



Protecting the blue planet

October 24, 2022

Dr. Caroline Good
Office of Protected Resources
National Oceanic and Atmospheric Administration

Re: Amendments to the North Atlantic Right Whale Vessel Strike Reduction Rule: NOAA-NMFS-2022-0022

Dear Dr. Good,

The New England Aquarium (Aquarium) appreciates the opportunity to provide input on the National Oceanic and Atmospheric Administration (NOAA) Fisheries' *Amendments to the North Atlantic Right Whale Vessel Strike Reduction Rule: NOAA-NMFS-2022-0022* (Proposed Rule). Reducing the likelihood of deaths and serious injuries to the critically endangered North Atlantic right whale (NARW) that result from collisions with vessels requires decisive and bold action.

The NARW is one of the most endangered large whale species in the world, with fewer than 350 individuals remaining,¹ and a recent paper showed that the number of breeding females is in sharp decline; as of 2018, there were approximately 72 breeding females remaining.² The Aquarium has one of the longest-running right whale research programs in the world, extensively studying the animals for more than 40 years. Aquarium scientists focus on solutions-based work, collaborating with fishermen on new techniques to reduce deadly entanglements in fishing gear, collecting the data and conducting analyses needed to understand the potential impacts of offshore wind energy development, conducting spatial analyses to assess risk from vessels, facilitating communication across the maritime industry to reduce vessel strikes, and working with lawmakers locally, nationally, and internationally to develop science-based protections for the whales.

The Aquarium commends NOAA on recent steps taken to protect this species, including this Proposed Rule. Vessel speed reductions mitigate vessel-strike risk, and studies have shown that the probability of a fatal vessel strike increases at higher vessel speeds.³

The potential conservation gains from speed reductions are corroborated by the effectiveness of slowing vessels down for NARWs on the East Coast of the United States. In 2008, NOAA implemented a seasonal, mandatory vessel speed rule requiring all vessels ≥ 65 feet to travel 10 knots or less in East Coast seasonal management areas (SMAs) established for right whales. In studying the impact of this management measure, vessel speed restrictions reduced vessel-strike mortality risk by 80–90%,⁴ and no

¹ The last reported estimate was 356 individuals. Pettis, H.M., Pace, R.M. III, Hamilton, P.K. 2022. North Atlantic Right Whale Consortium 2021 Annual Report Card. Report to the North Atlantic Right Whale Consortium. The updated estimate will be published in 2023.

² Reed, J. et al. 2022. Multi-event modeling of true reproductive states of individual female right whales provides new insights into their decline. *Frontiers in Marine Science*. Vol. 9.

³ Conn, P. B., and G. K. Silber. 2013. Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales. *Ecosphere* 4:1-16.

⁴ Conn, P. B., and G. K. Silber. 2013. Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales. *Ecosphere* 4:1-16.

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vessel-struck NARWs were observed inside of active SMAs or within 45 nautical miles of an SMA boundary.⁵ Additionally, NOAA's recent assessment of the 2008 speed rule concluded that the rule had helped to reduce risks to right whales, but also indicated that further efforts are needed. In particular, the report recommended assessing the timing and locations of the SMAs, addressing the risk associated with vessels < 65 feet, and addressing the low compliance with the voluntary vessel speed restrictions.⁶ The Aquarium commends NOAA for taking steps with this Proposed Rule to address the recommendations in the report.

The recommendations set forth below are submitted in the spirit of strengthening this Proposed Rule to reduce the risk of serious injuries and mortality to NARWs from vessel strikes and to prevent the species extinction. The recommendations are consistent with the Aquarium's congressional testimony supporting additional actions to ensure the long-term survival of this and other marine mammal populations,⁷ and reflect the best available science with a particular focus on the Gulf of Maine, where much of the Aquarium's research takes place.

The spatial and temporal modification of Seasonal Speed Zones (SSZs)

The Aquarium reviewed all proposed seasonal speed zones (SSZs) and applauds NOAA for expanding the size of the zones and the length of time they are active. While NOAA aimed to identify the smallest spatial and temporal footprint possible for speed restricted areas to minimize the extent of regulatory action, it aims to do so while also achieving necessary conservation goals. We appreciate this approach, but achieving the conservation goal of protecting NARW from extinction requires extending the temporal component of the mandatory speed zone for Southern New England (SNE) because this area has been shown to represent increasingly important right whale habitat.⁸ To define the geographic region encompassing SNE, the New England Aquarium recommends that NOAA use all available data. The literature cited below is not comprehensive of existing data in the region, rather it is based on the rectangle that forms the New England Aquarium's aerial survey and data collection study area.⁹

⁵ Laist et al. (2014) used locations of right whale carcasses attributed to vessel strikes to assess the effectiveness of the 2008 rule. Laist, D. W., A. R. Knowlton, and D. Pendleton. 2014. Effectiveness of mandatory vessel speed limits for protecting North Atlantic right whales. *Endangered Species Research* 23:133-147. However, van der Hoop et al. (2015) suggested that the findings of Laist et al. (2014) may be dependent on the size of the buffer around the SMAs used in their analyses and that the spatial and temporal extent of the SMAs should be expanded. van der Hoop, J. M., A. S. M. Vanderlaan, T. V. N. Cole, A. G. Henry, L. Hall, B. Mase-Guthrie, T. Wimmer, and M. J. Moore. 2015. Vessel strikes to large whales before and after the 2008 ship strike rule. *Conservation Letters* 8:24-32.

⁶ National Marine Fisheries Service. 2020. North Atlantic right whale (*Eubalaena glacialis*) vessel speed rule assessment. National Marine Fisheries Service, Office of Protected Resources, Silver Spring, MD.

⁷ New England Aquarium testified before the House Committee on Natural Resources, March 2022; oral and written testimony available at https://naturalresources.house.gov/hearings/wow-legislative-hearing_march-17-2022.

⁸ O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*; Quintana-Rizzo, E., S. Leiter, T. V. N. Cole, M. N. Hagbloom, A. R. Knowlton, P. Nagelkirk, O. O'Brien, C. B. Khan, A. G. Henry, P. A. Duley, L. M. Crowe, C. A. Mayo, and S. D. Kraus. 2021. Residency, demographics, and movement patterns of North Atlantic right whales *Eubalaena glacialis* in an offshore wind energy development area in southern New England, USA. *Endangered Species Research* 45:251-268.

⁹ Refer to Figure 1, O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*.

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The proposed SSZ encompassing SNE, the Atlantic Zone, is limited to the following temporal dates: November 1 through May 30. This is not consistent with the best available science which indicates the increasingly predictable year-round detection of NARW in SNE.¹⁰

The Aquarium recommends NOAA extend the temporal component of the speed restrictions in SNE based on visual sightings of the species, coupled with research that indicates the increasingly predictable importance of this NARW habitat.¹¹ Aquarium scientists have found a significant, increasing trend in NARW abundance in the waters south of Martha's Vineyard and Nantucket.¹² This work demonstrated that NARWs are now sighted in this area in every season. In the study, researchers used data collected from Aquarium aerial surveys of the southern New England shelf waters from 2013 to 2015, and 2017 to 2019. This study "found a significant, increasing trend in winter and spring right whale abundance in SNE from 2013 to 2019."¹³ With respect to the presence of NARW year-round, the discussion states:

"Historically, right whale presence in SNE peaked in winter and spring and right whales were absent between June and October. In our study, the historical seasonal occurrence of right whales in SNE appears to have continued through 2015. However, beginning in 2017, surveys began to detect small numbers of right whales in both summer and fall. The recent, year-round detection of right whales in SNE by aerial surveys is unique among major right whale habitats. Our analyses and previous studies suggest that SNE represents an increasingly important habitat for the declining right whale population."¹⁴

In addition to visual observations, passive acoustic recorders in these waters have also detected the presence of right whale calls year-round.¹⁵ This includes detections during the fall,¹⁶ when visual survey effort has been less consistent due to gaps in funding. Acoustic detections play a vital role in identifying

¹⁰ O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*.

¹¹ O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*. Quintana-Rizzo, E., S. Leiter, T. V. N. Cole, M. N. Hagbloom, A. R. Knowlton, P. Nagelkirk, O. O'Brien, C. B. Khan, A. G. Henry, P. A. Duley, L. M. Crowe, C. A. Mayo, and S. D. Kraus. 2021. Residency, demographics, and movement patterns of North Atlantic right whales *Eubalaena glacialis* in an offshore wind energy development area in southern New England, USA. *Endangered Species Research* 45:251-268.

¹² O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*.

¹³ O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*.

¹⁴ O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*.

¹⁵ Davis, G.E., Baumgartner, M.F., Bonnell, J.M. et al. Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (*Eubalaena glacialis*) from 2004 to 2014. *Sci Rep* 7, 13460 (2017). <https://doi.org/10.1038/s41598-017-13359-3>.

¹⁶ The Passive Acoustic Cetacean Map (PACM), NOAA Northeast Fisheries Science Center, available at <https://apps-nefsc.fisheries.noaa.gov/pacm/#/narw>.

the presence of NARW for management purposes.¹⁷ These techniques assess the occurrence of NARWs using both autonomous vehicles and moored equipment.¹⁸ Studies for both systems have shown that false detection rates at the temporal scales considered in analyses were 0%.¹⁹

The year-round detection, along with the increase in winter and spring abundance, demonstrates that this region represents an increasingly important habitat for the declining population. **As a result, the Aquarium recommends NOAA analyse effort-corrected visual sighting data and acoustics data to determine the timeframe (e.g., weeks, months) to add on either side of the currently proposed temporal component (November 1 through May 30) for SNE waters. In doing so, NOAA would account for the increasingly predictable use of the SNE habitat.**

For any time periods not included in the extended SSZs, it is important that SNE is included as a DSZ. Research shows that NARW are increasingly using this habitat year-round²⁰ and that the risk is above zero in most months.²¹ Consequently, SNE fits the NOAA designation as an area for DSZ. So that the DSZ meets the conservation goal of preventing NARW extinction, it is critical to ensure that sufficient visual survey effort and passive acoustic monitoring exist in this region.

¹⁷ Van Parijs, S. M., Clark, C. W., Sousa-Lima, R. S., Parks, S. E., Rankin, S., Risch, D., and Van Opzeeland, I. C. 2009. Management, mitigation and research applications of near real time and archival passive acoustic sensors over variable temporal and spatial scales. Theme Section 'Acoustics in marine ecology' in Marine Ecology Progress Series 395:21-36; Clark, C.W., Brown, M.W. and Corkeron, P. (2010), Visual and acoustic surveys for North Atlantic right whales, *Eubalaena glacialis*, in Cape Cod Bay, Massachusetts, 2001–2005: Management implications. Marine Mammal Science, 26:837-854. <https://doi.org/10.1111/j.1748-7692.2010.00376.x>

¹⁸ Baumgartner, M. F., Bonnell, J., Corkeron, P. J., Van Parijs, S. M., Hotchkin, C., Hodges, B. A., Bort Thornton, J., Mensi, B. L., and Bruner, S. M. 2020. Slocum gliders provide accurate near real-time estimates of baleen whale presence from human-reviewed passive acoustic detection information. *Frontiers in Marine Science* 7:100; Baumgartner, M. F., Bonnell, J., Van Parijs, S. M., Corkeron, P.J., Hotchkin, C., Ball, K., Pelletier, L-P., Partan, J., Peters, D., Kemp, J., Pietro, J., Newhall, K., Stokes, A., Cole, T. V. N., Quintana, E., and Kraus, S. D. 2019. Persistent near real-time passive acoustic monitoring for baleen whales from a moored buoy: system description and evaluation. *Methods in Ecology and Evolution* 10:1476-1489.

¹⁹ Baumgartner, M. F., Bonnell, J., Corkeron, P. J., Van Parijs, S. M., Hotchkin, C., Hodges, B. A., Bort Thornton, J., Mensi, B. L., and Bruner, S. M. 2020. Slocum gliders provide accurate near real-time estimates of baleen whale presence from human-reviewed passive acoustic detection information. *Frontiers in Marine Science* 7:100; Baumgartner, M. F., Bonnell, J., Van Parijs, S. M., Corkeron, P.J., Hotchkin, C., Ball, K., Pelletier, L-P., Partan, J., Peters, D., Kemp, J., Pietro, J., Newhall, K., Stokes, A., Cole, T. V. N., Quintana, E., and Kraus, S. D. 2019. Persistent near real-time passive acoustic monitoring for baleen whales from a moored buoy: system description and evaluation. *Methods in Ecology and Evolution* 10:1476-1489.

²⁰ O'Brien, O., D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus, and J. V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Nature Scientific Reports*. Quintana-Rizzo, E., S. Leiter, T. V. N. Cole, M. N. Hagbloom, A. R. Knowlton, P. Nagelkirk, O. O'Brien, C. B. Khan, A. G. Henry, P. A. Duley, L. M. Crowe, C. A. Mayo, and S. D. Kraus. 2021. Residency, demographics, and movement patterns of North Atlantic right whales *Eubalaena glacialis* in an offshore wind energy development area in southern New England, USA. *Endangered Species Research* 45:251-268.

²¹ With the exception of September, there is an “above 0” risk in SNE, *See* Garrison, L., Adams, J., Patterson, E., Good, C., 2022. Assessing the risk of vessel strike mortality in North Atlantic right whales along the U.S East Coast. NOAA TECHNICAL MEMORANDUM NMFS-SEFSC-757.

NOAA also seeks to minimize impacts to the regulated community, and NOAA's recent assessment of the 2008 speed rule found no indication of impact to navigational safety from implementation of the 2008 rule and no impact from the speed rule on the volume or economic activity at potentially affected ports.²² Still, the Aquarium acknowledges this recommendation will impact a larger number of recreational boaters and anglers for additional periods of time than the currently proposed rule, due to the call for extended temporal restrictions. However, the presence of NARWs in SNE is now detected year-round and speed restrictions to date have demonstrated no impact on both navigational safety and economic activity.

The expansion of the vessel size class subject to restrictions: Most vessels ranging from 35 to 65 feet

The Aquarium supports the Proposed Rule's expansion of the vessel size class subject to restrictions: Data from past and recent vessel strikes, including a NARW calf mortality in 2021, indicate vessels as small as 39 feet have been involved in strikes that caused serious injury or death to NARWs and other large whales.²³ The Aquarium recommends NOAA address barriers to adoption and enforcement in the proposed rule by working with the U.S. Coast Guard as it carries out NARW regulation implementation across the Atlantic seaboard. It is critical both to develop an effective notification outreach tool to reach these operators and to enforce the measures appropriately to protect both the whales and vessel operators. These stakeholders should be consulted regarding the most effective way to communicate where and when speed restrictions are in place. In addition, the Aquarium recommends NOAA work with all government agencies whose vessels may be exempt from these regulations to ensure they are well educated about the speed restrictions and are implementing best practices to reduce their risk of striking a right whale.

The establishment of the Dynamic Speed Zone (DSZ) framework to implement mandatory speed restrictions when NARW are known to be present outside active SSZs

The Aquarium commends NOAA for transitioning from voluntary to mandatory speed restrictions. Over a decade of research on the East and West Coasts of the United States shows low compliance with voluntary speed reductions.²⁴ Consequently, alternative strategies must be used to reduce vessel speeds.

²² In particular, the yearly direct cost estimates to commercial shipping as a percent of trade value at affected East Coast ports was approximately 0.005%. National Marine Fisheries Service (2020). North Atlantic right whale (*Eubalaena glacialis*) vessel speed rule assessment. National Marine Fisheries Service, Office of Protected Resources, Silver Spring, MD.

²³ National Marine Fisheries Service. 2020. North Atlantic Right Whale (*Eubalaena glacialis*) Vessel Speed Rule Assessment. National Marine Fisheries Service, Office of Protected Resources, Silver Spring, MD; Knowlton AF, Costidis A. Unpublished. 2013. Case Studies of Vessel Struck Right Whales (*Eubalaena glacialis*) documented off the East Coast of North America. Report prepared for The Volgenau Foundation. Available from the Anderson Cabot Center for Ocean Life, New England Aquarium, Central Wharf, Boston, MA.

²⁴ McKenna, M.F., Katz, S.L., Condit, C., and Walbridge, S. (2012). Response of commercial ships to a voluntary speed reduction measure: are voluntary strategies adequate for mitigating ship-strike risk? *Coastal Management* 40(6), 634-650. doi: 10.1080/08920753.2012.727749; Silber, G.K., Adams, J.D., and Bettridge, S. (2012a). Vessel operator response to a voluntary measure for reducing collisions with whales. *Endangered Species Research* 17(3), 245-254; Freedman, R., Herron, S., Byrd, M., Birney, K., Morten, J., Shafritz, B., et al. (2017). The effectiveness of incentivized and non-incentivized vessel speed reduction programs: case study in the Santa Barbara channel. *Ocean & Coastal Management* 148, 31-39. doi: <https://doi.org/10.1016/j.ocecoaman.2017.07.013>; Morten, J., Freedman, R., Adams, J.D., Wilson, J., Rubinstein, A., and Hastings, S. (2022). Evaluating Adherence With Voluntary Slow Speed Initiatives to Protect Endangered Whales. *Frontiers in Marine Science* 9. doi: 10.3389/fmars.2022.833206.

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Mandatory speed reductions were found to achieve high compliance when they were implemented and enforced on the East Coast.²⁵ This research suggests that implementing mandatory speed restrictions in areas of high risk identified using the best available science will reduce the risk of lethal vessel strikes for baleen whales.

The Aquarium supports NOAA's assertion that static speed management is not sufficient as a sole strategy to reduce vessel strike risk. With respect to NOAA's request for comment on the geographic areas that should be subject to mandatory DSZs, **the Aquarium recommends Cape Cod Bay be subject to the mandatory DSZ framework, especially in this era of rapid climate change.** It is well established that NARWs occur in Cape Cod Bay from January to May.²⁶ However, NARW occurrence in Cape Cod Bay outside of this timeframe is not well known because survey effort typically starts in January and ends in mid-May.²⁷ Additionally, research suggests that the timing of NARW occurrence in Cape Cod Bay is changing. Specifically, studies suggest that climate change has resulted in the peak usage of Cape Cod Bay by NARW occurring later in the season and in a higher abundance of NARW in Cape Cod Bay.²⁸ These studies contribute to the body of scientific knowledge of climate-driven changes in NARW movement and habitat use,²⁹ and indicate the need for dynamic management measures in Cape Code Bay to address less predictable habitat patterns outside of the SSZ timeframe.

With respect to NOAA's request for comment on the methodology used to establish the spatial extent of DSZs, we applaud the continued use of both visual sightings and acoustic detections and recommend that NOAA ensure there is sufficient visual survey effort (e.g., weekly surveillance flights) and passive acoustic monitoring to trigger DSZs, both within Cape Cod Bay and extending into other particular spatial areas of concern along the Eastern Seaboard.

Implementing DSZs in a manner that achieves NARW conservation goals requires that sufficient visual survey effort and acoustic monitoring occur.³⁰ Without sufficient effort from both systems, there is no

²⁵ Silber, G.K., Adams, J.D., and Fonnesebeck, C.J. (2014). Compliance with vessel speed restrictions to protect North Atlantic right whales. *PeerJ* 2, e399. doi: 10.7717/peerj.399.

²⁶ Ganley, L. C., Brault, S., & Mayo, C. A. (2019). What we see is not what there is: estimating North Atlantic right whale *Eubalaena glacialis* local abundance. *Endangered Species Research* 38:101-113.

²⁷ Ganley, L. C., Brault, S., & Mayo, C. A. (2019). What we see is not what there is: estimating North Atlantic right whale *Eubalaena glacialis* local abundance. *Endangered Species Research* 38:101-113.

²⁸ Ganley, L. C., J. Byrnes, D. E. Pendleton, C. A. Mayo, K. D. Friedland, J. V. Redfern, J. T. Turner, and S. Brault. 2022. Effects of changing temperature phenology on the abundance of a critically endangered baleen whale. *Global Ecology and Conservation*; Pendleton, D. E., M. W. Tingley, L. C. Ganley, K. D. Friedland, C. Mayo, M. W. Brown, B. E. McKenna, A. Jordaan, and M. D. Staudinger. 2022. Decadal-scale phenology and seasonal climate drivers of migratory baleen whales in a rapidly warming marine ecosystem. *Global Change Biology*

²⁹ Record, N. R., Runge, J. A., Pendleton, D. E., Balch, W. M., Davies, K. T., Pershing, A. J., ... & Thompson, C. R. (2019). Rapid climate-driven circulation changes threaten conservation of endangered North Atlantic right whales. *Oceanography* 32(2):162-169.

³⁰ "[N]ear real-time monitoring systems...should include visual sightings of animals, acoustic detections of animals, and habitat modeling to predict species locations. Species habitat models have been used to successfully forecast novel conditions at scales of a single day, several months, or a year (e.g., Becker et al., 2012; Becker et al., 2019). Continuing the development of these systems through an initial investment in a pilot monitoring and mitigation project for right whales will help meet the immediate and urgent need to protect this species from vessel strikes and other emerging activities that have the potential to cause harm, such as the development of offshore wind energy. It



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possibility of detecting NARWs and triggering DSZs. Consequently, in areas critical for sustaining the NARW population, including Cape Code Bay and SNE, **the Aquarium recommends NOAA develop a clear and expanded program for visual survey effort and acoustic monitoring.**

We have reason to celebrate conservation successes for some marine mammal species in United States waters (e.g., removal of Eastern Pacific stock of gray whales from the Endangered Species List), and such examples show that having the right commitment and policies in place can effectively recover struggling populations. The critically endangered NARW requires swift, decisive, and effective action to protect the species from preventable deaths caused by vessel strikes. As we continue to contribute to the body of scientific knowledge informing the conservation of this species, the Aquarium remains committed to working closely with NOAA and other stakeholders to prevent any further serious injuries and mortalities to NARWs from preventable vessel strikes. Implementing the recommendations included in this comment represents additional progress towards reducing the risk to NARWs from vessel strikes.

Sincerely,

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will benefit multiple marine species and ecosystems by incentivizing the continued innovation of near real-time monitoring technologies and techniques.” Written Testimony of Dr. Jessica Redfern, Senior Scientist and Chair Spatial Ecology, Mapping, and Assessment (EcoMap) Program, Anderson Cabot Center for Ocean Life, New England Aquarium, Before the United States House Natural Resources Subcommittee on Water, Oceans, and Wildlife, March 17, 2022.