



MARINE MAMMAL COMMISSION

5 August 2013

Ms. Nicole R. LeBoeuf
Chief, Marine Mammal and Sea Turtle Conservation Division
Attn: Right Whale Ship Strike Reduction Rule
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Dear Ms. LeBoeuf:

The Marine Mammal Commission (the MMC), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the proposed rule (78 *Fed. Reg.* 34024) published by the National Marine Fisheries Service (NMFS) to delete the expiration date for regulations limiting vessel speed in certain areas to reduce the likelihood of vessel collisions with North Atlantic right whales. The MMC offers the following comments and recommendations.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service:

- adopt the proposed amendment to delete the expiration date from the existing rule to protect North Atlantic right whales from ship strikes along the U.S. East Coast. This amendment will extend the regulations indefinitely, pending new information or analyses;
- as part of its assessments of the rule's effectiveness, analyze data related to the carcasses of all whales determined to have been struck by ships to evaluate the probability that they were struck in or near established management zones and by vessels subject to the rule (i.e., those > 65 feet long) by ensuring necropsy protocols and related analyses are as complete as logistical constraints allow to:
 - a. determine whether the injuries were consistent with being struck by a vessel 65 feet or longer,
 - b. evaluate the extent to which sustained ship strike injuries could have limited the whale's mobility before death,
 - c. estimate the date of the whale's death based on carcass decomposition and other relevant factors, and
 - d. estimate carcass drift for the period between time of death and time of carcass discovery to determine the approximate location of the whale when it died;
- refrain from establishing any new sunset provision similar to the arbitrary five-year expiration date included in the current rule; and
- examine data on vessel traffic patterns and right whale occurrence collected since 2008 to determine whether additional regulatory measures should be adopted, at least on an interim basis, to:

- a. widen the seasonal management areas between New York and Florida so that they all extend to 30 nmi from shore,
- b. establish a new seasonal management area in the recently identified right whale winter habitat in the Jordan Basin area of the central Gulf of Maine, and
- c. establish new seasonal management areas or mandatory speed restriction zones at times when and in areas where dynamic management areas have been established repeatedly.

RATIONALE

Extend the Rule Indefinitely

The *Federal Register* notice provides a thorough and concise review of information on the status of North Atlantic right whales and the urgency for mitigating ship-strike-related deaths of this species along the east coast of the United States. It notes that North Atlantic right whales are one of the world's most critically endangered large whales and one of the most endangered of all mammals. They currently number fewer than 500 and, while the population has been increasing over the past decade, it is doing so at a rate below the 4-7 percent rate of increase in populations of taxonomically similar species, such as southern right whales and western Arctic bowhead whales. Human-caused deaths from ship strikes and entanglement in commercial fishing gear are the primary obstacles to their recovery, having caused the apparent population decline in the 1990s. Although ship strike deaths may be underestimated because not all carcasses of whales killed by ship strikes are found and some carcasses are too decomposed when found to be identified as a ship strike death, an average of 1.2 ship-strike related deaths were documented per year during the decade before ship-speed restrictions were first proposed in 2006. A large majority of those whales were found in or near major shipping channels off ports between Jacksonville, Florida, and the Canadian border. Since December 2008, when regulations restricting the speed of vessels greater than 65 feet in length to 10 knots in shipping lanes within 20 nmi of shore were put in place, no right whale deaths attributable to ship-strikes have been documented in or near any of the seasonal management areas. The MMC believes this evidence, along with other analyses cited in the notice, provide a basis for cautious optimism that the vessel speed measures are accomplishing their purpose: to reduce the incidence of fatal ship strikes on right whales.

The notice explains that the original rule included a five-year sunset provision because some public comments had raised concern about whether the 10-knot speed limit would significantly reduce serious injuries and deaths of right whales from ship strikes. For reasons noted in the enclosed 29 September 2008 letter commenting on that final rule, the MMC opposed the inclusion of a sunset provision. The MMC continues to oppose inclusion of a sunset provision for those same reasons. Uncertainty about the effectiveness of regulatory measures, when those regulations are based on the best available information, is not a valid reason for imposing an arbitrary expiration date. Any modifications to the regulations should be based on scientific analyses that demonstrate why and how the measures should be changed. The preliminary data cited in the notice suggest that the speed limits have been effective. As such, the rule should remain in place until additional scientific data has been collected to confirm or dispute this apparent effectiveness. Determining the merit of a sunset provision must be considered within the context of the identified need for these measures, including: (1) the fact that human-caused deaths of right whales, including ship strikes, are considered the main impediments to their recovery; (2) measures to reduce the incidence of

entanglement in fishing gear—the only other major known cause of right whale mortality—have been ineffective to date; (3) numerous scientific papers cited in the notice substantiate that ship-strike mortality increases at vessel speeds above 10 knots; and (4) currently there are no other options likely to be as effective at reducing ship strikes. Therefore, the MMC recommends that NMFS adopt the proposed amendment to delete the expiration date from the existing rule to protect North Atlantic right whales from ship strikes along the U.S. East Coast. This amendment will extend the regulations indefinitely, pending new information or analyses.

Analyses of Rule Effectiveness

The *Federal Register* notice requests “information that may help establish the amount of time and the studies needed to determine how effective the rule is in protecting and recovering” North Atlantic right whales. With regard to needed studies, the MMC believes one line of investigation that should be undertaken is to determine as possible where ship strikes occur and compare those locations with established management zones. The MMC currently is working on such a study and will forward the results to NMFS as soon as it is completed. The rule’s effectiveness ultimately should be judged on the extent to which the incidence and severity (lethality) of ship strikes are reduced. Most studies cited in the notice therefore have attempted to evaluate whether ship strike-related right whale deaths have decreased since the rule went into effect. However, because of the small sample size, researchers have had to pool all ship strikes regardless of whether they occurred within or outside of management zones where vessel speeds are regulated. As noted above, no ship strikes have been documented within the management zones. A finer analysis of carcass location, known or potential carcass drift since the time of death, and whether the involved ship was subject to regulation is needed to assess the rule’s effectiveness.

Although the extent of drift between the time a whale is lethally struck and the time its carcass is found is a confounding factor for any such an analysis, preliminary results from the Commission’s study support the notice’s unreferenced statement that “...there have been no vessel-strike related right whale deaths in the areas covered by the vessel speed restriction rule since its implementation.” The preliminary results further indicate that a large majority of ship strike-related right whale deaths in U.S. waters during the 18 years preceding implementation of the rule (12 of 15 deaths attributed to ship strikes) were detected inside or within likely drift distances of the management zones established by the December 2008 rule (10 were inside those zones, two were within 6 nmi, and one was 36 nmi from a zone). The span of time since the vessel speed rule went into effect, and during which there have been no documented ship strike-related deaths of right whales in or near those management zones—4.5-years—is now nearly twice the longest interval without a documented death in the 18 years before adoption of the rule. If the apparent reduction in the average annual death rate of right whales in or near management areas suggested by the limited data available were to continue to hold once a larger data set becomes available, this would provide a valuable measure of the effectiveness of the vessel speed rule. Unlike other types of analysis, this approach can be tied directly to the geographic boundaries of the established speed zones and the size of ships subject to regulation. That is, data on carcass decomposition and distance from management zone boundaries can be used to assess the likelihood that whales were struck inside regulated areas, and examination of injuries (e.g., the size of propeller wounds and type and magnitude of blunt trauma injuries) can be used to deduce whether strikes likely involved vessels subject to regulation (i.e., > 65 feet long).

For these reasons, the MMC recommends that the NMFS, as part of its assessments of the rule's effectiveness, analyze data related to the carcasses of all whales determined to have been struck by ships to evaluate the probability that they were struck in or near established management zones and by vessels subject to the rule (i.e., those > 65 feet long) by ensuring necropsy protocols and related analyses are as complete as logistical constraints allow to:

- a. determine whether the injuries were consistent with being struck by a vessel 65 feet or longer,
- b. evaluate the extent to which sustained ship strike injuries could have limited the whale's mobility before death,
- c. estimate the date of the whale's death based on carcass decomposition and other relevant factors, and
- d. estimate carcass drift for the period between time of death and time of carcass discovery to determine the approximate location of the whale when it died.

Concerning the amount of time necessary to assess the rule's effectiveness, the notice states that "simply detecting a relatively large change in the rate of known ship strike deaths and serious injuries would require 5-7 or more years (depending on the magnitude of change) perhaps longer." The MMC believes the many confounding and unpredictable variables make it difficult, and probably unrealistic, to try to estimate how long it would take to obtain a scientifically robust assessment of the rule's effectiveness. The small sample size of deaths before and after the rule went into effect is one obvious limiting factor as is the considerable inter-annual variability in the number of such events. Analyses have been made even more difficult by the decision to limit the range of management zones in the current rule to 20 nmi from shore along the whales' migration route. The initial proposed rule of September 2006, which the MMC supported, included waters out to 30 nmi off the U.S. mid-Atlantic and southeastern states because it was believed that a significant part of the migration occurred in areas between 20 and 30 nmi offshore. By excluding waters beyond 20 nmi, analyses of effectiveness must now differentiate between ship strikes that occur in potentially high-risk areas just beyond 20 nmi, where vessel speeds are not restricted, and those that occur within the regulated areas. This is further complicated because whales struck near management zone boundaries may drift into or out of those zones. Taken together, these complexities, along with the small sample sizes, ensure that it will take a considerable time to evaluate the rule's effectiveness.

Other factors that could affect the time needed to evaluate effectiveness of the rule include: (1) unknown changes in vessel traffic patterns and levels due to new offshore energy development, global economic trends, military activities, or new vessel activity; (2) changes in whale abundance and distribution; (3) changes in whale movement patterns in response to short or long-term environmental change, including the changes in vessel traffic patterns and effects of climate change; (4) human disturbance from offshore or nearshore development or other activities; (5) changes in agency funding that could affect efforts to search for or retrieve carcasses and to conduct related analyses; and (6) variable levels of non-compliance with speed restrictions by vessel operators that could result in whale deaths in regulated areas.

Extending the Sunset Provision

The *Federal Register* notice also requests comments on whether the final rule should extend, rather than eliminate, the sunset provision to allow time for a more comprehensive assessment of

the benefits and effectiveness of the rule and what timeframe would be appropriate. Although the MMC believes that more time is necessary, a sunset provision is not needed for this purpose. The MMC does not believe it is possible to predict how long it would take to develop a statistically reliable assessment of the rule's effectiveness. As such, the MMC strongly opposes setting another arbitrary expiration date. The notice states that NMFS will continue studies to assess the rule's effectiveness. If results of those studies demonstrate that the rule is ineffective, that would be the appropriate time to repeal or modify the rule. Preliminary analyses suggest that the rule is having its intended effect; therefore, extending the sunset provision likely would result in using more agency resources to prepare the rule extension, and require more time from other agencies and the public to review it, all with no guarantee that there would be sufficient information at the end of the extension period to judge effectiveness. Accordingly, the MMC believes that establishing a new expiration date is unnecessary and unwarranted. Therefore, the MMC recommends that NMFS not include a new sunset provision in any extension of the current rule.

Alternative Actions

The notice indicates that NMFS is continuing to evaluate aspects of the rule's effectiveness. The results of this work will not be completed before the current rule expires, but could form the basis for subsequent rulemaking to modify, refine, or abolish certain regulatory provisions (e.g., to change management area boundaries or terminate unnecessary requirements). NMFS therefore requested comments on ongoing monitoring and assessment work needed to consider possible regulatory changes. The MMC commends NMFS for recognizing that changes to the rule may be warranted and believes that there are several ways in which the rule could be improved. As a general matter, given the endangered status of the North Atlantic right whale, the MMC believes that a precautionary approach is appropriate and that NMFS should start with management measures that provide the greatest assurance of protection consistent with available scientific data. Once additional information becomes available, it may be appropriate to tailor certain measures as long as doing so would not sacrifice conservation benefits. Consistent with this approach, the MMC believes that NMFS should consider expanding the boundaries of some existing seasonal management areas and establishing new ones.

Perhaps most importantly, consideration should be given to extending the outer boundary of seasonal management areas along the right whale migratory corridor from 20 to 30 nmi from shore, as NMFS had initially proposed in its September 2006 proposed rule. The rationale for that distance, as described in the draft environmental impact statement on the proposed rule, is that the main right whale migratory corridor extends out to 30 nmi. The subsequent decision to narrow the width of seasonal management areas south of New England to 20 nmi in the final rule significantly reduced right whale protection. Analyses of new information on right whale occurrence based on aerial surveys, passive acoustic detection, and other sources should be examined and, along with earlier information, form the basis of a new assessment of whether seasonal management boundaries in this part of the right whale's range should be expanded to 30 nmi. Including these waters in management areas could significantly shorten the time required to collect statistically meaningful data to evaluate the effectiveness of the rule.

In addition, consideration should be given to adding a seasonal management zone for the Jordan Basin area of the Gulf of Maine, off the ports of Portland, Maine, and Portsmouth, New Hampshire. Information gathered since the December 2008 rule went into effect has shown that this

Ms. Nicole R. LeBoeuf

5 August 2013

Page 6

area provides regular winter habitat for many right whales and suggests that ship traffic into and out of Portland and Portsmouth poses a risk to whales using that area.

Finally, there is a need to review the vessel traffic patterns and dynamic management areas that have been established to protect groups of right whales in areas where seasonal management areas are not in place. Given that dynamic management areas trigger only voluntary speed limits and that information on compliance with these voluntary measures is poor, consideration should be given to establishing seasonal management zones, with mandatory speed limits in areas that are designated repeatedly as dynamic management areas. Therefore, while work continues to evaluate the effectiveness of the 10-knot speed restriction, the MMC recommends that NMFS examine data on vessel traffic patterns and right whale occurrence collected since 2008 to determine whether additional regulatory measures should be adopted, at least on an interim basis, to:

- a. widen the seasonal management areas between New York and Florida so that they all extend to 30 nmi from shore,
- b. establish a new seasonal management area in the recently identified right whale winter habitat in the Jordan Basin area of the central Gulf of Maine, and
- c. establish new seasonal management areas or mandatory speed restriction zones at times when and in areas where dynamic management areas have been established repeatedly.

Thank you for the opportunity to comment on this proposed rule. If you have any questions on these comments or recommendations, please let me know.

Sincerely,

A handwritten signature in blue ink that reads "Rebecca J. Lent". The signature is written in a cursive style with a large initial "R".

Rebecca J. Lent, Ph.D.
Executive Director

Enclosure (29 September 2008 letter)