup> (2011 Baseline)</i>		
	Coastwide	Northeast
Lobster Trap/Pot	<b>2,044</b>	<b>1,993</b>
Other Trap/Pot	<b>91</b>	<b>67</b>
Gillnet	<b>213</b>	<b>92</b>

<sup>1</sup>FTE Active Vessels stands for Full Term Equivalent vessel. Using Federal and state data sources, the model estimates the number of commercial fishing vessels that participate in each fishery. Depending on the location and fishery, the model employs a variety of methods to estimate the number of active vessels this differs from the number of permitted vessels.

<i>Annual Average Number of Vertical Lines (2011 Baseline)</i>		
	Coastwide	Northeast
Lobster Trap/Pot	<b>224,456</b>	<b>220,216</b>
Other Trap/Pot	<b>7,905</b>	<b>5,630</b>
Gillnet	<b>1,501</b>	<b>615</b>

Several stakeholders suggested that the proposed closures should affect both trap/pot and gillnet gear; however, looking at the amount of gillnet vertical lines removed as a result of the proposed closures the result is minimal compared to the trap/pot gear removed (Exhibit 3A-2). This result leads to a high economic impact on individual gillnet vessels but low overall conservation impacts or reduction in co-occurrence. Therefore, NMFS proposes the closures for only trap/pot gear and not gillnet gear. The current gillnet gear closures would remain in place.

**Exhibit 3A-2  
Effects of Proposed Closures on Trap/Pot vs Gillnet Gear**

<i>Average Number of FTE Active Vessels Affected by Closure (During Closed Months)</i>				
	<b>Lobster</b>	<b>Gillnet</b>	<b>Other Trap Pot</b>	<b>Total</b>
<i>Alternative 3</i>				
Cape Cod Bay Restricted Area	16	0	0	16
<i>Alternatives 4 &amp; 5</i>				
Massachusetts Restricted Area #1	110	12	0	122
Jeffreys Ledge	69	5	0	74
Jordan Basin	5	0	0	5
<i>Alternative 6</i>				
Massachusetts Restricted Area #2	109	12	0	121

<i>Average REDUCTION in Vertical Lines in Closures (assumes 100% Suspend Fishing)</i>				
	<b>Lobster</b>	<b>Gillnet</b>	<b>Other Trap Pot</b>	<b>Total</b>
<i>Alternative 3</i>	841	0	0	841
<i>Alternatives 4 &amp; 5</i>	15,262	568	35	15,865
<i>Alternative 6</i>	6,329	0	0	6,329

## Appendix 3-B

### SUMMARY OF ORAL AND WRITTEN COMMENTS FROM 2011 SCOPING MEETINGS

#### Summary of Public Scoping Meetings

NMFS held a 90-day scoping/public comment period following the June 14, 2011, publication in the *Federal Register* (76 FR 34654) of the agency's Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Atlantic Large Whale Take Reduction Plan (ALWTRP). Twenty-three sets of written comments were submitted to the agency. In addition to written comments, NMFS held fifteen public scoping meetings<sup>1</sup> during the 90-day scoping/public comment period along the Atlantic Coast. The public hearings were held as follows:

- Machias, Maine, on July 11, 2011 (30 attendees)
- Ellsworth, Maine, on July 12, 2011 (50 attendees)
- Rockland, Maine, on July 13, 2011 (30 attendees)
- Portland, Maine, on July 14, 2011 (15 attendees)
- Providence, Rhode Island, on July 18, 2011 (4 attendees)
- Plymouth, Massachusetts, on July 19, 2011 (30 attendees)
- Chatham, Massachusetts, on July 20, 2011 (30 attendees)
- Gloucester, Massachusetts, on July 21, 2011 (35 attendees)
- Portsmouth, New Hampshire, on July 22, 2011 (20 attendees)
- Morehead City, North Carolina, on July 26, 2011 (8 attendees)
- Virginia Beach, Virginia, on July 27, 2011 (5 attendees)
- Ocean View, Delaware, on July 28, 2011 (9 attendees)
- Manahawkin, New Jersey, on July 29, 2011 (4 attendees)
- Cape Canaveral, Florida, on August 22, 2011 (15 attendees)
- Jacksonville, Florida, on August 23, 2011 (10 attendees)
- Garden City, Georgia, on August 24, 2011 (8 attendees)

NMFS received oral testimony during these public hearings. Due to the large number of oral comments, they are organized according to the following specific topics:

- Exemptions
- Safety
- Monitoring

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<sup>1</sup> The New Hampshire Fish and Game Department held a scoping meeting that was attended by NMFS staff.

- Gear Marking
- Vertical Line Model
- Gear Modifications
- General Comments

This appendix summarizes the written and oral comments, presenting them in two separate tables. Each comment is assigned to one of five categories:

- **Analyzed:** Comment is addressed in the DEIS.
- **Proposed Alternatives:** Comment is an element in one or more of the proposed alternatives.
- **Rejected Alternatives:** Comment relates to regulatory alternatives considered but rejected by NMFS.
- **Outside of Scope:** Comment falls outside the scope of the current regulatory action.
- **Duly Noted:** NMFS acknowledges the comment, but responding is difficult because the commentor did not articulate specific concerns; did not suggest concrete alternatives; or did not substantiate the position advocated.

The Response to Comments received during the public comment period for the Notice of Intent to prepare an EIS should be considered as a whole, for it collectively reflects NMFS' consideration of public comments. In some cases, NMFS has combined or paraphrased comments. All comments received during the public comment period and the public hearings have been fully considered. NMFS has addressed all written and oral comments. Please note that some commenters submitted written comments and offered oral testimony; thus, some of the comments are duplicative. In these cases, NMFS summarized the comments and responses in both the written and oral comments.

## EXHIBIT 3B-1

## SUMMARY OF WRITTEN SCOPING COMMENTS RECEIVED

Original Comment Number	Specific Comment Component	Category	DEIS Section Where Addressed
1	Action can't wait until 2014. Agency is spending a lot of tax payer dollars.	Duly Noted	---
	Request a two-day meeting on webinar instead of all the scoping meetings so the entire country can join in.	Duly Noted	---
2	Commenter supported the status quo (no change) option for the lobster trap/pot fishery.	Duly Noted	---
3	Thoroughly consider economic and operation impacts of new regulations.	Analyzed	Chap. 6
	Avoid a one size fits all approach and identify options that will be feasible and safe for industry.	Analyzed	Chap. 3
4	Concerned that criteria for whale protection are unrealistic and ungrounded in science. Unsure what the correct level of vertical line reduction or target is.	Duly Noted	---
5	Consider exempting more areas from the ALWTRP. Commenter has not seen any whales inside 8 miles along the Maine coast.	Proposed Alternatives	Chap. 3
6	Commenter supported the status quo (no change) option for the lobster trap/pot fishery. Verticals lines have been reduced through trap reductions.	Duly Noted	---
7	Commenter supported the status quo (no change) option for the lobster trap/pot fishery.	Duly Noted	---
8	South Carolina's coast differs from other states and should be considered independently.	Duly Noted	---
	Landings data do not accurately reflect how many traps are offshore in South Carolina waters.	Analyzed	Chap. 4

<b>EXHIBIT 3B-1</b>			
<b>SUMMARY OF WRITTEN SCOPING COMMENTS RECEIVED</b>			
<b>Original Comment Number</b>	<b>Specific Comment Component</b>	<b>Category</b>	<b>DEIS Section Where Addressed</b>
9	Commenter gave a description of the current black sea bass fishery in Northeast Florida suggesting that the risk of entanglement is non-existent because the fishery is so small.	Duly Noted	---
	Suggest making vertical line out of biodegradable material.	Outside of Scope	---
10	The Mid-Atlantic poses less risk to whales from fishing. Management measures should focus on hot spots.	Proposed Alternatives	Chap. 3
	Do not reduce the number of verticals line, instead improve gear marking and reporting.	Proposed Alternatives	Chap. 3
	Support increasing the number of marks on the line to improve gear marking. Do not require a point specific distance as this would make it hard for enforcement.	Proposed Alternatives	Chap. 3
	Recommend a survey approach for monitoring or make changes to the observer forms.	Duly Noted	---
11	Regulations should target areas of high whale density and be seasonal.	Proposed Alternatives	Chap. 3
	Increasing number of traps per trawl will be difficult for inshore waters, may be easier past the 50f curve.	Rejected Alternatives	---
12	Supports the development of the vertical line model and encourages NOAA to enhance whale population and data collection in the Mid-Atlantic.	Duly Noted	---
13	Requiring one endline is unsafe.	Rejected Alternatives	---

## EXHIBIT 3B-1

## SUMMARY OF WRITTEN SCOPING COMMENTS RECEIVED

Original Comment Number	Specific Comment Component	Category	DEIS Section Where Addressed
14	Should be allowed to land dragged lobsters in Maine.	Outside of Scope	---
15	Commenter has fished for over 30 yrs and has never seen a whale. Commenter prefers status quo.	Duly Noted	---
16	Commenter concerned about development of conservation measures without current and comprehensive information regarding known impacts of fishing gear on the whale population. Supports the status quo until decisions can be informed by more complete information.	Duly Noted	---
17	Commenter supports status quo. There is no direct correlation that can be made between a reduction in vertical lines and a reduction in whale harm. NMFS is guessing what the results of the plan will be.	Duly Noted	---
18	Give greater weight to the protection of right whales when developing management measures.	Alternatives Rejected	---
	Need to estimate occurrence rates greater than zero for whales within 20 miles of the Maine coast.	Duly Noted	---
	Commenter proposed management areas by SPUE.	Analyzed	Chap. 3
	Suggested closures, caps on the numbers of endlines, one endline per trap, and a minimum number of traps per endline as possible management measures.	Analyzed	Chap. 3
	Require consistent reporting.	Proposed Alternatives	Chap. 3
19	Improve gear marking requirements.	Proposed Alternatives	Chap. 3
	The model should be used in areas where there is consistent and reliable data. The model is less useful in areas with data gaps. NOAA needs to advocate for collection of whale density data to fill the gaps in the Mid-Atlantic. Until then, the agency should potentially look to other methods for assessing risk and support careful monitoring.	Duly Noted	--
20	Where are the data to show statistical significance that the sinking groundline modification made an impact? Wait to see what the effects of the groundline modification are before imposing new restrictions.	Duly Noted	--
	Should weigh effects of entanglements of whales based on population size. 10 right whales affected are much worse than 10 humpback whales.	Alternatives Rejected	--

## EXHIBIT 3B-1

## SUMMARY OF WRITTEN SCOPING COMMENTS RECEIVED

Original Comment Number	Specific Comment Component	Category	DEIS Section Where Addressed
21	Strategy should focus on risks arising from spatial and temporal correspondence between right whales and lobster gear.	Rejected Alternatives	---
	Measures should take into account whale behavior. Topography, presence of nutrients, and other factors affecting risk of entanglement with fishing gear.	Analyzed	Chap. 9
	Assess effectiveness of existing measures in combination with proposed measures.	Analyzed	Chap. 9
	Conduct evaluation of costs and benefits of existing and proposed measures taking into account experiences of fishermen in Maine waters.	Analyzed	Chap. 6
	Measures need to consider the conservation benefit, economics, safety/feasibility, flexibility, and have a periodic review and revision.	Proposed Alternatives	Chap. 5, 6, 7
	Maintain status quo in Maine state waters.	Rejected Alternatives	---
	Implement aggressive measures in areas where fishing gear and whales are most likely to occur (outside 50 f curve).	Analyzed	Chap. 3
	Proposed gear modifications such as using weaker rope and using a small amount of float rope.	Analyzed	Chap. 3
	Enhance gear marking and reporting.	Proposed Alternatives	Chap. 3
	Use second endline for large trawls for safety reasons.	Proposed Alternatives	Chap. 3
22	Plan to address the risk from vertical lines is long overdue.	Duly Noted	---
	NOAA fails to provide a target for risk reduction so this prevents understanding of how to judge success of plan.	Duly Noted	---
	Give management priority to right whales.	Rejected Alternatives	---
	Question the sufficiency of the data underlying the risk assessment in the model.	Duly Noted	---
	In favor of large seasonal and temporal areas rather than smaller blocks. Should explore recommendations to reducing amount of gear in the water while leaving catch rates unaffected.	Proposed Alternatives	Chap. 3
	The recent Biological Opinion on fisheries should not rely on vertical line rulemaking as basis for no jeopardy conclusion.	Outside of Scope	---
	Gear Marking should be frequent enough that line removed from whales is likely to be able to be identified to fishery or geographic area.	Proposed Alternatives	Chap. 3
	Should improve consistency of reporting.	Proposed Alternatives	Chap. 3

## EXHIBIT 3B-1

## SUMMARY OF WRITTEN SCOPING COMMENTS RECEIVED

Original Comment Number	Specific Comment Component	Category	DEIS Section Where Addressed
23	Commenter supports the use of the vertical line model to define areas that will be managed. Does not support the use of closures as a management measure.	Analyzed	Chap. 3
	Should be managed year round. Fishermen cannot be expected to change gear several times a year to accommodate seasonal regulation changes. Measures should vary by LMAs and zones in Maine.	Proposed Alternatives	Chap. 3
	Supports changes to the gear marking strategy.	Proposed Alternatives	Chap. 3
	Supports idea of increased data collection as long as there is a funding source for the implementation of this program.	Proposed Alternatives	Chap. 3
<p><b>Category Key:</b>  <b>Analyzed</b> = Comment is addressed in the FEIS.  <b>Proposed Alternatives</b> = Comment is an element in one or more of the proposed alternatives.  <b>Rejected Alternatives</b> = Comment relates to regulatory alternatives considered but rejected by NMFS.  <b>Outside of Scope</b> = Comment falls outside the scope of the current regulatory action.  <b>Duly Noted</b> = NMFS acknowledges the comment, but responding is difficult because the commenter did not articulate specific concerns; did not suggest concrete alternatives; or did not substantiate the position advocated.</p>			

<b>EXHIBIT 3B-2</b>			
<b>SUMMARY OF ORAL COMMENTS RECEIVED DURING 2011 SCOPING MEETINGS</b>			
<b>Topic Area</b>	<b>SPECIFIC COMMENT COMPONENT</b>	<b>Category</b>	<b>DEIS Section Where Addressed</b>
Exemptions	Commenters during the Maine scoping meetings wanted the Maine exemption line moved to the 3-mile line.	Rejected Alternatives	----
	Commenters expressed a desire to have an exemption in New Hampshire state waters.	Analyzed	Chap. 3
	Allow floating groundline back in some areas.	Outside of Scope	----
Safety	Safety concerns with increased traps per trawl in some areas. Two endlines are needed for safety and gear loss reasons.	Duly Noted	-----
Monitoring	Have entanglements decreased since the sinking groundline requirement? Monitor past requirements before implementing new ones.	Duly Noted	----
	New Hampshire and Massachusetts feel they are unfairly picked on because of the greater whale sighting survey effort and mandatory reporting requirements in their area. Desire to have survey effort in other areas.	Duly Noted	----
	Agreement that reporting is necessary. No problem with the current reporting questions or frequency of survey methods.	Proposed Alternatives	Chap. 3
	Disagreement with whether the reporting should be mandatory or voluntary. Mandatory might causing inaccuracy.	Duly Noted	----
Gear Marking	General support for a change to the current gear marking scheme.	Proposed Alternatives	Chap. 3
	Desire for more regional gear marking.	Duly Noted	----
	Continue to allow cheap gear marking methods.	Proposed Alternatives	Chap 3
	Potentially mark with 2 marks every 30-40 fathoms or at top, middle, and bottom of line. One mark for state, and other mark to represent gear type.	Proposed Alternatives	Chap 3
Vertical Line Model	Support for looking at finer scale management areas and allowing states to submit their own proposals.	Duly Noted	----
	Agree with the use of the co-occurrence layer.	Analyzed	Chap. 3
	Support of seasonal measures.	Rejected Alternatives	----
	Need more marine mammal survey effort in Mid-Atlantic.	Duly Noted	----

	Some commenters wanted the model to focus on right whales only since a humpback whale status review is occurring.	Duly Noted	----
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<b>EXHIBIT 3B-2</b>			
<b>SUMMARY OF ORAL COMMENTS RECEIVED DURING 2011 SCOPING MEETINGS</b>			
<b>Topic Area</b>	<b>SPECIFIC COMMENT COMPONENT</b>	<b>Category</b>	<b>DEIS Section Where Addressed</b>
Gear Modifications	Suggest weaker breaking strength for top 1/3 <sup>rd</sup> of rope.	Duly Noted	---
	Have a weak link at the top 1/3 <sup>rd</sup> of the endline.	Duly Noted	---
	Some support for 1100 lbs breaking strength.	Duly Noted	----
	Could shorten lines closest from surface link from buoy to toggle and reduce the amount of line in the water that way.	Duly Noted	----
	In Cape Cod Bay, could eliminate sinking rope requirement in top 2/3 <sup>rd</sup> of endline.	Duly Noted	----
General Comments	Some concern over lack of target or goal for vertical line reduction. Some think a target will be set in the future and whatever is proposed now will not be enough to hit this future target. Others understood the idea of trying to do what is realistic and not setting a target.	Duly Noted	----
	No additional measures are necessary due to proposed trap reductions that could potentially reduce the risk of entanglement.	Duly Noted	----
	The government could perform a buyout to reduce latent effort.	Duly Noted	----
	Get rid of singles.	Proposed Alternatives	Chap. 3
	Black sea bass gear is brought in at night so that fishery has already reduced risk of entanglement.	Duly Noted	----
	Commenter wanted to know what was necessary to amend MMPA.	Outside of Scope	---
	Ship strikes are a problem as well.	Duly Noted	---
	Commenter wanted to know what Canada is doing to reduce level of entanglement in Canadian waters.	Duly Noted	----

**Category Key:**

**Analyzed** = Comment is addressed in the FEIS.

**Proposed Alternatives** = Comment is an element in one or more of the proposed alternatives.

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