#### RECORD OF DECISION

# For Implementation of Vessel Operational Measures to Reduce Ship Strikes to the North Atlantic Right Whale

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#### INTRODUCTION

The National Marine Fisheries Service (NMFS) has prepared an Environmental Impact Statement (EIS) to Implement Vessel Operational Measures to Reduce Ship Strikes to the North Atlantic Right Whale. This Record of Decision (ROD) documents NMFS' decision to implement the set of measures included in Alternative 6 (Proposed Action) of the Final EIS (FEIS). These measures include: (1) Seasonal Management Areas (SMAs), which are predetermined and established areas within which a mandatory, seasonal speed restriction of 10 knots would apply; (2) Dynamic Management Areas (DMAs), which are areas temporarily defined around confirmed right whale sightings, within which a voluntary speed restriction of 10 knots would apply; and (3) monitoring the use of recommended shipping routes. These measures would apply only to non-sovereign vessels 65 feet or more in overall length and would expire five years after their date of effectiveness. A more detailed description of the measures (including their geographical and temporal extent) and exemptions is provided in the FEIS and will be contained in the final rule to be issued by NMFS.

NMFS' purpose and need for the ship-strike reduction vessel operational measures is to reduce the occurrence and severity of vessel collisions with North Atlantic right whales, thereby contributing to the recovery and sustainability of the species, while minimizing adverse effects on the shipping industry and maritime commerce.

The FEIS provides decision-makers and the public with an evaluation of the environmental, social, and economic impacts of the proposed action and alternatives. The FEIS and this ROD were prepared pursuant to the National Environmental Policy Act (NEPA, 42 USC § 4321 *et seq*), the Council on Environmental Quality (CEQ)'s regulations implementing NEPA (40 CFR Parts 1500-1508), and the National Oceanic and Atmospheric Administration (NOAA) environmental review procedures (NAO 216-6). CEQ regulations at 40 CFR 1505.2 state that: *At the time of its decision* (...) *each agency shall prepare a concise public record of decision. The record* (...) *shall:* 

- (a) State what the decision was.
- (b) Identify all alternatives considered by the agency in reaching its decision, specifying the alternative or alternatives which were considered to be environmentally preferable. An agency may discuss preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions. An

agency shall identify and discuss all such factors including any essential considerations of national policy which were balanced by the agency in making its decision and state how those considerations entered into its decision.

(c) State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.

#### BACKGROUND

The western North Atlantic right whale (*Eubalaena glacialis*) is a critically endangered large whale, with an existing population in the range of 300 to 400 individuals. The species is listed as endangered under the Endangered Species Act (ESA) and depleted under the Marine Mammal Protection Act (MMPA). Ship strikes are the major anthropogenic cause of serious injury to and death of right whales and, therefore, a primary cause of the lack of recovery of the species despite the protective measures currently in place. A continued lack of recovery and possible extinction will occur if deaths from ship strikes are not reduced. NMFS has the authority and responsibility under the ESA and the MMPA to protect the North Atlantic right whale population. Therefore, in 2004, NMFS initiated a process to promulgate new regulations which, along with non-regulatory measures, would reduce the occurrence and severity of ship strikes and, consequently, facilitate population recovery.

On June 1, 2004, NMFS published an Advanced Notice of Proposed Rulemaking (ANPR) for right whale ship strike reduction measures in the *Federal Register* (69 FR 30857), followed by an extended comment period that ended on November 15, 2004 (69 FR 55135). During the comment period, NMFS held a series of public meetings and industry stakeholder meetings. In June 2005, NMFS completed a draft environmental assessment (EA) for the proposed measures. The EA found that the impacts of the measures had the potential to be highly controversial and/or significant; consequently, in compliance with NEPA, NMFS initiated the preparation of an EIS. NMFS published a notice of intent (NOI) to prepare the EIS in the *Federal Register* on June 22, 2005 (70 FR 36121), opening a 30-day public scoping and comment period that ended on July 22, 2005. On June 26, 2006, NMFS published a Proposed Rule to implement speed restrictions, with a 60-day comment period ending on August 25, 2006 (71 FR 36299). A notice of availability (NOA) of the draft EIS (DEIS) was published on July 7, 2006 (71 FR 38641). The comment periods for both the Proposed Rule and DEIS were extended beyond their initial deadlines to October 5, 2006 (71 FR 46440). NMFS held three public hearings on the DEIS during summer 2006 to solicit and receive comments.

The NOA for the FEIS was published on August 29, 2008 (73 FR 50962) and comments were accepted during the 30-day minimum wait period mandated by CEQ regulations. The 30-day wait period ended on September 29, 2008. NMFS reviewed and considered all comments in preparation for this ROD. Publication of the final rule in the *Federal Register* will implement the decision documented in this ROD.

### ALTERNATIVES CONSIDERED

#### FEIS Alternatives

In the FEIS, NMFS analyzed six alternative sets of operational measures. In addition, DEIS Alternative 6 was incorporated to the FEIS by reference. More detailed descriptions of the FEIS alternatives are provided in Chapter 2 of the FEIS. In all cases, the measures would apply only to non-sovereign vessels 65 feet and more in overall length. For all measures featuring speed restrictions, the FEIS considered three options: 10 knots, 12 knots, and 14 knots.

<u>Alternative 1 – No Action:</u> NMFS would continue to implement existing measures and programs to reduce the likelihood of ship strikes to right whales. No new operational measures would be implemented.

<u>Alternative 2 – Mandatory Dynamic Management Areas:</u> In addition to the existing protective measures included in Alternative 1, NMFS would implement mandatory DMAs along the US East Coast within the Exclusive Economic Zone (EEZ). DMAs are areas temporarily defined around confirmed right whale sightings and within which speed restrictions would apply.

<u>Alternative 3 – Speed Restrictions in Designated Areas:</u> In addition to the existing protective measures included in Alternative 1, NMFS would implement SMAs of various sizes and durations at specified locations along the US East Coast. SMAs are predetermined and established areas within which speed restrictions would apply in the months when right whales are most likely to be present (some SMAs would be active year round).

<u>Alternative 4 – Recommended Shipping Routes</u>: In addition to the existing protective measures included in Alternative 1, NMFS would recommend the use of designated shipping routes intended to minimize the overlap between vessels and right whales. There would be no speed restrictions.

<u>Alternative 5 – Combination of Alternatives:</u> NMFS would implement all the measures included in Alternatives 1 through 4.

Alternative 6 – Proposed Action: In addition to the existing protective measures included in Alternative 1, NMFS would implement a range of operational measures that would include: SMAs of various sizes and durations at specified locations along the US East Coast; voluntary DMAs along the US East Coast within the EEZ; and recommended shipping routes. The regulatory measures proposed under this alternative would expire five years after their date of effectiveness; only the recommended shipping routes would remain in place. [Note that in addition to the alternatives described above, the FEIS incorporates by reference DEIS Alternative 6 (the DEIS preferred alternative) and associated analyses. See "Changes to Alternative 6" section below for a description of how the FEIS and DEIS alternatives 6 differ.]

## Alternatives considered but dismissed

The public involvement process was extensive, and assisted NMFS in the identification and consideration of numerous alternatives. Alternatives that were considered early in the planning process but dismissed from further consideration and not analyzed in detail in the FEIS include those that would: (1) incorporate speed restrictions outside the 10- to 14-knot range; (2) make use of such technologies as satellite tagging or acoustic detection/deterrence; (3) restrict port approaches to daytime hours; (4) involve only voluntary measures; (5) require the presence of trained whale observers on commercial shipping vessels; (6) include Federal vessels; (7) establish new shipping routes or SMAs in areas where the presence of right whales is unlikely or not reliably predictable; and (8) implement new mandatory ship reporting systems. Section 2.4 of the FEIS provides more information on these alternatives and NMFS' rationale for determining that these alternatives would not meet its purpose and need.

# Differences between the DEIS Alternatives and FEIS Alternatives

A number of changes were made to the alternatives between the DEIS and the FEIS based on public comments, the availability of new scientific studies, and the incorporation of new information. These changes are summarized below (more details are available in Section 2.3 of the FEIS):

<u>Changes to Alternative 2:</u> Alternative 2 was changed by modifying the trigger mechanisms for DMAs to remove the possibility that the sighting of a single whale could trigger a DMA. This change was made because NMFS found that implementing a DMA based on the sighting of one whale in a shipping lane would place an undue burden on the shipping industry, as the majority of sightings are individual whales.

<u>Changes to Alternative 3:</u> The duration of the Southeastern United States (SEUS) SMA included in this alternative was extended so the SMA would be in place when whales are present in this region. The original duration proposed was the result of an oversight. The FEIS Alternative 3 implementation period is the same as that proposed in the DEIS for the Alternative 6 SEUS SMA, that is November 15 through April 15, the months when right whales are, in fact, present in the SEUS.

<u>Changes to Alternative 4</u>: Changes were made to the recommended shipping routes under this alternative to reflect the separate agency process under which these routes were defined; also, changes were made to the period during which use of the routes was recommended (from certain months of the year to year round) to maximize protection. In addition, two routing measures - modifications to the Traffic Separation Scheme (TSS) into Boston and creation of an Area To Be Avoided (ATBA) – were deleted from the alternative because these measures have been or will be established by the International Maritime Organization independently of, and on a different schedule from, that of NMFS' vessel operational measures.

<u>Changes to Alternative 5</u>: Alternative 5 includes the measures proposed under Alternatives 2, 3, and 4; the changes made to those alternatives were also made to Alternative 5.

<u>Changes to Alternative 6</u>: Several changes were made to Alternative 6 between the DEIS and the FEIS:

- With regard to DMAs: The trigger mechanisms for DMAs were modified to remove the possibility that the sighting of a single whale could trigger a DMA. This change was made to minimize economic impacts on the shipping industry. Additionally, DMAs under Alternative 6, which were mandatory in the DEIS, were made voluntary in the FEIS. This change was made, in part, due to limitations in agency resources that would make it difficult to verify and establish DMAs quickly, and in part, to minimize economic impacts on the maritime industry.
- With regard to recommended shipping routes: Changes were the same as those described above for Alternative 4.
- With regard to SMAs: Under DEIS Alternative 6, semi-circular SMAs with a 30-nautical-mile radius were defined around the entrances to eight East Coast port areas from New York to Savannah, GA; under FEIS Alternative 6, semi-circular SMAs with a 20-nautical-mile radius were defined around four port areas between New York and Morehead City/Beaufort, NC, and a continuous SMA extending 20 nautical miles from the shore was defined between Wilmington, NC, and just south of Savannah, GA. This change was made to minimize economic impacts to the shipping industry, taking into account sightings data on the density of right whales 20 and 30 nautical miles from the shore. The SMAs associated with the right whale feeding grounds along the coast in the northeastern US coast and calving grounds off the southeastern US coast did not change between the DEIS and the FEIS.
- With regard to the duration of the proposed measures: Under FEIS Alternative 6, all measures, except for the recommended routes, would expire five years from their date of effectiveness. There was no such restriction under DEIS Alternative 6. This change was made in response to comments on the DEIS and Proposed Rule, and to allow time for NMFS to assess the effectiveness of the measures and to review their economic impacts.

## The Environmentally Preferable Alternative

CEQ's implementing regulations for NEPA require that an agency identify an environmentally preferable alternative(s) in the ROD. CEQ has advised that such an alternative is based only on the physical and biological impacts of the proposed action, and not the social or economic impacts of the action.

Alternative 5 includes a combination of measures that would provide the most robust protection of biological resources among all the alternatives considered. While Alternative 3 also includes a strong set of measures that would provide strong protection to the right whale, it would offer only minor benefits to other marine mammals, whereas Alternative 5 would offer right whales very strong protection and other marine mammals some degree of protection through the

addition of mandatory DMAs and recommended routes. For this reason, Alternative 5 is the environmentally preferable alternative.

## NMFS' DECISION AND FACTORS CONSIDERED IN THE DECISION

#### Decision

NMFS's decision is to implement the vessel operational measures to reduce ship strikes to North Atlantic right whales contained in FEIS Alternative 6 with a 10-knot speed restriction, as summarized below and described in greater detail in Chapter 2 of the FEIS. The measures proposed under FEIS Alternative 6 are the measures that will be implemented in the final rule. In addition to the measures to be implemented via the final rule, the selection of Alternative 6 encompasses the continuation of existing measures and programs as described in Alternative 1.

## Alternative 6 Measures

- In the Northeast Region of the United States: 10-knot speed restrictions will be required in Cape Cod Bay SMA from January 1 to May 15; Off Race Point SMA from March 1 to April 30; and the Great South Channel SMA from April 1 to July 31. Additionally, NMFS will monitor use of year-round recommended shipping routes in Cape Cod Bay.
- In the Mid-Atlantic Region of the United States: 10-knot speed restrictions will be required from November 1 to April 30 in a rectangular SMA south and east of Block Island Sound; in semi-circular SMAs with a 20-nautical mile radius around the entrances to the port areas of New York/New Jersey, Delaware Bay, Chesapeake Bay, and Morehead City/Beaufort, NC; and in a continuous 20-nautical mile wide SMA extending from Wilmington, NC to south of Savannah, GA, inclusive of Georgetown and Charleston, SC.
- In the Southeast Region of the United States: 10-knot speed restrictions will be required in the Southeast SMA from November 15 to April 15. This SMA extends from north of Brunswick, GA to south of Jacksonville, FL, inclusive of Fernandina, FL, and offshore to the eastern boundary of the Mandatory Ship Reporting System. Additionally, NMFS will monitor the use of year-round recommended shipping routes for the approaches to the ports of Brunswick, GA, and Fernandina and Jacksonville, FL.
- In all three regions: NMFS will establish a year-round DMA program, in which temporary and voluntary 10-knot speed restrictions will be established in a circular buffer zone when a right whale aggregation meets the conditions to trigger a DMA (three or more right whales within 75 square nautical miles). DMAs will only be established when and where other measures (i.e., SMAs) are not in effect.

In addition to the measures to be implemented via the final rule, the selection of Alternative 6 encompasses the continuation of existing measures and programs as described in Alternative 1.

Except for the recommended routes and existing protective measures, all operational measures will expire five years after their date of effectiveness.

# Rationale for the Decision

In making this decision, and consistent with its purpose and need to reduce the occurrence and severity of vessel collisions with North Atlantic right whales, thereby contributing to the recovery and sustainability of the species, while minimizing adverse effects on the shipping industry and maritime commerce, NMFS fully considered the goals of the Endangered Species Act and the Marine Mammal Protection Act. NMFS also balanced the extent to which each of the alternatives is likely to adequately reduce the occurrence of ship strikes to right whales against the alternative's economic impacts.

In general, the economic impacts of the alternatives increase with the level of additional protection they would afford the North Atlantic right whale. Thus, Alternative 1, which would continue existing measures, would have no additional economic impacts but would offer no additional protection to the right whale. Therefore, it is inconsistent with NMFS' purpose and need.

All the other alternatives would offer additional protection. Alternative 4, because it consists of the voluntary use of recommended shipping routes only, without speed restrictions, would have the smallest economic impact after Alternative 1. However, it would also result in minimal additional protection from ship strikes. Upon review, NMFS found that Alternative 4 would be too unlikely to effectively contribute to the recovery of the species.

Other alternatives (alternatives 2, 3, 5, DEIS 6, and FEIS 6) all include vessel speed restrictions and, as noted above, NMFS considered three such restrictions: 10, 12, and 14 knots. While for each alternative, the higher restrictions (12 or 14 knots) would have lesser economic impacts than the lowest one (10 knots), upon review, and consistent with available studies, it was found that they would be less likely to effectively contribute to the recovery of the species, regardless of the specific areas and times within which they would apply.

Even with a 10-knot speed limit, Alternative 2, Mandatory DMAs, would have a relatively limited economic impact. However, because it consists of a single type of measure (DMAs), it would provide some additional protection, but is unlikely to effectively contribute to the recovery of the species.

Alternatives 3, 5, and DEIS 6 with a 10-knot restriction would provide the highest level of protection against ship strikes and would contribute the most to the recovery of the species. However, these alternatives would also have the highest economic impacts. Alternative 6 with a 10-knot restriction would have a smaller economic impact than Alternatives 3, 5, and DEIS 6, and while it would offer a slightly lower level of protection against ship strikes, it is still expected to significantly contribute to the recovery of the species.

Alternative 6 with a 10-knot speed restriction is the alternative that best balances ship strike protection and economic impacts: lesser levels of protection (all alternatives with a 12- or 14-

knot restriction; Alternatives 1, 2, and 4 with a 10-knot restriction) would likely be less adequate to effectively contribute to the recovery of the species; higher levels of protection (Alternatives 3, 5 and DEIS 6 with a 10-knot speed restriction) would impose a heavier burden on the shipping and other maritime industries; for instance, Alternatives 3 and 5 would result in an economic impact more than twice that of Alternative 6. This alternative will contribute to the recovery of the species during the period of effectiveness and allow for future additional analysis of the measures' effectiveness and economic impacts.

#### **Public Comments**

Public and agency comments on the proposed operational measures and alternatives were solicited, considered, and addressed, as appropriate, by NMFS throughout the NEPA and rulemaking process, including comments on the ANPR, NOI, DEIS, and Proposed Rule. Comments on the FEIS were received over a 30-day period, ending on September 29, 2008. NMFS considered these comments when making its decision. A summary of the key issues raised in comments on the FEIS follows.

A total of 241 comments on the FEIS were received. Of these, most (193) were entirely supportive of the proposed measures. Some commenters advocated stronger measures for the proposed action, e.g., mandatory DMAs, eliminating the five-year sunset provision, revising the implementation areas and effective dates of specific SMAs, and inclusion of sovereign vessels and vessels less than 65 feet. Conversely, several commenters argued for less restrictive measures and stated that there is no compelling evidence for the benefits of a 10-knot speed restriction; they thought a 14-knot speed restriction would be as effective. One commenter proposed that technology be used to reduce ship strikes rather than regulatory measures involving speed restrictions. Two commenters requested that NMFS address natural and environmental causes of death, including disease, prey availability, and pollution. Others recommended elaborating on the positive environmental impacts of vessel speed reductions, including fuel savings and decreasing emissions and ocean noise levels. The substance of these comments is addressed in the FEIS or the final rule. Comments that are not addressed in either of these documents are briefly summarized below, by topic.

SMAs: Several commenters requested returning to the 30-nautical-mile semi-circular SMAs in the mid-Atlantic, as in DEIS Alternative 6, and others mentioned their disappointment at the change from 30 to 20 nautical mile zones. One commenter asked for more recent data (from 2001-present) on right whale distribution to be included in the analysis. Two commenters suggested that the reduction in protection afforded to right whales by this change is likely to be greater than predicted in the FEIS due to an inshore sampling bias. The rationale for the change from 30 to 20 nautical miles is provided in the FEIS and final rule. Regarding the sampling bias, although right whales can occur at various distances from shore, they are not distributed randomly and there is a general tendency for them to be found closer to shore. NMFS took this fact into account when moving the outer boundary of the semi-circular SMAs closer inshore.

<u>DMAs</u>: Commenters from both environmental and shipping organizations expressed their concern with voluntary DMAs. They stated that compliance with voluntary measures has been historically low, and that, if expeditiously implementing mandatory DMAs through rulemaking

is unpractical, other approaches must be available. Current limitations in agency resources make it difficult to verify the presence of whales and subsequently establish DMAs quickly. By implementing a voluntary DMA program, NMFS will alleviate these issues of timing and duration. In addition, NMFS considered economic factors when deciding to make compliance with DMAs voluntary. Many small businesses, including ferry and whale watching companies, were concerned about going out of business in the event of a DMA being designated in their operating area during peak season. Voluntary DMAs consider both right whale conservation and potential economic impacts, consistent with NMFS' purpose and need. NMFS hopes vessel operators will avoid the area or proceed through the area at 10 knots, but understands that many will not. NMFS will monitor compliance. If it is not satisfactory, the agency will consider making DMAs mandatory through further rulemaking.

Another commenter requested that the ROD include a quantitative analysis of the number of additional whale collisions that can be expected to occur as a result of making DMAs voluntary and changing the triggering criteria. Data limitation and uncertainties make it impossible to develop a reliable quantitative model to estimate the impacts of the vessel operational measures on the number of ship strikes; the only available approach is qualitative, as stated in Section 4.1 of the FEIS.

Enforcement: Several commenters expressed concerns about the enforcement of the measures. Another voiced concerns about the enforceability of the proposed exemptions. NMFS is committed to implementing an effective enforcement strategy and will continue to work with all of its interagency partners, including the US Coast Guard, to do so. In addition, NMFS has identified available technologies that could be used to supplement existing enforcement capabilities and will further explore their potential application. Regarding enforceability of the exemptions, as stated in the FEIS, "if a deviation from the 10-knot speed limit is necessary, the reasons for the deviation, the speed at which the vessel is operated, the latitude and longitude of the area, and the time and duration of such deviation shall be entered into the logbook of the vessel." During standard vessel boardings, personnel from the NMFS Office of Law Enforcement, the US Coast Guard, or a state law enforcement agency may review the logbook for accuracy and compliance with regulations. In the event where a master of the vessel deviated from the 10-knot speed restriction, and entered this information into the logbook during conditions when maneuverability should not have been jeopardized, NMFS may take appropriate action.

Exemptions: Numerous comments were received from different organizations requesting exemptions for certain port areas or specific types of vessels. One commenter requested that exemption from the measures be extended to include pilot vessels operating out of the port of Charleston, South Carolina. Another asked that exemption from the measures apply to chartered recreational fishing boats in North Carolina. Exemptions were also requested for FastShip vessels and 70-foot racing sailboats participating in the Volvo Ocean Races in 2009. The range of, and rationale for, exemptions to the proposed measures are described in the FEIS and the final rule. Impacts from the measures to charter fishing operations are assessed in the FEIS. Overall economic impacts on North Carolina and South Carolina ports were reduced by the change in the size of SMAs around these ports from 30 to 20 nautical miles. The exemption for vessels engaged in national security, human safety, and other vital missions is limited to federal

and state vessels, and, therefore, does not apply to pilot vessels. NMFS is not considering exemptions to the measures beyond those stated in the FEIS and the final rule.

Other commenters from pilot associations did not specifically request exemptions, but stated that speed restrictions when a state pilot is aboard a vessel in confined waters may adversely affect navigational safety. Vessel maneuverability and safety are addressed in the FEIS and the final rule. There is an exemption that may be applicable to pilot vessels under certain circumstances: A vessel may operate at a speed necessary to maintain safe maneuvering instead of the required 10 knots only if justified because the vessel is in an area where oceanographic, hydrographic and/or meteorological conditions severely restrict the maneuverability of the vessel and the need to operate at such speed is confirmed by the pilot on board or, when a vessel is not carrying a pilot, the master of the vessel. If a deviation from the 10-knot speed limit is necessary, the reasons for the deviation, the speed at which the vessel is operated, the area, and the time and duration of such deviation shall be entered into the logbook of the vessel. The master of the vessel shall attest to the accuracy of the logbook entry by signing and dating it.

<u>Five-year Sunset Provision:</u> While industry stakeholders were, in general, supportive of the five-year sunset, environmental organizations and many individuals were not. Environmental organizations commented on the sunset provision, raising issues such as limited funding that may interfere with the research NMFS will conduct to assess the effectiveness of the rule and that it would take decades for right whales to show signs of recovery. Other commenters indicated that the sunset provision provides a disincentive for voluntary reporting of a collision by the shipping industry. Stakeholders from both groups urged NMFS to quantitatively and qualitatively monitor the effectiveness of the measures during the five-year period. To the extent possible with existing resources, NMFS will synthesize existing data, gather additional data, or conduct additional research on ship-whale interactions to assess the effectiveness of the measures during their period of application. NMFS will also review the economic consequences of the measures. Based on this analysis, NMFS will determine what further steps may be required.

Quality of Data and Completeness of Analysis: Several commenters questioned the completeness, quality, and accuracy of the data presented in the FEIS and the accuracy of the economic impact analysis. In developing the proposed measures and preparing the FEIS, NMFS used the best available scientific information. The findings of the FEIS rest on extensive and upto-date review and analysis of the relevant literature and data, and NMFS believes the FEIS provides an accurate evaluation of the positive and adverse impacts of the operational measures. The data and assumptions underlying the economic impact analysis are detailed in a separate report available to the public online at: <a href="http://www.nmfs.noaa.gov/pr/shipstrike">http://www.nmfs.noaa.gov/pr/shipstrike</a>.

## **MITIGATION MEASURES**

The measures adopted by NMFS are designed to provide greater protection to right whales against ship strikes. These measures may also provide some incidental protection to other marine mammals that are vulnerable to ship strikes. The measures are not expected to have any substantial adverse impacts on the natural oceanic environment, including water and air quality. Therefore, no environmental harm will result from the implementation of the measures and no

mitigation of such harm is needed. To the contrary, by reducing the likelihood of death or serious injury to right whale, thereby contributing to the recovery of the species, the measures will have a positive environmental impact.

Consequently, no additional specific mitigation measures are needed or being considered by NMFS. In essence, the operational measures are mitigation measures in themselves, as they will mitigate the adverse effect of ship strikes on the right whale population. NMFS will evaluate the effectiveness of the measures through monitoring and enforcement procedures, as described in the final rule.

During the five years the measures will be in effect, to the extent possible with existing resources, NMFS will continue to synthesize existing data, gather additional data, and conduct additional research on ship-whale interactions to assess the effectiveness of the measures. Based on this analysis, NMFS will determine what further steps to take prior to or when the measures expire.

## **CONCLUSION**

Through the NEPA process and as documented in this ROD, NMFS has considered the objectives of the proposed action and analyzed a reasonable range of alternatives to address these objectives. The impacts of these alternatives on the human environment were evaluated. NMFS considered public and agency comments throughout the NEPA and rulemaking processes. Taking all these factors into account, NMFS has decided to implement the vessel operational measures included in FEIS Alternative 6 with a 10-knot speed restriction. Alternative 6 is inclusive of the continuance of existing measures described in Alternative 1. This is the alternative that best achieves the need to promote recovery of the North Atlantic right whale population and the need to minimize impacts on the maritime industry in the affected areas.

# **CONTACT INFORMATION**

For further information on this ROD and NMFS' decision, interested parties may contact Mr. David Cottingham, Chief, Marine Mammal and Sea Turtle Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910.

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