United States House of Representatives House Natural Resources Committee Subcommittee on Water, Wildlife, and Fisheries

"Examining the impacts of the National Oceanic and Atmospheric Administration's proposed changes to the North Atlantic Right Whale Vessel Strike Reduction Rule."

Tuesday, June 6, 2023 1325 Longworth House Office Building Washington, DC 20515

Written Testimony for Frank Hugelmeyer President & CEO, National Marine Manufacturers Association

Chairman Bentz, Ranking Member Huffman, and members of the Subcommittee:

Thank you for the opportunity to appear before you today to discuss the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration's (NOAA) proposed rulemaking to amend the North Atlantic right whale vessel speed regulations.

My name is Frank Hugelmeyer, and I am the President and CEO of the National Marine Manufacturers Association – the leading recreational marine trade association in North America, representing nearly 1,300 boat, engine, and accessory manufacturers.

I speak on behalf of America's \$230 billion recreational boating and fishing industry which the Commerce Department's Bureau of Economic Analysis (BEA) confirms is the top contributor to our nation's \$862 billion outdoor recreation economy. We are a made-in-America sector and a driving force for national, state, local and coastal economies, supporting 812,000 jobs and 36,000 businesses across the nation. One of the most concentrated corridors for boating activities and the vital jobs and businesses they support is the Atlantic seaboard.

A core value of our community is the protection of our shared natural resources, ocean ecosystems and marine life. Our community contributes nearly a billion dollars in annual conservation funding via the excise tax on boat fuel sales and fishing gear. And we have a long bipartisan track record of successfully working with Congress and the executive branch to develop policies that promote conservation and responsible recreation.

As America's original conservationists, our community of boaters and anglers proactively support science-based efforts to conserve our marine ecosystems and proudly collaborate with Congress and federal agencies to develop legislation and policies that strike a balanced approach between conservation and recreational access. Recent examples of this include passage of the Modern Fish Act, the Great American Outdoors Act, and the Driftnet Modernization and Bycatch Reduction Act and engagement on the administration's America the Beautiful initiative, and recreation friendly expansions to the nation's National Marine Sanctuary System.

My organization and our partners in the boating and recreational fishing advocacy space, for the last dozen years, have enjoyed a healthy and constructive dialogue when it comes to marine

resource management issues of greatest interest to our businesses and to the nation's boaters and anglers. I am very sorry to say, we are now ten months into an experience with NOAA and NMFS that has been the opposite experience – minimal dialogue and zero interest in collaboration – on an issue that presents an unprecedented potential blow to boating and fishing along the entire east coast of the United States.

On July 29th, 2022, NOAA published its proposed North Atlantic Right Whale Vessel Strike Reduction Rule. This was the first time our industry had heard of these contemplated speed reduction measures. Given the sweeping scope of the proposal covering thousands of miles of coastline across twelve states, and the resulting huge direct and indirect economic impacts to coastal communities and the maritime industry, we were shocked. In contrast to our industry's previous engagements with NOAA on conservation initiatives that involved thoughtful and collaborative communications, the Federal Register notice was the first we heard NOAA was considering sweeping new speed regulations to protect these whales – and that strikes by smaller recreational boats were being considered a significant cause of lethal vessel strikes.

Current Right Whale vessel speed restrictions require all vessels 65 feet or longer to travel 10 knots or less in certain limited locations along the Atlantic Coast at certain times of the year. Under the proposed changes, all boats 35 feet and greater cannot travel faster than 10 knots (about 11 mph) within a vastly expanded area extending from Massachusetts to central Florida – essentially requiring Americans to risk their vessel and own lives in unpredictable seas by going the speed of a bicycle. These speed restrictions would apply to areas up to 90 miles offshore, for up to 7 months out of the year in some instances.

The proposal contains numerous flaws that will result in disastrous impacts to coastal communities but little protection for the whales. The proposed changes lack a data-driven approach, are based on incorrect assumptions about the number of boats covered by the rule and where those boats generally travel, and ignores basic ways that boats of this size operate — namely NOAA's modelling that made no distinction between a 35 pleasure boat that drafts only 3 feet and enormous oceangoing ships that draft 45 feet.

These flaws could have been avoided had NOAA engaged with the boating and fishing industries - a very data rich segment of the economy - to more accurately understand the proposal's impact on boating access and coastal economies, and its efficacy in protecting right whales. To put it another way, how could NOAA possibly have expected to come up with a workable, well-founded rule that would actually achieve the goal of helping North Atlantic right whales if the agency never talked with the very stakeholders most impacted by and responsible for complying with the new restrictions?

NOAA has miserably failed basic good governance tests in this instance. We now understand that the proposed rule was in development for over a year prior to publication, but solely within NOAA's Office of Protected Resources. It would have been a best practice and appropriate for NOAA to directly engage with our industry at this time. If NOAA had pursued such a path, the conversation could have started with making sure they had accurate intelligence on the actual

economic impacts, the true number of boats affected, and the design basics of how different boats within the various types and sizes in question actually move through the water.

The recreational fishing and boating community is highly engaged in any federal agency management process that impacts our sport and is highly data driven. In many cases, our industry has offered policymakers constructive scientific input and technical data that was ultimately used to develop management solutions that meet conservation goals and allow for the continued social and economic contributions our sector provides to the nation.

Unfortunately, the lack of meaningful engagement led to a proposed rule that ensures we will have excessively severe impacts on fishing and boating. Many boaters and anglers will forego boating and fishing trips altogether due to the unreasonable time, cost and restrictions imposed by the rule. This in turn will negatively impact marinas, dry dock storage, boats sales, rentals, dealers, maintenance, fishing tournaments, tour and watersport operators, tackle shops, charter and party boat operations, and many others. Fellow panelist, Fred Gamboa, will provide insights into just how hard this proposal will be on his business and countless others that represent America's small business economy.

An important aspect of this proposed rule's many flaws is how it would exacerbate challenges with enforcement of existing vessel speed restrictions pertaining to larger ships. The U.S. Coast Guard (USCG) is charged with enforcing vessel speed rules across thousands of miles of open oceans. Given their current role in national security and maritime safety, we urge the committee to review whether the USCG has the necessary resources to undertake enforcement of an expanded vessel speed program. In fact, NOAA has already acknowledged there is not sufficient funding or resources to enforce the current 10-knot speed restrictions for vessels 65 feet and greater. Yet the rule's expansion to boats 35 feet and greater would task law enforcement agencies with monitoring tens of thousands of boats and vessels across a larger section of the Atlantic Ocean. I strongly encourage this committee to work with your colleagues on the Transportation and Infrastructure Committee to reach a thorough understanding of how this proposed rule will impact the USCG's existing enforcement mandates.

While there are a myriad of inaccuracies and unjustifiable negative consequences to this proposal, the most severe are the extensive damage to coastal economies, threats posed to boater safety, and a clear lack of understanding of small recreational boat contributions to right whale vessel strikes.

NOAA claims the proposed rule changes will have an annual estimated yearly cost of \$46 million. Make no mistake, this figure drastically understates the impact to even a single state budget or individual manufacturer. And it's astonishing that NOAA did no impact analysis on tax revenues critical to local, state, or federal coffers. By making boating and fishing trips in the Atlantic unsafe and nearly impossible for as much as seven months of the year, this proposal would result in the cancellation of countless trips along with the economic activity they generate. Consequently, the rule would have a devastating impact on thousands of jobs and small businesses supported by boating-fueled economies along the eastern seaboard.

The Department of Commerce's own BEA has reported the outdoor industry is a major economic engine in the U.S. Since BEA began reporting on the outdoor industry through the Outdoor Recreation Satellite Account in 2018, boating and fishing have remained the leading contributor to this critical sector. It is imperative to underscore with this committee that in Atlantic coastal states alone, 63,000 registered saltwater fishing boats are impacted, and 340,000 American jobs and nearly \$84 billion in economic contributions are in jeopardy if this proposed rule moves forward.

NOAA also grossly underestimated the number of boats impacted, stipulating the rule changes will have little impact on East Coast recreational boaters and anglers affecting 9,300 recreational boats. However, a quick check of easily accessible USCG boat registration data from 2021 clearly shows 63,000 registered recreational saltwater boats measuring 35-65 feet in length along the East Coast. Had NOAA engaged with the recreational marine community, the agency would have had a better understanding of this data and the rule's potential impact on coastal economies.

Of the many questions we have presented, that NOAA has not answered, we are hoping this committee can find out how the Office of Protected Resources, within NMFS reached its economic impact figures and who specifically created the projections. The impact figures are so astonishingly low that they conveniently avoid Office of Budget of Management and Congressional triggers that demand and require greater regulatory scrutiny. If NOAA had reached out to colleagues within the Department of Commerce at BEA, they would have had far more accurate information in their hands. BEA economists specialize in tracking and studying outdoor recreation data. Why not consult these experts?

NOAA acknowledges that various factors have contributed to the increase in right whale mortality, from entanglement in commercial fishing gear to climate change, which may increase food scarcity and thus shift migratory patterns. In NOAA's proposed rule, the agency inaccurately assumes that small boats under the 65-foot threshold are significantly contributing to right whale mortalities and strikes. I need to be extremely clear on this point: While large vessel strikes pose significant risks to the North American right whales, there is insufficient and conflicting data supporting the conclusion that small vessels are responsible for the increase in right whale mortality we have seen in the last several years.

In fact, the Tethys Research Institute found that most lethal injuries to whales were caused by large vessels greater than 80 meters or over 260 feet. When questioned, a lead researcher at Tethys mentioned to NMMA and the global boating community that recreational boat strikes were "unlikely to cause a fatality" and such strikes would most likely damage a smaller vessel and injure passengers. It is noteworthy that the boating and angling industry leadership in America has not heard of reported instances of recreational boats being disabled by right whale strikes in U.S. waters. And there is scant evidence from NOAA that proves small vessel strikes are a common occurrence.

An analysis of NOAA's own data found approximately 5.1 million recreational fishing trips were taken along the eastern seaboard by vessels 35-65 feet in length since 2008. Assuming all five right whale strikes during this time were from smaller recreational boats, and that those boats

were on fishing trips, the chance of a 35-65 foot recreational boat striking a right whale during an offshore fishing trip is at most 0.000098%, or less than one-in-a-million. Attempting to prevent a one-in-a-million chance of a strike from smaller recreational boats is not an effective management strategy and highlights the futility of expanding the seasonal speed zones to boats smaller than 65 feet.

Additionally, NOAA fundamentally misunderstands how smaller recreational boats between 35-65 feet in length operate in the water. Recreational boats do not have a 10-meter draft (most have a draft of less than 1 to 2 meters). NOAA also has incorrectly assumed that smaller recreational boats have the same transit patterns as large commercial ships (they do not) and, therefore, utilized whale density estimates that overestimate the risk.

NOAA also did not take into account how small recreational boats under 65 feet are designed and used. Recreational boats are not large ocean-going vessels, which are built to cut through choppy waters and withstand turbulent weather. Requiring small recreational boats to travel at 10 knots (11 mph) in the open ocean and worsening seas increases a boat's chance of capsizing or swamping, putting boater safety at great risk. Put simply, traveling at 10 knots (roughly 11 mph) in the open Atlantic Ocean for long periods is inherently dangerous for recreational boats. Yet NOAA's proposed "go-slow zones" would extend up to 90 miles from shore—including thousands of square miles of the ocean where North Atlantic right whales have not been observed in decades, or ever—forcing recreational boaters and anglers to forego their pastime altogether for fear of their personal safety.

Given the social, health, economic and conservation benefits of recreational fishing and boating to the nation, and the glaring flaws that justify the proposed rule, more deliberation and analysis is needed to a balance conservation goals with measures that protect boating access, boater safety, and coastal economies. Fortunately, there are constructive developments outside NOAA's regulatory process that stand to put us on a balanced path.

First, the James M. Inhofe National Defense Authorization of 2022 included authorization of a pilot project for real-time monitoring aimed at protecting right whales and directed at identifying core foraging habits, important feeding breeding, calving, rearing, or migratory habits that cooccur with areas of high risk of mortality, serious injury, or other impacts to whales such as vessel strikes. Within three years, the Coast Guard is directed to design and deploy a program that 1) comprises the best available detection survey technologies to detect right whale foraging habits, 2) uses dynamic habitat suitability models to inform right whale occurrence in core foraging habitats at any given time, 3) coordinates with the federal ocean observation and maritime traffic services, 4) integrates historical data and new near real-time monitoring methods and technologies as they become available, 5) accurately verifies and rapidly communicates detection data, 6) creates standards for ocean users to contribute data to monitoring system, 7) and communicates the risks of injury or large whales to ocean users to further mitigate the risk of vessel strikes.

The data and information this program will provide are paramount to shaping science and databased policy as it pertains to vessel speeds and interactions with right whales. NOAA should be required to have this data in order to move forward with any expansion of the existing North Atlantic right whale vessel speed restrictions. Our industry is working attentively to ensure this program is adequately funded in the FY24 appropriations process to prevent any delays to the implementation of this critical program.

Second, there are mitigation technologies being tested internationally that should be considered and utilized before restricting U.S. waters. The Tethys Research Institute conducted a study in the Mediterranean Cetacean Sanctuary (located along the Italian and French coast) that analyzed how best to deal with threatened whale populations and high levels of maritime traffic and nautical activities. Strike mitigation strategies being tested in this region include the use of REPCET software, drones and other detection devices that notify vessels that they are likely to encounter a cetacean on their route and then advise slowing down for several miles. The U.S. Commerce Department would be smart to follow the examples of Italy and France who are working to protect both the endangered whales and their dynamic boating, fishing and tourism economies.

Third, since the proposed rule was published last fall, our industry launched the Whale and Vessel Safety (WAVS) Task Force for the purpose of identifying, developing and implementing technology and monitoring tools in the marine industry and boating community with the goal of mitigating the risk of vessel strikes to all marine mammals, with special attention to right whales. So far, the task force has projects underway examining and utilizing risk terrain modeling to identify places of highest risk for whale strikes and inform actions/resource based on that risk. The task force is also evaluating how marine radar algorithms and artificial intelligence can be used to more accurately detect and alert vessel operators of the presence of whales. Like in the Mediterranean, technology innovations stand to play an important role in addressing right whale conservation in the Atlantic, yet NOAA's proposal did not take into account how technology could be a valuable tool in minimizing vessel strikes to right whales. WAVS Task Force representatives have made numerous requests to NOAA for agency engagement that went unanswered for months.

Ultimately, it is unclear if NOAA has the statutory or constitutional authority to issue such sweeping regulatory restrictions impacting the American people. The agency's proposed action would restrict a significant portion of the American economy and amount to a total transformation of the Atlantic coast, but NOAA has not pointed to any clear congressional authorization to regulate in this manner. Instead, the agency relies on its ability to promulgate regulations that are "necessary and appropriate." This is not, and cannot be, an open-ended authorization for the agency to take any action without limitation. Questions of such deep economic, societal, and public policy significance, like severely restricting public access rights for millions of Americans, using satellite safety technology to track and fine American citizens, or setting expansive regulations that impact the economic foundations of the entire Atlantic seaboard, should only be addressed by Congress.

Despite all of the above, the boating industry looks forward to working collaboratively with the members of this subcommittee, other committees of jurisdiction, and NOAA towards a balanced solution that protects right whales while minimizing adverse impacts on recreational boating

access and coastal economies. The marine industry can be passionate about whale protection and vehemently against this ill-conceived and over-reaching regulation. It is a false choice to state that Americans must choose between saving whales and allowing public access that provides economic security for small businesses. We can do both. By working together, we can develop data-driven, reasonable solutions that protect our natural resources and way of life, including developing and implementing available and/or newly advanced whale-tracking and monitoring technologies that protect North Atlantic right whales, without jeopardizing consumer safety, public access or coastal communities.

However, if NOAA chooses not to stand down on this profoundly ill-conceived proposal, it will be imperative for Congress to step in. We appreciate the bipartisan support for appropriations language and legislation that would fund NOAA to fully explore real time monitoring and other technological options to protect marine mammals without needlessly shutting down public access and coastal economies. We hope NOAA listens and changes course. If that doesn't happen, the American people will need Congress to act on their behalf.

Thank you for the opportunity to appear before the committee.

Addendum

Below is a list of concerns on numerous aspects of the proposed rule with additional background. NMMA along with industry stakeholder partners pointed out these concerns in a letter to NOAA on October 3, 2022, and we have not received a reply. We respectfully request Congress to require responses from NOAA on these questions.

1. Seasonal Speed Zones (Currently Referred to as Seasonal Management Areas)

The proposed rule significantly expands the geographic scope of the existing SSZs to encompass almost the entire East Coast. NOAA justifies this expansion on shifting right whale migratory patterns and the need to reduce human induced right whale mortality events from vessel strikes and uses a complex risk model to justify the scope of the proposed changes. The risk model simulates the likelihood of a fatal vessel strike in space and time using various sources of right whale and vessel traffic data. NOAA risk analysis resulted in a proposed expansion of SSZs but actual data on real-word mortality supports the maintenance, not the expansion of the existing SSZs. For example, NOAA notes that since 2008, four of the five strike mortality events involving vessels less than 65 feet occurred inside active SSZs. Therefore, the observed data suggest that an 80% reduction in realized mortality since 2008 could have been achieved if vessels less than 65 feet were added to existing SSZs. Instead, NMFS opts for a vast geographic expansion of SSZs from Massachusetts to north Florida based on projected risk when realized risk indicates existing SSZs would be an effective management strategy to achieve conservation goals for the 35-65 foot vessel class. To be clear, our industry is not expressing support for applying the proposed restrictions to the existing SSZs, but rather pointing out these issues as an example of NOAA's failure to draw reasonable conclusions from the best data available.

2. Dynamic Speed Zones (Currently Referred to as Dynamic Management Areas)

To address the potential for vessel strikes in areas outside SSZs, NOAA is proposing to replace existing voluntary Dynamic Speed Zone (DSZ) requirements with mandatory DSZs for vessels 35 feet and larger. DSZs are triggered when right whales are visually or acoustically observed in

a specific, discrete area. Practically speaking, DSZs with high vessel traffic should have the highest risk of vessel strikes with right whales because right whales are known to be present. Yet, to our knowledge, since 2008, none of the 35-65 foot vessel strike mortalities occurred in a DSZ, despite the higher risk of right whale and vessel collisions. Voluntary compliance with DSZs by these smaller vessels could partially explain the lack of mortality events, but NOAA speed rule assessment determined that vessel cooperation with DSZs is low, and therefore, the reduction in risk provided by the voluntary DSZs is minimal (NMFS, 2020). Again, it is contradictory that in areas where vessel strike probability is highest (in high traffic DMZs) associated right whale mortality is lowest. This again speaks to the flaws in NOAA's risk modeling in the unsupported conclusions the agency has drawn to justify the proposed rule.

3. Estimating Risk of a Recreational Vessel Strike

In an impact analysis for this proposed rule commissioned by the American Sportfishing Association, Southwick and Associates analyzed historical data to better characterize the actual risk from recreational fishing boats in the 35 - 65 foot size class to right whales (Appendix A). Using NMFS Marine Recreational Information Program (MRIP) effort data published by NOAA, they estimated there have been over 92 million offshore fishing trips taken since 2008 in states within the proposed expanded SSZs. Of these trips, they conservatively estimate using vessel registration data, that at least 5.1 million were taken by vessels 35-65 feet in length. Assuming that all five documented right whale strikes were from recreational vessels, and that all these vessels were on fishing trips, the chance of a 35-65 foot recreational vessel striking a right whale during an offshore fishing trip is less than one in 1,000,000. Furthermore, this analysis only incudes recreational fishing trips and does not include recreational vessel trips that occur for other reasons. Therefore, it is reasonable to assume that many more non-fishing trips occurred as well, and non-recreational vessels may have been responsible for one or more of the strikes, meaning the actual probability is likely much lower than Southwick's estimate.

While this analysis demonstrates that the chances of a recreational boat striking a right whale is exceedingly rare, it also shows that in general, the recreational fishing and boating sector does not pose a significant threat on an individual right whale level. Despite considerable boat activity, recreational boats are not interacting with right whales at a rate consistent with the NOAA risk model.

Finally, NOAA is using unrepresentative whale density values, thereby creating a significant bias in the risk model. NOAA's own technical memo states that, "the high densities predicted along the mid-Atlantic may not be realistic." These inflated density values feed the risk assessment model and produce outcomes that are inconsistent with actual risk and the occurrence of known strikes. The model also served as a primary tool in the development of the proposed rule, thus, the density bias is reflected in those expansive measures. NOAA acknowledges that model development and evaluation is ongoing to address this source of bias. Noting this inherent bias and the ongoing work on the model, it would be irresponsible and unreasonable to move forward with the proposed rule until these issues are fully resolved.

4. Number of Recreational Vessels 35-65 Feet and Fishing Trips Impacted

Further exploration of available datasets underlying NOAA's proposal indicates its NEPA Environmental Analysis (EA) underestimates the number of anglers, boaters, and economic

impact associated with the proposed rule. For example, NOAA identifies 9,200 recreational vessels that will be impacted by the proposed rule. However, based on 2021 vessel registration data analyzed by Southwick Associates, there were more than 63,000 registered recreational saltwater vessels measuring 35-65 feet in states across the proposed SSZs. Furthermore, an analysis of MRIP trip data from 2019 - 2021 reveals that each year more than 70,000 recreational fishing trips in the 35-65 foot size class take place in the Atlantic Ocean more than 3 miles offshore in states with proposed SSZs during the months when the speed restrictions would be in place. NOAA must address the EA's shortcomings through preparation of an Environmental Impact Statement, and include a more thorough and accurate investigation of the number of recreational vessels impacted, speeds needed for offshore trips to be viable, and the true costs and economic impacts of the lost fishing opportunities associated with the proposal, as they clearly exceed the \$1.2 million claimed (see Appendix A).

5. Establishing the 35-65 Foot Vessel Size Class

NOAA posits that current right whale speed zones do not address the threat of strike mortalities involving vessels less than 65 feet and proposes to extend vessel speed restrictions to a 35-65 foot vessel size class. However, since 2005, only a total of six fatal vessel strikes occurred involving vessels 42-54 feet. NOAA additionally references Canada's expansion of the vessels covered by dynamic mandatory 10-knot speed restrictions in the Gulf of St. Lawrence in 2019 to include vessels 43 feet or greater in length. Thus, even if one accepts NOAA's flawed rationale for the proposal, the data suggest a smaller vessel size class of 42-65 feet is more justifiable than the proposed 35-65 foot size class. At a minimum, it brings into question how 35 feet was selected as the low end of the range since vessels around this size have not been responsible for any right whale vessel strike mortalities in the U.S. The proposed rule appears to argue that extending speed restrictions to smaller vessels will help address safety concerns as vessel strikes pose a threat to human life. As stated, we value minimizing safety concerns from strike occurrences, but given the rarity of vessel strikes in the 35-65 foot size class, we expect more safety concerns and threats to human life will occur from the proposed vessel speed restrictions, due to forcing boaters to spend more time on the water in potentially unsafe conditions, than the highly improbable chances of smaller boats striking a right whale.

6. Misestimate of Draft Depths for 35-65 Foot Recreational Vessels

The NOAA Technical memorandum NMFS-SEFFSC-757, may vastly overestimate the probability of a recreational vessel 35-65 feet interacting with a right whale. The model assumes a 10-meter (m) draft depth criteria when calculating vessel strike risk. Recreational vessels in this size class rarely have a static draft that exceeds 2 m. For example, a 35 foot center console has a static draft of 1.01 meters and a 64 foot sportfish boat has a static 1.7 m draft. Given that most recreational boats in this size class are planing or semi-planing hulls, once at speed their draft is further reduced. The result is that these boats have minimal intrusion beyond the upper 6 feet (2 m) of the water column. Assuming that this class of boats poses a right whale vessel strike risk beyond 2 m of depth is simply invalid. Based on this fact alone, we believe the vessel strike risk attributed to vessels 35-65 feet is overestimated at a minimum of 80%. Risk posed for right whales comes not only from the boat and whale being in the same location, but also the boat being deep enough to strike the whale.

7. Overlap of Speed Rule with Known Recreational Fishing Seasons

The date ranges of the proposed SSZs conflict with many popular inshore and offshore recreational fishing seasons currently managed by the three Atlantic regional fishery management councils, NMFS Highly Migratory Species Division, and the Atlantic States Marine Fisheries Commission. For example, we evaluated NOAA's MRIP catch data from 2017 - 2021 across all waves to determine the proportion of recreational catch occurring in waves overlapping with the timing of proposed SSZs. As expected, we found that several recreationally important species, including but not limited to cod, haddock, bluefish, black sea bass, striped bass, tautog, Spanish mackerel, dolphinfish, and wahoo, have a significant amount of catch that overlaps with the timing of proposed SSZs (see Appendix B). Although these data are not specific to vessel size class, they demonstrate that NOAA's inaccurate assumption that colder weather and rougher sea conditions will result in lower boating activity during the timing of proposed SSZs needs further exploration. We are concerned that NOAA has failed to directly engage the regional fishery management bodies to reduce the overlap between proposed changes to the timing of SSZs and recreational fishing seasons as much as possible. Additionally, there are other recreational fishing seasons for highly migratory species that overlap with the proposed SSZs and are not sampled by MRIP (e.g., bluefin tuna).

8. Draft Regulatory Impact Review and Initial Regulatory Flexibility Analysis

NMFS is required to conduct a thorough evaluation of impacts of the proposal to the human environment; however, the Draft Regulatory Impact Review (RIR) for this proposal provides conflicting economic analyses for benefits versus impacts. For example, the RIR cites a 2020 NOAA study that estimated the direct economic output of six whale watching operations within Stellwagen Bank National Marine Sanctuary at \$95.1 million (Schwarzmann, 2020). In contrast, the RIR estimates \$46.2 million from the proposed rule cumulative impacts for all vessel size classes and regions combined. It is difficult to understand how the economic benefits of six whale watching operations exceeds the economic impact of 9,200 recreational vessels, a vessel number likely underestimated based on Southwick's findings. Furthermore, the RIR includes no indirect impact analysis, but indirect benefits from whale watch operators is included by reference in the benefits section. We question that NMFS was unable to compile any indirect economic impact information for recreational vessels especially when NMFS regularly publishes a Fisheries Economics of the United States report. These points call into question the thoroughness and accuracy of NMFS' analysis. NMFS cannot move forward with the rulemaking without understanding the true economic impacts of the proposed vessel speed restrictions.

9. Enforcement Concerns of the Proposed Rule

Currently, right whale speed restrictions are enforced almost exclusively by evaluating Automatic Identification Systems (AIS) data. AIS data are analyzed to determine if a vessel has exceeded the speed limit within a seasonal speed restriction zone. AIS is a piece of marine electronics equipment made mandatory for certain vessels over 65 feet to improve the navigational safety of the vessel and other vessels operating in the area. AIS is not required on recreational vessels 35-65 feet, thereby making the primary enforcement tool of the right whale speed restrictions unavailable for many boats 35-65 feet. In short, enforcement of the proposed rule would be impractical, if not impossible. Additionally, there are no indications that development of legislation to amend 46 USC 70114 has begun or will be initiated in the near

future. This leaves the proposed rule, as written, with an extremely low likelihood that it can be enforced.

The technological limitations of AIS make the enforcement of speed limits based on its data unreliable. Positional information transmitted through AIS can carry sufficient variation, as a function of the rate of transmission and sea state, that can produce a range of estimated speeds. This variability can be particularly considerable during high seas and heavy weather conditions. Furthermore, certain conditions, such as a following sea or entering an approach on a flood tide, may result in a vessel exceeding a 10-knot limit through its AIS data (speed over ground) but its speed through the water is at or lower than the 10 knots because of additive vectors in like direction. During these conditions, a vessel must increase speed to maintain adequate steerage. The rule would clearly create scenarios where operators may be forced to run a boat at an unsafe speed in fear of AIS triggering a speed violation.

It is also important to point out that AIS is a tool that was developed and mandated for use in certain vessels to improve navigational safety. It was not designed or intended to be used as a tool to enforce spatial or fisheries management regulations. Many vessels under 65 feet voluntarily carry and operate AIS for the added safety-at-sea benefits gained from the technology. It is a very real concern that operators of boats less than 65 feet may decide to turn off their AIS safety systems in fear of triggering a speed restriction enforcement action.

10. Updates to Safety Deviation Provisions

NOAA provides a safety deviation provision as part of the proposed rule. The deviation provision is only applicable to vessels less than 65 feet, allowing those vessels to transit at speeds greater than 10 knots within areas where a National Weather Service Gale Warning, or other National Weather Service Warning for wind speeds exceeding those that trigger a Gale Warning is in effect. The National Weather Service defines Gale force wind speeds at 39-46 mph. We question how NOAA arrived at a Gale force threshold because, from recreational boating experience, vessels 35-65 feet cannot operate safely at 10 knots during wind speeds exceeding approximately 25 mph. Therefore, we suggest NOAA lower the wind speed deviation threshold to at least 25 mph to ensure safe vessel operation at sea.

It is also important to note that vessel speed is a significant safety feature on a recreational boat. Most recreational boats lack high displacement hull design that often provides ocean going and commercial vessel stability and the ability to operate safely in significant sea states. Recreational vessels utilize speed to conduct fishing and other recreational trips during weather windows of opportunity. To comply with a 10-knot speed limit, recreational boats could be forced to operate during conditions that would compromise safety of the passengers and vessel. Speed is also a safety asset in the event of localized weather events such as thunderstorms where a vessel could return to port or avoid a line of thunderstorms with the ability to operate above 10 knots. The proposed rule would unfairly deprive a primary safety feature of recreational boats 35 feet and larger.

Operating at speeds that do not exceed 10 knots, for most recreational boats, forces the vessel to operate at a less than optimal speed and angle of attack. Operating at these speeds raises the bow which reduces the visibility of the operator to see and avoid hazards in the water, including right

whales. Most recreational boats have hull designs that allow the boat to ride level when on plane. Operator visibility is optimized when a boat is on plane. Thus, the proposed rule may actually have the unfortunate consequence of reducing operator visibility and elevating the risk of collisions.

11. Exploring Technological Advancements and Mariner Outreach

Halting the proposed rule would provide opportunity to focus on two key areas of interest that warrant discussion. First, technology that can deliver real-time monitoring of individual right whales continues to advance. From direct observations, aerial surveillance, acoustic detection, heat signature technology, satellite monitoring and ambient DNA signatures found in water samples, it is feasible to gather real-time location information on a significant portion of the right whale population. Fewer than 350 individual right whales remain, which makes tagging or other high-value monitoring techniques possible. If all right whales cannot be tagged or monitored, perhaps efforts could be focused exclusively on mature female right whales, roughly 100 individuals, to protect the most reproductively valuable segment of the population. Even if monitoring of all right whales is not possible, we can expect any real-time monitoring to provide ancillary protection to non-monitored right whales because of their grouping behavior. This approach would be consistent with the criteria used to trigger DSZs. Outreach could also be conducted with the recreational fishing and boating community on ways they can provide direct observations of right whales to NOAA.

The second key portion of this effort is the need to disseminate information to mariners and other vessel operators. Distributing this information to anglers and boaters and into their marine electronics is essential. This is something NOAA continues to struggle with given the lack of outreach to the recreational fishing and boating community following the implementation of the 2008 measures. As mentioned, on the rare occasion when recreational boats unintentionally interact with right whales, the outcome often results in risk to human life. Our industry would welcome developing ways to provide real-time positioning on navigational hazards, including right whales, to vessel operators.

12. Need for Stakeholder Engagement

We question why stakeholder engagement was not a significant part of the process for developing the proposed vessel speed rule, considering known significant impacts to recreational fishing and boating. For years, NOAA has used the Take Reduction Team (TRT) model to work collaboratively with the commercial fishing industry to develop management solutions that address commercial fishing gear-related whale mortality. Even if the Marine Mammal Protection Act doesn't require TRTs for a vessel speed rule, it shows a lack of responsibility that NOAA did not use the TRT model to engage the recreational fishing and boating community in the development of this proposed rule.