



ENDANGERED FISH AND WILDLIFE; Proposed Rule to Eliminate the Expiration Date Contained in the Final Rule to Reduce the Threat of Ship Collisions with North Atlantic Right Whales RIN 0648-BB20

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INTRODUCTION

The Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University is dedicated to advancing knowledge about the effects of regulation on society. As part of its mission, RSP conducts careful and independent analyses that employ contemporary economic scholarship to assess rulemaking proposals and their effects on the economic opportunities available to and social well-being of all members of American society.

This comment addresses the efficiency and efficacy of this proposed rule from an economic point of view. Specifically, it examines how the proposed rule may be improved by more closely examining the societal goals the rule intends to achieve and whether this proposed regulation will successfully achieve those goals. In many instances, regulations can be substantially improved by, for example, choosing more effective regulatory options or more carefully assessing the actual societal problem.

SUMMARY

The proposed rule aims to “eliminate the expiration date (or ‘sunset clause’) contained in regulations requiring vessel speed restrictions to reduce the likelihood of lethal vessel collisions with North Atlantic right whales.”¹ The existing regulation (73 FR 60173; October 10, 2008) is due to expire on December 9, 2013 and restricts travel speeds of large vessels to not more than 10 knots when travelling in certain locations and at specific times of the

1. Department of Commerce, National Oceanic and Atmospheric Administration, “Endangered Fish and Wildlife; Proposed Rule to Eliminate the Expiration Date Contained in the Final Rule to Reduce the Threat of Ship Collisions with North Atlantic Right Whales,” 50 C.F.R. Part 224, Docket No. 1108195182318-01, RIN 0648-BB20 (June 6, 2013): 34024. Hereafter referred to as “NPRM.”

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year along the US Atlantic East Coast Seaboard. Large vessels are defined in the existing rule as 65 feet or greater in length. All provisions of the original 2008 rule other than the expiration date are proposed to remain in place.

The goal of the original rule and the current proposal to remove the expiration date is to reduce the likelihood of serious injury and death of right whales struck by vessels. Evidence is cited indicating “that the probability of death or a serious injury of a struck whale is rapidly diminished when vessel speeds are below 12 knots.”² Unfortunately, as my comment argues, the sponsoring agencies have failed to account for all the costs of maintaining the regulation and to adequately assess the benefits of the regulation despite having the historical data available for such an analysis. Furthermore, the analysis presented fails to abide by two primary guidelines set forth by Executive Order 12866.

First, the economic analysis understates the true costs associated with the proposed rule. While the analysis presented in the December 2012 Final Report appears to present a fair account of the direct and indirect costs to the impacted industries to arrive at the total cost estimate of \$44.7 million (represented in 2009 dollars),³ the analysis ignores entirely the management and enforcement costs to the agencies. Given the complexities involved in determining the location and size of the Seasonal Management Areas (SMAs) and Dynamic Management Areas (DMAs) and the difficulties involved with enforcement in light of the abuse of the exceptions clause and the lack of adherence by foreign vessels, these costs are likely substantial.

Second, the discussion of the benefits of the speed restrictions for vessels traveling in SMAs and DMAs is contradictory to a degree. First, the analysis correctly argues that the benefits are difficult to quantify monetarily and that “the sampling period was too short to make a meaningful determination about the rule’s impact on the right whale population.”⁴ However, the agency appears to argue for the elimination of the sunset clause based on the same existing analyses that were just said to be insufficient for definitive conclusions. In addition, the discussion lacks specificity regarding the estimated number of right whales saved due to the regulation.

Lastly, the analysis provided fails to adhere to the requirements of a Regulatory Impact Analysis as outlined by Executive Order 12866. First, without any benefits estimation, neither a benefit-cost analysis nor a cost-effectiveness analysis is possible. Second, the analysis considers no alternatives to the proposed rule beyond asking for comment as to whether the final rule should simply include an extension of the sunset provision or eliminate the provision entirely.

It is possible that the elimination of the sunset clause in the 2008 Right Whale Ship Strike Reduction Rule is in the best interest of society in regards to both protecting the endangered North Atlantic right whale population and doing so at the lowest cost. However, the analysis provided does not give Congress and the public enough information to make such a determination. The Department of Commerce and the NOAA should improve the regulatory impact analysis to more accurately estimate all of the costs involved, to provide a more meaningful estimate of the benefits of the regulation, and to compare the net benefits of the proposed rule with those of other reasonable alternative solutions to the threat of lethal ship strikes with right whales.

HOW THE ECONOMIC ANALYSIS UNDERSTATES THE COSTS

The economic analysis incorporates the direct and indirect costs borne by the shipping industry and other impacted market segments, such as commercial fishing, charter fishing, passenger ferries, and whale watching, to arrive at a total cost of \$44.7 million (2009\$).⁵ If these were the only relevant costs imposed by the regulation, this figure

2. NPRM, 34027.

3. Nathan Associates Inc., *Economic Analysis of North Atlantic Right Whale Ship Strike Reduction Rule: Update of Economic Impact and Scoping Assessment for Study of Potential Modifications*, special report prepared at the request of National Oceanic & Atmospheric Administration (NOAA), National Marine Fisheries (NMFS), Office of Protected Resources, December 2012, 28. Hereafter referred to as “Final Report.”

4. NPRM: 34026.

5. Final Report, Chapter 4: 28.

could be considered to be a reasonable estimate; however, the analysis fails to recognize what is possibly a sizable fraction of the true total costs: SMA and DMA management and enforcement costs.

Establishing SMA and DMA Regions

Whereas the SMA regions are explained to be relatively constant with changes being made slowly over time, DMA regions are more regularly established and expired depending on right whale movement. DMAs are voluntary speed reduction zones generally established for periods of 15 days, with possible extensions also dependent on right whale movement.

DMA implementation is based on specifications for the “Atlantic Large Whale Take Reduction Plan (ALWTRP) Dynamic Area Management fishing restrictions,” and the process can be “triggered by a single reliable report from a qualified individual of an aggregation of three or more right whales within 75 square nautical miles.”⁶ The National Marine Fisheries Service (NMFS) creates a circle with a radius determined by the number of whales reported at the sighting. “If any circle or group of contiguous circles includes three or more right whales, this core area and surrounding waters would be a candidate DMA zone,” and the initial core area would be expanded to allow for protected movement of the whales.⁷ The DMA would expire after 15 days from implementation unless subsequent surveys indicate the continued presence of right whales, extending the DMA for an additional 15 days from the last sighting. Reoccurring DMAs can become candidates for new SMAs.

The above-described process for establishing and monitoring SMAs and DMAs likely involves substantial labor hours by the NMFS and possibly the creation of positions which otherwise would not exist in the agency. However, no discussion of the required labor hours or the level of expertise of the laborers involved (such as who is a “qualified individual”) is discussed in the analysis. As such, the true costs of the rule are potentially much greater than those estimated in the provided analysis.

Monitoring and Enforcement Costs

Monitoring vessel speeds is accomplished through the use of the “Automatic Identification System (AIS) that uses a Global Positioning System-linked, very high frequency radio signal that provides for ship-to-ship and ship-to-shore information transfer.”⁸ However, vessels are permitted at the captain’s discretion to travel at speeds faster than the established maximum, but such action must be appropriately described in the ship log for official review. The cost estimate presented in the regulatory impact analysis (RIA) should include the time cost for this official review. Further, no discussion of enforcement costs for the rule can be found in the RIA.

BENEFITS ARE UNSPECIFIC

Citations are provided linking a “rapidly diminished” probability of a serious or fatal strike with a whale while at speeds below 12 knots as justification for the proposed rule.⁹ It is also noted that while there has been an “average of 1.2 known vessel-strike related fatalities” occurring over the period from 2006 to 2010,¹⁰ no such known fatalities occurred in areas covered by the speed restriction rule since its implementation.¹¹ Given the lack of fatal collisions in established speed restriction zones, it is quite possible the rule is working to the benefit of the endangered right whale population. However, as is noted on numerous occasions in the analysis, “the sampling period was too short to make a meaningful determination about the rule’s impact on the right whale population,”

6. Final Report, Chapter 2: 9–10.

7. Final Report, Chapter 2: 10.

8. Final Report, Chapter 2: 1.

9. NPRM: 34027.

10. NPRM: 34025.

11. NPRM: 34026.

and “it is difficult to make definitive conclusions at this time regarding the long-term biological effectiveness of the current vessel speed restriction rule.”¹²

The analysis discusses how low-probability events, such as a serious or fatal whale strike, require at least 5–7 years of data for accurate conclusions to be drawn. However, the agency, despite self-admitted inaccurate conclusions of the speed restriction rule’s effectiveness, proceeds to propose the removal of the sunset clause. Given that sufficient data is not currently available and reliable conclusions regarding the success of the speed restriction rule cannot be made, the proposed rule should address the extension of the sunset clause (say, for another five years) rather than its elimination, such that sufficient data can be collected and analyzed before deciding on whether to permanently eliminate the sunset clause.

The limited data availability does not excuse the agency from estimating the benefits of the rule. Indeed, it is the agency’s responsibility to justify the passage of the rule. The agency should continue to admit that the existing statistical results in recent peer-reviewed academic publications addressing the impact the speed restriction rule on the right whale population suffer from data limitations. The quantitative findings of those results should be discussed along with the estimates from other studies of similar—but more long-standing—speed restriction programs intended to benefit other whale populations. Based on these sets of findings, the agency should admit to a degree of uncertainty and determine a range of projections for the reduction in right whale strikes in areas covered by the speed restriction rule over a five or ten year period.¹³ Such a calculation would then allow for a cost-per-right-whale-life-saved calculation to help meet the expectations of Executive Order 12866, as discussed below.

The above-described benefits analysis, given the large degree of uncertainty in the estimate, would provide justification for an extension of the sunset clause, rather than its elimination entirely. In situations in which there is a lack of data to provide for more certain estimates of benefits and in which the existing limited research indicates potentially large benefits from the regulation, there is a reasonable argument for the extension of the sunset clause in order to allow for sufficient data to better determine the regulation’s impact on society.

HOW ANALYSIS FAILS TO MEET EXPECTATIONS OF EXECUTIVE ORDER 12866

Executive Order 12866, which this rule has been determined to fall under, requires, among other things, that “each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.”¹⁴ This requirement is often, although not always, interpreted as implying the inclusion of a net-benefit calculation. The Executive Order also requires that the agency provide evidence of why the proposed rule has been chosen over alternative solutions to the systemic problem.¹⁵ The analysis provided fails to meet both of these criteria.

Cost-Per-Right-Whale-Life-Saved Calculation

The monetary benefits of the rule are difficult to compute. In such circumstances, regulatory agencies often opt for a cost-effectiveness—or in this case, a cost-per-right-whale-life-saved—calculation.¹⁶ Such calculation, as mentioned above, could be achieved through the use of the existing estimates of reduction in the probability of a

12. Ibid.

13. Three studies are mentioned (NPRM 34026) to show that the probability of lethal right whale strikes has been reduced substantially as a result of the speed restriction rule.

14. Regulatory Planning and Review, Exec. Order No. 12866, 58 Fed. Reg. 190 (October 4, 1993), 2, http://www.reginfo.gov/public/jsp/Utilities/EO_12866.pdf.

15. Ibid.

16. For example, see the break-even analysis in *Preliminary Regulatory Impact Analysis: Minimum Sound Requirements for Hybrid and Electric Vehicles FMVSS 141*, National Highway Traffic Safety Administration, Office of Regulatory Analysis and Evaluation, National Center for Statistics and Analysis, January 2013.

lethal strike as a result of the speed reduction rule. These figures could then be used to project the number of right whales saved over a longer period of time, such that the expected cost per life saved could be computed.

Alternative Solutions

Executive Order 12866 also calls for the consideration and discussion of the incremental costs and benefits of alternative solutions to the systemic problem addressed by the proposed rule. The analysis also does not mention any alternatives short of asking for comment as to whether the final rule should eliminate the sunset clause entirely or simply extend it. Additional consideration should be given to other possible solutions. Such solutions could include, for example, a fine per whale strike such that each individual firm can decide how best to alter behavior to reduce the probability of such a strike, which may involve traveling at speeds even lower than the 10 knot maximum set forth in this proposed rule. This alternative clearly involves complicated enforcement obstacles, but it is one that could clearly be considered. Other considerations could involve an educational campaign with no speed restrictions and the establishment of only voluntary speed reduction zones, among others. At a minimum, the analysis should discuss why these alternatives are inferior solutions to the problem, relative to the chosen rule.

CONCLUSIONS

For the reasons discussed above, the Department of Commerce and the NOAA likely understate the costs of eliminating or extending the sunset rule from the existing speed reduction rule to reduce the threat of right whale strikes. Furthermore, a more thorough discussion and analysis of the benefits of the proposed rule are needed. A sunset clause, by its very nature, creates an opportunity for the agency to conduct more a rigorous evaluation of the regulation's impacts when the costs or benefits are, a priori, uncertain. The sunset clause allows for regulatory experimentation in cases where it is difficult to measure costs and benefits without unduly exposing society to risk of a poor regulation. Unfortunately, the original sunset clause is too short for meaningful insight.

At best, the agency should improve the analysis in an attempt to address whether the sunset clause should be extended over a time period long enough to collect valid data. There simply is not enough data presently—due to the initial sunset clause being too short—to accurately evaluate whether the clause should be permanently eliminated. An improved analysis of whether the clause should be extended could include a range of estimates, albeit imprecise due to data limitations, of the number of right whale lives saved over a five or ten year span. This calculation would also permit the inclusion of an estimate of the cost per right whale life saved. Lastly, the analysis should enumerate and analyze the cost and benefits of alternative solutions to the threat of serious and fatal right whale strikes. Modifying the analysis as described above would provide Congress and the public with a better depiction of the relative net benefits of the proposed rule such that a more informed decision can be made as to whether the speed restriction rule should be extended.