From Keith Allen <keith_allen53@yahoo.com>
Sent Friday, July 14, 2006 1:10 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject I support ship speed limits to limit Right Whale fatalities

Dear Sirs,

I whole heartedly support the proposed ship speed limits to decrease Right whale fatalities. Please keep me appraised of the status of this rule.

Sincerely,

Keith Allen
PO Box 704
773 Douglas Ave.
Palmer Lake, CO 80133

SAMPLE FORM E-MAIL
42 RECEIVED
2-28,30-32,40-41,79,81,83-86,90-91,98,107,118-119

Chief, Marine Mammal and Sea Turtle Conservation Division
Attn: Right Whale Ship Strike Reduction Strategy DEIS
Office of Protected Resources, NMFS
1315 East-West Highway
Silver Spring, MD 20910

The Sierra Club commends the National Marine Fisheries Service for taking this vital step to protect North Atlantic right whales with the proposed ship strike reduction strategy. We strongly support the lowest (10 knots) proposed speed restriction in order to provide the greatest protection to the whales.

We request that U.S. government vessels and vessels under US contract also be required to observe speed restrictions. Exceptions should only be allowed under extreme circumstances, such as human safety missions, times of warfare or national disaster, or when the Federal vessels are already operating under mitigation measures under the Endangered Species Act.

If federal vessels are exempted, we encourage NMFS to immediately re-initiate consultation to ensure that federal agency vessels and activities are not jeopardizing North Atlantic right whales. Vessels exempt from the speed restriction should be required to have two on-board trained marine mammal lookouts at all times and use either aerial spotters or passive sonar, and should travel at the slowest speed possible at night and during times of inclement weather, when whales are most difficult to detect.

We support alternative 5, which would provide a higher level of protection for the species than the preferred alternative (6), by expanding the times and areas in which speed restrictions apply.

The Sierra Club encourages that flexibility will be retained to modify the proposed regulations as new data is collected in the future as to the location and timing of whale distributions. We also urge that these regulations be implemented by this November to protect mothers and calves as they migrate to their winter waters.

Bruce A. Russell
JS&A Environmental Services
7107 Oakridge Ave.
Chevy Chase, MD 20815
Tel: 301 656 1751 FAX 301 656 0436

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9 August 2006

Chief Marine Mammal Conservation Division
Right Whale Ship Strike Reduction Strategy
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Re: Comments on DEIS (Right Whale Ship Strike Reduction)

I write in general support of the findings of the DEIS and offer the following comments to improve the scope and findings of the EIS.

Dynamic Management Areas (DMA)

NMFS is seeking comments on well aware of the concerns raised about the need for timely imposition of dynamic management areas for shipping. I believe for a variety of reasons discussed below that it is imperative that the effective date and time of the initial designation be the same or several hours after (to allow for ships to clear the area or slow to 10 knots) as the actual notice of mariners through the Coast Guard's demonstrably effective broadcast notice to mariners system. NMFS should model the initial designation and rulemaking process after the Coast Guard's proven emergency *Limited Access Areas* (LAA) designation process used for safety, security and environmental protection. The Coast Guard can impose essentially impose a LAA immediately.

- The scientific rational for a DMA is based on a study by NMS scientists that found that the detection of 3 or more whales in an area is an indicator that right whales will remain in that general area for 15 or more days from the date of the detection. Delaying the effective date of the DMA, and therefore extending the DMA beyond the time that the whales are expected to be in the area would limit this measures effectiveness and pose an undue burden on the industry and vessels over 65 feet.
- Unlike fisherman who need time to clear their gear, vessel captains do not require several days to clear an area (or reduce speed). Vessel captains regularly monitor USCG Broadcast notice to mariners and can change course to clear an area or reduce speed in a matter of hours not days.
- The prudent mariner also understands that notification of a danger requires that they take action. Thus the prudent mariner will as a matter of practice take the notice from the Coast Guard as direction to immediately steer clear of an area or slow to 10 knots...I expect some will take action while others will assume the "risk."

Therefore, to delay the effective date of the DMA for several days but leave the DMA in place for the full 15-day period from the effective date of the DMA rule, would endanger the right whales during the unnecessary administrative process at the front end and pose undue burden on the shipping industry on the back end. THE DEIS and supporting economic impact assessments should address the increased burden to the industry.

Block Island Sound Seasonal Management Area

The seasonal management area (SMA) proposed for the approaches to Block Island Sound by NMFS in their strategy will not be effective for vessels en-route New Haven, Bridgeport and New London, Connecticut from points west and southwest. These vessels leave the NY-Ambrose Traffic Separation Scheme on an oblique heading (east by northeast) to cut the corner. As proposed in the NPRM, vessels on easterly and northeasterly courses from point's west would transit through the right whale migratory corridor outside the SMA with the exception of the last 4 or 5 nautical miles.

As proposed in the NPRM, the western boundary of the proposed SMA is a line drawn 30nm south and east from Montauk Point.

I therefore recommend that the western boundary of the proposed SMA be revised to a line drawn (generally) southwest from Montauk Point to intersect with an extended (to the west) southern boundary of the proposed SMA.

The DEIS should address this alternative and the economic impact assessment should be amended to address the costs.

Enforcement

In the DEIS, section 1.12 : Enforcement will not be included in the EIS as it is outside the scope...NMFS will address enforceability in the final rule. I would like to make several points in this regard.

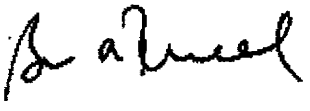
Enforcement and enforceability of the proposed rules are two different issues and should not be confused. I would agree that the enforceability of the proposed rules is outside the scope and should be addressed in the final rule.

However enforcement should be within the scope of the EIS and should be addressed in the Final Rule as it has a direct impact on and is part of the operational measures under consideration. Enforcement is a continuum of measures, some operational, which involve the mariner, *to ensure compliance* and involves both the enforcement agencies and the regulated parties. The continuum of measures range from outreach and education, planning, safety and environmental management systems, self-auditing systems, flag state and port state inspections and examinations to sanctions (penalties, remedial action orders, criminal violations). An important learning form the implementation of the Mandatory Ship Reporting System was that without assertive enforcement the operational effectiveness of the MSRs was severely limited.

The operational measures that must be considered and are not explicitly included in the NPRM and the DEIS are the: 1) the voyage planning requirements required by SOLAS Chapter V Regulation 34 to address protection of the marine environment; 2) requirements of the International Safety Management Code to address protection of the marine environment; and 3) company-wide ISO 14001 environmental management systems. These three operational measures are all part of the enforcement continuum, have little to do with enforceability, but would have an impact on the regulated community and are essential to the effective implementation of NMFS' strategy. If these measures are not part of the NMFS strategy, then the strategy is fatally flawed.

Use of AIS (Automatic Information System) information for compliance assurance (enforcement) could greatly enhance the effectiveness of NMFS strategy. The Swedish Coast Guard for example, is using AIS to help track down vessels whose crew illegal discharges oil. The EIS and the Final Rule should examine the use, impacts of the usefulness of this important tool.

Respectfully submitted,



Bruce Russell
Director

Hello,

My name is Susan Barco and I am the Marine Mammal Stranding Response Coordinator for Virginia. I am here representing the Virginia Aquarium Foundation in Virginia Beach, VA. In the past five years, my organization has responded to 18 large whale standings including 5 right whales, 8 humpback whales as well as fin, sei and minke whales. Of the 12 whales where we could determine the circumstances of death, 11 (including 4 of 5 right whales) appeared to have died from injuries sustained because of human activities. Of these, 8 showed signs consistent of death by ship strike including 3 right whales, two of whom were pregnant females. [The other 3 whales were entangled in fishing gear or showed signs of entanglement.]

Most of the whales that showed signs of ship strike were apparently healthy and alive when struck. Several had been actively feeding at the time of death. Because of the condition of these whales it is very likely that they were struck by ships in the vicinity of the entrance to Chesapeake Bay.

While not considered critical habitat for right whales, the waters off Chesapeake Bay are transited by individual whales, especially pregnant females (in the fall and early winter) and females with newborn calves (in the late winter and spring). These whales are on their way to and from feeding and calving areas. While the whales may not linger in our area, it is clearly a dangerous place for them.

I am here on behalf of the Virginia Aquarium Foundation to support both the NOAA ship strike reduction plan and future research on additional ways to mitigate ship strike of right whales and other whale species in the US and especially near the entrance of Chesapeake Bay. We believe that speed reduction is currently the best mitigation strategy available to NOAA, but encourage both NOAA and the commercial and military shipping industries to continue to search for, and, when possible, test other ship strike reduction strategies.

My colleagues and I in the US marine mammal stranding network hope to be responding to fewer whales killed by ship interactions in the future.

Thank you

Susan G. Barco
Stranding Response Coordinator
Virginia Aquarium Foundation
717 General Booth Blvd.
Virginia Beach, VA 23451

Maryland Chapter

SIERRA CLUB
FOUNDED 1892

Testimony at the North Atlantic Right Whale Hearing - August 11, 2006

My name is Earl Bradley. I am here today on behalf of the Maryland Chapter, Sierra Club which has approximately 15,000 members Statewide. Ensuing the continued viability of endangered species, including the North Right Whale is one of our top priorities.. Thus, we strongly support the proposed 10 - knot limit to reduce the danger from ship strikes. We also encourage the extension of the proposed limit to U.S government vessels and vessels under U.S. contract except when those vessels are already under mitigation measures under the Endangered Species Act or operating in circumstances involving human safety missions, national disaster, or times of warfare.

We urge you to adopt alternative 5, which would provide the greatest possible protection to the Right Whale. Thank you for consideration of our views.

7338 Baltimore Avenue #1A College Park, MD 20740 TEL: [301] 277-7111 FAX: [301] 277-6699

ANIMAL WELFARE INSTITUTE
PO Box 3650 Washington, DC 20027-0150 www.awionline.org
telephone: (703) 836-4300 facsimile: (703) 836-0400

Statement by the Animal Welfare Institute

Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales

Public Meeting, Baltimore, MD
August 10, 2006

The Animal Welfare Institute welcomes the National Marine Fisheries Service proposed rule to implement speed restrictions on certain vessels in an attempt to reduce the threat of ship collisions with North Atlantic Right Whales. We also appreciate the measures that have been presented in the proposed rule which are more restrictive than those included in the Advanced Notice of Proposed Rulemaking of June 2004.

The proposed ruling is long overdue. This year alone has seen at least two North Atlantic Right Whales struck and killed by ships. The population of these whales is in a critical situation and the loss of one whale by ship strike is an avoidable tragedy. These whales already face synergistic threats from other anthropogenic sources including bycatch, chemical pollutants, climate change, the reduction in the numbers of prey species, ingestion of foreign objects and ocean noise. In fact ocean noise is a potential factor contributing to collision rates according to the International Whaling Commission's Ship Strikes Working Group First Report to the Conservation Committee, dated May 2006. The report states that "*High levels of ambient noise may make it difficult for cetaceans to detect approaching vessels and to judge their relative location and movement. Cetacean responses to approaching vessels may also be affected by habituation to vessel noise. In addition, exposure to very loud sounds may cause damage to the auditory system and reduce the ability to detect oncoming vessels.*"

We are concerned that the rule is not inclusive to all vessels over 65 ft but exempts vessels of Federal Agencies. The rule states that operation of these vessels and those of other Federal Agencies will be subject to guidance provided through consultations under the Endangered Species Act. It had been estimated that the single biggest known source of whale strikes is by U.S. government vessels, with the Coast Guard and Navy accounting for nearly one-quarter of all reported ship strikes on whales. To merely address this significant threat through consultation and guidance is totally inadequate.

We are also concerned that last month the House passed its Appropriations Bill which would slash NOAA's budget by $500 million. At a time when the oceans and its inhabitants are in desperate need of attention as recommended by both the U.S. Commission on Ocean Policy and the Pew Oceans Commission, this is not the time to cut funding for the only agency with the authority and means to address these problems.

Comments on the North Atlantic Right Whale ship strike reduction strategy and DEIS
To NMFS, NOAA, Boston, August 14, 2006
Comments by Rob Moir, Ph.D., 9 Hanson Street, Somerville, MA 02143

Hello, My name is Rob Moir, I'd like to speak to you as a former school teacher and non profit director who lives in Somerville, MA. Let me tell you a bit about why I care for Right Whales and then how I would like the National Marine Fisheries Service to adopt strong protections for such precious leviathans.

In April 1975, a group of Massachusetts public and private school science teachers, many of them Massachusetts Science Supervisors and all of them founders of Massachusetts Marine Educators convinced Provincetown tuna boat captain Al Avelar to prepare his tuna boat early for a whale watch out into the Northwest Atlantic Ocean. That bright clear spring day eight to twelve North Atlantic Right Whales were observed feeding in the placid fecund waters of Cape Cod Bay.

Later in the spring, Bill Watkins brought his family to the beaches of Provincetown. With keen eye and ear from the beach, Bill listened to the "clack" of right whale baleen plates knocking while the open mouthed whale skimmed the water for plankton. When right whales feed gulls are quite because they have no interest in gulping down zoo-plankton soup.

The next spring, Al Avelar changed his focus away from tuna fishing, and set out with tuna fisherman Charlie Mayo's son, Stormy Mayo, who had just completed a Ph.D. in plankton studies from the University of Miami. Massachusetts school and college teachers returned with students, their families and friends and the whale watch industry began. Humpback whales soon took center stage. Nonetheless, the industry from Provincetown to Newburyport began with educators witnessing the annual migration of Right Whales. For many in Massachusetts, spring became synonymous with Right Whales are feeding in Cape Cod Bay. By summer the whales were gone.

Five summers later, August 1980, the hundred foot research staysail schooner Westward with a compliment of 34 scientists, educators and mostly college students passed over Browns Bank while transiting from Newfoundland to Massachusetts. Browns Bank and Georges Bank separate the Gulf of Maine from the Atlantic Ocean. Browns Banks lies across the Northeast Channel from Georges Bank, south of Yarmouth Nova Scotia. After midnight, in the dim light of a partial moon, more than a dozen right whales were observed.

A summer feeding location for right whales hand been found and environmental conditions were measured, recorded and communicated. At 1 a.m local time, 600 hours Greenwich Mean Time we radioed NOAA with our observations and with silver nitrate stained fingers from salinity and dissolved oxygen titrations. "Whiskey, Zulu, Victor, 8 1 Niner Zero this is the Research Vessel Westward". . . Our surface truths were used by NOAA to check the calibrations and information coming from their satellite overhead.

North Atlantic Right Whales are cetaceans that belong to the sub-order of baleen whales called "mysticeti." They are literally mysterious whales. Little is known of how many years whales reproduce or how long they may live. Right whales may live 50, 75, 150 years, or more. Supported by water, whales live in a suspended, gravity free world eating plankton that by definition can not swim away. Think about it! Life is pretty easy and reproduction is very slow. It does not take the loss of many whales to threaten the survival of North Atltnatic Right Whales.

Therefore, because there are fewer North Atlantic Right Whales today than when I first observed them, and because they are such magnificent animals, the state mammal of Massachusetts, I stand before you to urge adoption of strong protections of right whales and to slow ships to prevent strikes. We need the National Marine Fisheries Service to NOAA immediately adopt a comprehensive and adaptive suite of management measures that includes both vessel speed limit and routing. By adaptive, I mean, regulations must be expectant of and responsive to ongoing unforeseen elements of ocean, ship traffic and whales. Nature and weather continues to surprise, particularly in the Northwest Atlantic Ocean. A dynamic management system is need that can be deployed rapidly should the unexpected happen. For example, implementing speed restrictions when whales appear out of season, and perhaps lifting speed restrictions during periods when whales are observed lingering longer in feeding areas separate from ship traffic.

Thank you for traveling to Boston and holding this public hearing. I hope you have an opportunity to get out on the water, perhaps in Boston Harbor, to experience our piece of the Northwest Atlantic Ocean. May I recommend the MBTA boat from Boston to Charlestown and back again for a few dollars.

Paul Revere would have used it if he could. And while we have come a ways since communicating by lanterns in steeples, I hope this hearing will further illuminate the dire necessity for responsible North Atlantic Right Whale ship strike reduction strategies and regulations.

Thank you.

If I may pose a question on a related topic, I have recently returned from Barrow Alaska and ask for the IWC chair's plan or strategy for protecting the native traditional and subsistence hunt for Bowhead to the North of Alaska, while preventing Japan from re-opening commercial whaling, continuing bogus scientific whaling, and ridiculously claiming their hunt is traditional?

Rob Moir, robmoir@tiac.net office 617 661-6647

CROWLEY®

Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Protected Resources, NMFS
1315 East West Highway
Silver Springs, Md. 20910

Re: Docket No. 040506143-6016-02.I,D. 101205B

To Whom It May Concern:

Crowley Liner Services, Inc. (Crowley) appreciates the opportunity to comment on the NPRM regarding the implementation of speed restrictions to reduce the threat of ship collisions with the North Atlantic Right Whales.

As a leader in the maritime community for over a century, Crowley is committed to environmentally sound practices. Crowley has been an enthusiastic participant in educating its crews and raising their awareness of the threat to the North Atlantic Right Whale. It holds all employees accountable for safety and protection of the environment. The result of which was an award from NOAA in 2003 to one of the vessels in it's fleet, STENA TIMER, for it's ***voluntary*** efforts in reducing ship-strikes.
Based on the examples cited above, it is clear that Crowley has taken a proactive approach to working with government agencies to preserve and protect the marine environment. It is also clear that issues that impact the marine environment, its living resources and the safe navigation of vessels be left to the agencies that best understand these components, namely the USCG, NOAA, NMFS and the commercial maritime industry and not the court system. It is with this perspective that Crowley would like to commend NOAA for its efforts in this matter and welcome the opportunity to contribute to a solution that benefits both the animal and industry.

Crowley agrees that the North Atlantic Right Whale is a seriously endangered species. However, as a matter of the human condition when faced with a situation where a specie is in serious decline, we tend to accentuate the negative to make our argument. As an example, Arguments and studies (Kraus et al 2005), (Kraus 1990), (Knowlton and Kraus 2001), (NMFS 2005,) (Laist et al 2001) (Waring et al 2004)and (NPRM 2006) make assumptions and statements without proof that the actual numbers of whale mortalities due to ship strikes are higher because some deaths go undetected or unreported. Crowley would tend to agree that the number may be higher but the combination of direct and indirect anthropogenic factors as well as natural inhibitors pose just as serious a threat to Right Whale recovery (Preliminary Environmental Assessment PEA 2005) as do ship strikes. To infer that ship-strikes alone are the most serious threat to the specie is mis-leading. Having said that, Crowley would like to suggest that any studies/data or necropsies be peer-reviewed by individuals not associated with NOAA/NMFS or receiving funding from said agencies in compliance with Section 515 of the Department of Commerce's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Disseminated Information and NOAA's Information Quality Guidelines. The proposed restrictions will have serious implications for most ports. Industry would like and deserves solid reasons for these impediments.

The fact that these proposed restrictions (NPRM 2006) are much more expansive than what has been previously discussed in studies, notices and in meetings/conferences came as quite a surprise to industry. Discussions regarding ship's speed, speed restrictions and whale mortalities (ANPRM 2004) (Laist et al 2001) (Jensen and Silber 2003), (Knowlton and Kraus 2001) centered on speeds greater than 13 kts as being the highest probability for a lethal injury. The consensus speed of 12kts appears to be a reasonable

accommodation given the fact that there is already a precedent speed of 13 kts for humpback whales in Glacier Bay National Park (2003). Plus, the area for these restrictions increased considerably, to almost twice the size of the critical habitat (CH). Given the probability of a ship strike occurring outside the CH due to the concentration of animals near shore (Garrison 2005, 2002) as being remote, it is Crowley's opinion that expanding the speed restriction and traffic lane margin to the MSR boundary is unwarranted. If speed restrictions and traffic lanes are to be implemented, they should be limited to the Critical Habitat (CH). Crowley would also like a review of the proposed seasonal implementation of these measures. Recent aerial surveys will attest to the fact that the animals are not present in the CH before December and are gone by the end of March (PEA 2005). The two week buffer prior to and after the whale's stay in the CH is again unwarranted. As for comment on the implementation of Dynamic Management Areas, vessels speeds need to be 12 kts and the DMAs need to be "actively" managed. To impose a DMA for 15 days without federal agencies making efforts to ensure that there are indeed Right Whales within the area is unacceptable. Speed Restrictions, Mandatory traffic lanes, DMAs are all impediments to commerce. If industry is willing to make the effort than these Federal agencies should reciprocate in kind.

Any Economic Impact studies not completed within the last year will not have relevant data due to the meteoric rise in fuel prices. Any information conveyed in the NPRM regarding economic impact to the various operators, port entities and affected parties is flawed due to the fact that the studies were based on a 12 kt restriction and not the proposed 10 kt. Crowley suggests that before these proposed measures are implemented that a true picture of the impacts be obtained. If that means another Economic Impact Assessment has to be undertaken, so be it.

Lastly, how do we measure success? It has been determined that the specie cannot afford the loss of one animal for it to survive. Is this our measure? Zero deaths before instituting far more restrictive measures? This should be a goal and not the measure for success. The statement, *Therefore NMFS will monitor the effectiveness of the ship-strike reduction measures and consider implementing larger seasonally managed areas, further reducing ship speed or other measures if appropriate,* could be interpreted as a threat by industry. Any more restrictive measures than those already proposed may be the death knell for some marginal ports along the Atlantic seaboard. The economic impact of such seems inappropriate for a specie that sadly might see extinction due to causes other than ship strikes (PEA 2005).

In summation, as a Company that has been involved with this process for quite some time, we might understand the issues more than most. However for NMFS to take the tack of ever more proposed restrictive measures after earnest and sincere participation and input by industry might be considered dismissive and counter productive. Crowley is a company that has protection of the environment as one of its core values..... but this result (NPRM 2006) will certainly color our dealings with NOAA/NMFS in the future.

Sincerely,

Mike Getchell
Marine Operations Manager
Crowley Liner Services, Inc.

Captain John Atchison
President, St Johns Bar Pilot Association
4910 Ocean St.
Atlantic Beach, FL 32233
904-246-6716

Questions and comments for the Public Hearing on DEIS and right whale shipstrike reduction strategy.

My name is John Atchison. I am president of and speak on behalf of the St Johns Bar Pilot Associaton. We handle all of the large ship traffic into and out of the Port of Jacksonville. I have an Unlimited Masters license and I have been a pilot in Florida for 18 years.

My comments regard proposed rules and the strategy alternatives involving speed restrictions, as it relates to vessel safety.

As pilots our primary job is the safety of the vessel during the inbound or outbound transit in pilotage waters. The aspect of the rules that is particularly concerning to us is the speed restriction on the critical stretch of water from the pilot boarding area near the sea buoy to the shoreline. The weather during the months that these restrictions are in affect is the some of the most hazardous that we face. Often, the prevailing north or northeast winds blow in excess of 20 to 25 knots for days at a time. These winds usually cause a very strong cross current at the mouth of the breakwaters. Bringing vessels in or out through these breakwaters can be extremely hazardous during these conditions. It is normal for us to bring these ships up to the maximum safe speed possible with short notice to transit this area in order to prevent wind and current from setting the vessel onto the rocks. Some vessels, especially large, high sided vessels such as large container ships or car carriers as well as deeply loaded tankers or bulk vessels will require speeds well in excess of the proposed 10 knot restriction in order to pass through the breakwaters safely. Should these rules pass, our ability to provide "all weather, 24 hour service" will be severely diminished. Commerce in Jacksonville will be drastically affected whenever adverse weather occurs.

~~An extension of comment period is not unreasonable given size & scope of DEIS~~

The rest of my comments I give in the form of questions that remain unanswered after briefly reviewing the published material.

Is there any provision for enforcement of the proposed rules and fines for violations?

What is the definition of "speed" as used in the rules? Do you consider the effects of tidal current when defining speed in your proposal?

Do proposed rules have language which exempts vessels otherwise regulated to facilitate safety of navigation, particularly when entering or departing the narrow jetty entrance to/from Jacksonville?

Does the study include the percentage of time that strong winds (in excess of 20 to 25 knots) from the North or Northeast blow during the times that these speed restrictions will be in effect?

Does the study include the effects these strong crosswinds have on currents across the jetty entrance to the St Johns River?

Does the study include the effects strong crosswinds and crosscurrents have on large vessels entering or leaving the jetty entrance to the St Johns River?

Does the study include the fact that much of the large, high sided (i.e. car carriers and container ships) and deep draft (bulk and tankers) traffic that calls at Jacksonville cannot safely enter or depart the breakwaters at the entrance to the St Johns River at a speed of 10 knots or less during periods of adverse weather conditions (i.e. strong crosswinds and crosscurrents)?

What size and type of vessels were used to determine handling characteristics at 10 knots of speed as referred to in the DEIS?

Who were the experts that determined 10 knots was a speed that allowed these vessels to be handled safely?

Does your economic impact study include the costs of holding out or in vessels and their cargo that are unable to safely cross the bar during periods of strong cross winds and cross currents at a 10 knot maximum speed?

Do the proposed rules contain language that exempts vessels otherwise regulated to facilitate safety of navigation in traffic situations defined under the Colregs, Intl rules of the road in the congested areas around the pilot boarding area?

Thank you for the opportunity to address this panel and express our concerns regarding the DEIS and proposed rules.

Sincerely,

John Atchison
President, St Johns Bar Pilot Association

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August 8, 2006

National Marine Fisheries Service, NOAA,
Right Whale Ship Strike Reduction Regulations Public Hearings
University of North Florida
Jacksonville, Florida

Gentlemen,

Good afternoon, my name is Victoria Robas. I am a member of the Board of Pilot Commissioners of the State of Florida. I am also its chair. On behalf of the Board of Pilot Commissioners, I am requesting an extension on the stated comment period since the board has not had an opportunity to meet and publically discuss this issue. Therefore I can not represent the views of the board but request the opportunity to bring this before the board and submit its comments after our September, 2006 meeting. My comments today are my personal observations.

For your guidance, the Board of Pilot Commissioners is tasked by the State of Florida legislature to ensure the safe navigation of vessels transiting its 14 deep water ports by regulating pilotage with the purpose of protecting the navigable waters of the state, the environment, life and property.

The proposed rule, 50 CFR Part 224, has direct impact on the operation of vessels being directed and controlled by pilots licensed by the State of Florida and regulated by the Board of Pilot Commissioners.

As it is written, it is possible that certain aspects of the rule could have the unintended consequence of creating a hazard to the environment as well as a safety issue for the large ocean-going vessels calling Florida's ports. I believe it would be beneficial to your deliberations to allow us the ability to publically discuss the proposed rule and provide a response prior to the rule being enacted.

We would appreciate your agreement to accept our comments after our September, 2006 board meeting.

Sincerely,

Victoria B. Robas
Chair
Board of Pilot Commissioners
Department of Business and Professional Regulation
State of Florida

cc: BOPC Commissioners
Robyn Barineau
Mary Ellen Clark

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August 15, 2006

Chief, Marine Mammal and Sea Turtle Conservation Division
Office of Protected Resources, NMFS
1315 East-West Highway
Silver Spring, MD 20910

Attention: Right Whale Ship Strike Reduction Strategy DEIS

Dear Chief:

The Sierra Club commends the National Marine Fisheries Service for taking this vital step to protect North Atlantic right whales with the proposed ship strike reduction strategy. We strongly support the lowest (10 knots) proposed speed restriction in order to provide the greatest protection to the whales.

We request that U.S. government vessels and vessels under US contract also be required to observe speed restrictions. Exceptions should only be allowed under extreme circumstances, such as human safety missions, times of warfare or national disaster, or when the Federal vessels are already operating under mitigation measures under the Endangered Species Act.

If federal vessels are exempted, we encourage NMFS to immediately re-initiate consultation to ensure that federal agency vessels and activities are not jeopardizing North Atlantic right whales. Vessels exempt from the speed restriction should be required to have two on-board trained marine mammal lookouts at all times and use either aerial spotters or passive sonar, and should travel at the slowest speed possible at night and during times of inclement weather, when whales are most difficult to detect.

We support alternative 5, which would provide a higher level of protection for the species than the preferred alternative (6), by expanding the times and areas in which speed restrictions apply.

The Sierra Club encourages that flexibility will be retained to modify the proposed regulations as new data is collected in the future as to the location and timing of whale distributions. We also urge that these regulations be implemented by this November to protect mothers and calves as they migrate to their winter waters.

Sincerely,

Robin McNamara

121 EAST WAYNE AVENUE
EASTON, PENNSYLVANIA 18042

Comment numbers 42 – 73 consist of oral comments from the public hearings. To read these comments, please refer to the transcripts posted online at: www.nmfs.noaa.gov/pr/shipstrike Meeting attendees who submitted a hard copy of their comment are not included in this list.

Jacksonville, FL – August 8, 2006
42. Andrea Conover
43. Hallie Stevens
44. Jessica Koelsch
45. Joe Flowers
46. Steven Sikes
47. Phillips Ramsey
48. Seana Parker-Dalton
49. Paul Pasternak
50. Linda Bremer

Baltimore, MD – August 10, 2006
51. Andrew Hawley
52. Nathaniel Brown
53. David White
54. Sierra Weaver
55. Alyce Ortiza
56. Melissa Ehrenreich
57. David Giles
58. Phillip Bates
59. Heath Gehrke
60. Bonnie Bick

Boston, MA – August 14, 2006
61. Ed Welch
62. Joseph McKechnie
63. John Phillips
64. Mike Glasfeld
65. Tom Valleau
66. Paul DiGangi
67. Debra Hadden
68. Patricia Sullivan
69. George Blanchard
70. Jim Hain
71. Sharon Young
72. Rick Nolan
73. Charles Mayo

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http://www.coastalstudies.org

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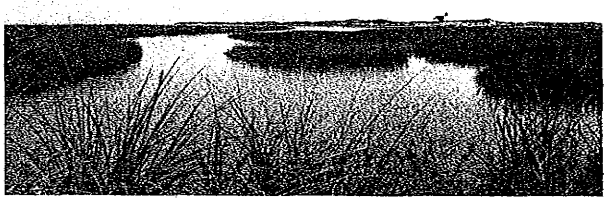


Provincetown
Center for Coastal Studies

Mr. Stewart Harris
Acting Chief, Marine Mammal Conservation Division
Office of Protected Resources
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1315 East-West Highway
Silver Spring, MD 20910

7 September 2006

Re: Right Whale Ship Strike Strategy DEIS

Dear Mr. Harris:

Thank you for this opportunity to comment on the "Draft Environmental Impact Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy". We are in support of the restrictive management strategies presented in the DEIS but with concerns about the methods for implementation. We favor Alternative 6 as the one most likely to achieve the stated goal of reducing "…. the number and severity of vessel collisions with North Atlantic right whales, thereby contributing to the recovery and sustainability of the species…..". However, the static nature of the proposed solutions to an inherently dynamic problem creates credibility issues for both the industry and conservation interests. To overcome the issues and achieve the stated goals NOAA will need to base the ship strike reduction plan on new methods for locating, verifying, and predicting the occurrence of whales. The plan should therefore acknowledge the need to evolve, to incorporate new management and implementation methods as information becomes available, and to more realistically define right whale distribution and movement.

Among the alternatives presented in the DEIS, Alternative 6 has the advantage of offering the highest level of protection to right whales at a time in their long history when it is most needed. Alternative 6 recognizes the importance of focusing management on seasonal high-use areas by applying a combination of static Seasonal Management Areas (SMA) and more responsive Dynamic Management Areas (DMA). While neither the scale nor the responsiveness of the two area management definitions reflect as precisely as needed the distributional dynamics of the right whale, they are reasonable responses to our present level of knowledge and therefore will better achieve the goals of the plan than the other alternatives presented.

To offer the greatest protection to the right whale population it is imperative that the management plan rely on up-to-the-moment information on the distribution of right whales; in principal, though not in practice, the concept of SMAs and DMAs satisfies this need. While the SMA recognizes that there are broadly defined areas and seasons of the year when the occurrence of whales can be predicted, a large portion of the population at any time may also be wandering, sometimes forming unexpected aggregations outside of previously identified regions and seasons. Thus with a combination of the protection afforded by the SMA and the reactivity of the DMA, the management plan may advance the goal of significantly reducing the impact of ship strike and should be adopted. Modifications in implementation of the plan should, however, address the methods used to delineate the areas for management action.

While the concept of a two tiered area management structure satisfies the conceptual needs of the plan, it is with the implementation of the proposed rules that we have concerns. Although the DEIS does not offer the detail that is needed to thoroughly evaluate the methods that will be used to detect and verify the presence of whales, a critical underpinning of the application of the DMA, it is clear that the plan is based upon several potentially weak detection and implementation elements that probably reflect both the realities of funding and deficiencies in our present understanding of whale movements and distribution. In particular it is neither helpful to the industries affected nor to the interests of right whale conservation if the detection and verification of the presence of right whales is based upon wide-area searches by aircraft with no intensive verification or rapid and dynamic management response to the conditions observed. The proposed measures will be effective and receive the wide support of all interested parties only if the areas that are subject to speed and routing management are based upon both evolving good science and, particularly, upon a plan to regularly survey, resurvey, verify, and predict right whale presence and residency in defined and **potentially moving** areas. Because the SMA and the DMA delineations are based upon sightings information, snapshots in time, both the area and duration of the proposed management actions will be acceptable or unacceptable depending upon the timeliness and accuracy of the information on which action is based, the data that describes the dynamics of whale distribution. Under the DMA, if ship speed and routing measures are applied to a region of arbitrary area (30 mile diameter) and for arbitrary duration (two weeks) then the effectiveness of the action may also be arbitrary. Thus it is essential that NOAA establish intensive and advanced methods of survey, verification, and prediction as the very underpinnings of the proposed plan. The problem simply is that, even within an SMA, whale movement and distribution is substantially more dynamic and aggregations more concentrated than any present or proposed management strategies reflect. Thus, neither the goal of reducing ship strike nor the effort to minimize the burden to maritime users are honestly accomplished.

Furthermore, there is little difference between the DMA and the SMA except in our perception of the meaningful scale of the determination. An SMA is in fact a marine region where aggregations of whales deserving of DMA protection regularly occur. There is no doubt that many areas yet to be discovered are deserving of the SMA definition; hence, to capture the essential distributional dynamism on which an effective

ship strike reduction plan should be based, an eventual evolution toward the use of DMAs, based upon intensive sighting, verification, and prediction, and away from static SMA definition may be warranted.

In summary of our concerns:

At the root of the effort to reduce ship strikes is the definition of areas and times for management action. We believe that management methods should evolve as more information is available and that speed restrictions, vessel size requirements, and rerouting are the most credible parts of the proposed measures. However, implementation of this plan, particularly the methods defining and verifying the location, size, and timing of management areas is both most critical to the reduction of ship strike and also most needing detailed development. The level of success of the plan will depend directly upon the sensitivity and precision of information on whale movement and distribution matched to responsive and flexible management actions.

With respect to strategies that may overcome the aforementioned issues we suggest that NOAA:

- review with specialists the several-year old definitions of areas requiring DMA and SMA status (with the potential that new information may better and more functionally define the complex dynamics of whale distribution, movement, and aggregation on which the area designations are based)

- review all whale field projects, both vessel and ship, and coordinate survey activities as much as possible (with the effect of improving the accuracy and coverage of survey data)

- systematically increase NOAA aircraft surveys of present SMAs with the possibility of applying a dynamic (DMA) approach to those areas in the future (with the possibility that enough survey density and verification can be applied to substantially decrease the size and increase the precision of the delineation of areas under considered for management, thereby improving compliance and conservation success)

- develop a plan for intensive verification of the presence of whales within defined DMAs (in order to confirm the location and to predict the durability, movement, and behavior of the whale aggregation, and to thereby validate the application of ship-speed and routing measures, effectively scaling DMA management to right whale habitat use; see below)

- define in detail (not available in the DEIS) the survey, definition, verification, prediction, and implementation methods that will underpin the plan(effectively allowing specialists to work with NOAA to tune the methods used)

- develop methods of management that allow for quick reaction to information available from intensive verification surveys, food resource data, and to any improved information on ship strike causes (only with an ability to rapidly react to volumes of new information in a timely fashion not presently available in the measures contained in the DEIS will the effectiveness of the plan be maximized)

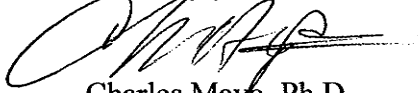
A tested model of the methods that would improve the credibility and application of the measures proposed in the DEIS is available in the coordinated survey, verification, and assessment project funded by NOAA through Section 7 and used in Cape Cod Bay by the Division of Marine Fisheries of the Commonwealth of Massachusetts. Collaborating with DMF, the Provincetown Center for Coastal Studies has developed a multi-disciplinary method for informing the process of dynamic management of fishing and shipping within the Cape Cod Bay Critical Habitat. Dense aircraft surveys of Cape Cod Bay coupled with assessment of the quality and location of the food resources that control the movement, aggregation, and dispersion of right whales, demonstrate all aspects of techniques that identify areas deserving of management action under Alternative 6. The Cape Cod Bay plan offers detailed and near-real time information that is made available to colleagues, management agencies, and to the Division of Marine Fisheries for their management action. The methods used provide a detailed view of the locations of whales and permit prediction of relatively small movements of the identified aggregations along with a forecast of residency, aggregation, dispersal, or departure. In the last year using evidence from the project's several sources the Cape Cod Bay project issued 5 warnings of ship strike risk in relatively small and manageable areas of the bay. Examples of the use of dense air survey coupled with regular resource evaluation are many and could form the basis for a more reasonable and responsive implementation of the measures under the preferred Alternative 6. An intensive effort of sampling and survey coupled with the development of a more rapid method for communicating modifications in the DMA has the advantage of capturing the dynamics of whale aggregation more accurately. With improved accuracy, both the distributional uncertainty and the extent of areas requiring action will be reduced while a focus on strict measures where whales are found will be sharpened. By depending instead upon the large time and space boundaries, ostensibly to make up for the uncertainty of intermittent and non-verified surveys, the conservation measures presented in the DEIS are weakened.

How might management measures based on the improved detection and prediction methods we propose be applied to a region where whales are present and shipping is common? In the case of Cape Cod Bay during the usual period of right whale residency, in the winter and early spring, the bay would be subject to the SMA designation and ship operations would be modified when ship strike risk is high. During the remaining portion of the year, from 15 May to 1 January, the region could be subject to DMA designation, depending upon whale presence. However, data on spring and summer whale occurrence during the last two decades demonstrate that in all but 2 years right whales have not been resident in Cape Cod and southern Massachusetts Bays outside the SMA period; therefore management action would rarely apply during the high-use summer season.

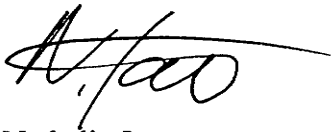
During the summers of 1986 and 1993 small groups of right whales were in fact resident in Massachusetts and Cape Cod Bays feeding on dense zooplankton resources. Under the plan put forth in the DEIS, vessel speed requirements would have covered an area 30 miles in diameter and therefore would have applied throughout all of Cape Cod Bay and the southern portions of Massachusetts Bay for approximately 3 months in 1986 and for 2 weeks in 1993. In contrast, with regular surveys as presently implemented in DMF's Cape Cod Bay monitoring program, the DMA covered by the three month summer residency in 1986 would seldom have encompassed a moving ellipse or circle more than 4 miles in major axis. The restricted DMA would have been moved about the bay based upon predictions from twice-weekly food resource sampling and upon air survey verification. In this case both data sources would serve to assure that the management area and duration were a reflection of actual whale occurrence. In 1993 an aggregation of 2-3 whales occupied a restricted area west of Provincetown for approximately 6 days. In this case the lack of whale movement and the clear delineation of a relative small and static food resource would have meant the establishment of a DMA approximately 3 miles long and 2 miles wide for 6 days. Although not well documented, an additional case that has particularly important implications for the conservation goals advanced in the DEIS may also be cited. In the spring of 1986, before arrival of whales in Cape Cod and southern Massachusetts Bays, several whales were observed by vessels northeast of Highland Light, in the vicinity of the Boston shipping lanes. At that time no management action was taken. In this instance observations suggest that a DMA would have been valuable a valuable conservation tool, particularly considering that a whale was struck by a ship and killed in that area in August of 1986. With a dense aircraft survey and predictions of whale movement and residency based upon an analysis of the controlling food resources, a moving area of perhaps 5 miles in diameter could have substantially reduced the risk to whales of ship strike. In all of these examples the sensitivity of the survey and of resource-based predictions is increased with increased sampling while the area and duration of the DMA are decreased, thereby reducing both the risk of ship strike to whales and the impact of management actions on maritime users.

In conclusion, we support Alternative 6 as the most effective means to achieve a substantial reduction in ship strikes. To be effective, however, the measures proposed in Alternative 6 must be coupled with the development creative and advanced methods for defining, identifying, verifying, and predicting the boundaries of the marine areas subject to the proposed measures.

Sincerely yours,



Charles Mayo, Ph.D.
Senior Scientist
Right Whale Habitat Studies



Nathalie Jaquet
Senior Scientist
Right Whale Survey

Peter Borrelli
Executive Director

▸ 75

From Esther Wolk <wolkeb2005@yahoo.com>
Sent Monday, September 18, 2006 4:32 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject NMFS proposals to help protect the endangered Northern Right Whale

Dear Sir or Madam,

I am writing to urge you to implement the National Marine Fisheries Service proposed policy of reducing the speed of vessels 65 feet or greater to 10 knots (or less) during the Right Whales' seasonal migration pattern, including federal agency vessels (with exceptions only under extreme circumstances).

Many thanks for your consideration and attention to this urgent matter.

Esther Wolk
542 Riverside Avenue
Medford, MA 02155

▸ 76

From Tom Wright <twright3@hotmail.com>
Sent Monday, September 25, 2006 4:50 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject Right Whale Ship Strike DEIS

Noaa,

The draft environmental impact statement ignores valid scientific approaches to reducing right whale ship strike.

Indeed, the "no action" option lists surveillance and tracking methods that will become increasingly effective as technology is improved and applied. The remaining options lack any scientific support to justify their effectiveness. The DEIS emphasizes low relative costs in comparison with overall shipping costs but does not justify the actual cost or effectiveness of slowing ships.

It appears that NOAA has decided to control ship speeds only because it will be simple to administer. NOAA placed valid, scientific initiatives in the "No Action" category because it absolves NOAA of responsibility, even though it is the area most likely to offer the most effective steps to protect right whales.

NOAA should select and fund studies to develop the "No Action" alternative, the most effective approach to protecting right whales.

Tom Wright
710 Bradley Point Rd
Savannah, GA 31410
cell(912)429-3350
home/fax(912)897-1582

▸ 77

From Bob Myrick <bob@myrickmarine.com>
Sent Tuesday, September 26, 2006 9:36 am
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject Reduced Speed Whales
Attachments image001.jpg 7K

I am very much opposed to the proposed reduction in vessel speed and feel that such a rule would likely cause more collisions because of the reduction in noise that whales depend on to prevent accidental collisions with vessels. Swim speed of the whales is sufficient to allow avoidance, but only if the noise of the approaching vessel is load enough to be detected soon enough to allow time for evasion. A slow and quiet vessel is setting the whale up for certain impact by "sneaking up" on the unsuspecting mammal. More studies need to be done to make the right (no pun) choices. Kindly delay your decision on this until the whole truth is known.

Regards

Bob Myrick
President
Myrick Marine Contracting Corp.
P O Box 60697
Savannah, GA 31420
Main Office (912) 964-0711
Direct Office (912) 964-0712 ext. 103
Fax (912) 964-0771
Cell (912) 313-3346
Email: bob@myrickmarine.com
Website: myrickmarine.com

MYRICK MARINE CONTRACTING CORPORATION
SAVANNAH, GEORGIA

▸78

From "Cutler, Stephen" <SC@sagafc.com>
Sent Wednesday, September 27, 2006 12:18 pm
To Shipstrike.Comments@noaa.gov , ShipStrike.EIS@noaa.gov
Cc "Munro, Neil" <NM@sagafc.com> , tonops <tonops@sagafc.com> , secretary@savannahmaritime.com , sma_1@bellsouth.net
Bcc
Subject Proposed NOAA speed reduction rules to reduce right whale strikes.

Dear Sirs.

The purpose of this communication is to register our objections to the proposed NOAA rules for mandatory speed reductions for vessels transiting certain seasonally managed maritime areas along the mid-Atlantic coast.

We do not claim any science-based knowledge of the effects of such a speed reduction on the right whale population, or on the propensity for whale strikes, but we do note that the proposed rules ignore valid scientific approaches to reducing right whale strikes that are listed on the DEIS "no action" options, such as surveillance and tracking.

It would appear that the sole justification behind these proposed rules is their apparent simplicity and ease of maintenance for NOAA.

We further take issue with the assertion in the DEIS that the cost to the shipping industry should be "relatively low", and with the failure to provide any cost-effective analysis in the impact statement.

We can assure you that the costs to individual shipping lines will not be insignificant, and when the present market value of ships is taken into account, such a restriction could easily add tens of thousands of dollars to a ship's coastwise transit.

Saga Forest Carriers will have some 48 coastwise vessel transits through the mid-Atlantic region in 2007, and even if could assume that the net effective loss to each vessel's schedule was just one day, the total cost to Saga will exceed $1.5 million during the year. We do not consider this a "relatively low cost" as comfortably assumed in the DEIS.

We urge the NOAA to shelve the proposed rule until an appropriate scientific analysis is completed on both the efficacy of the proposed speed restriction and the alternatives that have been summarily consigned to the "no action" list.

Sincerely

Capt. Stephen J. Cutler
General Manager
Saga Forest Carriers Intl.
Savannah, Georgia.
Direct: (912) 790 0297
Cell: (912) 596 5578
sc@sagafc.com

▸ 80

From Arthur D Unger <alunger@juno.com>
Sent Sunday, October 1, 2006 7:47 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject Please slow to 10 knots when in Right Whale habitat

Chief, Marine Mammal and Sea Turtle Conservation Division

Attn: Right Whale Ship Strike Reduction Strategy DEIS

Office of Protected Resources, NMFS

1315 East-West Highway

Silver Spring, MD 20910

Dear Chief,

Please make it extremely unlikely that any Right Whale is stuck by a ship. Slow to 10 knots and post look outs whenever there is a risk of collision.

Thanks
Arthur Unger
2815 La Cresta Drive
Bakersfield CA 93305-1719
661 323 5569

▸ 82

From David Dow <ddow@cape.com>
Sent Monday, October 2, 2006 1:12 pm
To ShipStrike.EIS@noaa.gov
Cc ddow@cape.com
Bcc
Subject Comments on North Atlantic Right Whale Ship Strike Reduction Strategy DEIS

The following comments are submitted on behalf of the 1100 members of the Cape Cod Group- Sierra Club of which I am the Acting Chair. At the Group's September 19, 2006 Executive Committee meeting, we decided to support the efforts of the the Sierra Club's Atlantic Coast Ecoregion (ACE) Program and the Massachusetts Chapter that support Alternative 5 of the DEIS with consultation with federal vessels to ensure that their activities don't endanger right whale populations. These higher Sierra Club entities will comment in more detail on why they favor Alternative 5 and other concerns that they have with the DEIS. The ACE is launching a speaking tour of the Northeastern U.S. where the plight of the right whale will be discussed by Mark Dittrick. He will speak in Provincetown, Ma. and New Bedford, Ma. during the week of October 22-28, 2006 which will raise the profile of this conservation challenge to our members on Cape Cod and in southeastern massachusetts. I will confine my comments to the Cape Cod perspective on the DEIS.

Since right whales feed in the Gulf of Maine from the Spring to early Fall and then migrate to the winter breeding areas off the Florida/Georgia coastline, the Great South Channel and Cape Cod Bay are important migratory pathways and provide essential habitat for feeding on copepods that are concentrated in the surface waters. From 1997 to 2001 roughly 2 whales per year died from either ship strikes or entanglements with fixed fishing gear. This is in excess of the Potential Biological Removal (PBR) rate of less than 1 right whale death per year needed to increase the population size of this critically endangered species. In spite of good calve production rates off the Southeastern U.S. coast in recent years, scientific studies by the Woods Hole Oceanographic Institution and New England Aquarium suggest that the whale population will not increase unless more is done to protect them. Certainly the National Marine Fisheries Service (NMFS) proposal to reduce the ship speed to 10 knots for vessels greater than 65 feet in length is a step in the right direction of offering additional protection. During vessel transit through Massachusetts Bay at night and during inclement weather during daylight, a vessel traveling at 10 knots even with a spotter probably could not avoid a surface dwelling right whale. The Dynamic Area Management (DAM) offers one way to address this problem in areas of known whale congregations (usually areas where their microscopic food is concentrated).

An area of concern in the DEIS is the exemption of government vessels from the speed restrictions. Certainly in war time this would be necessary for U.S. Navy and U.S. Coast Guard vessels, but in peacetime they should observe the same environmental requirements as the civilian fleet greater than 65 feet in length. For many years the Cape Cod Group has been involved in the groundwater cleanup at the Massachusetts Military Reservation where we support military training that is compatible with protection of our sole source aquifer for drinking water and the habitat for state listed species on the MMR.Even though there is obviously changes in time on the priorities that the military places on the training like they fight and environmental stewardship, these twin goals are not incompatible. We have insisted that military

training not be exempted from applicable state and environmental regulations (Superfund, Safe Drinking Water Act and Massachusetts Contingency Plan in this case). I feel that the same philosophy should apply to the Marine Mammal Protection Act (MMPA) and the strategies developed by the Take Reduction Teams for rebuilding the strategic stocks of whales in the Northeast and requirements under the Endangered Species Act (ESA) for the critically endangered right whale.

Whale watching is an important component of the tourist-based economy on Cape Cod and it is important to protect the whale populations that reside in our local waters. The right whale is a large, charismatic endangered species whose existence is valued by the residents of Cape Cod for aesthetic reasons. Many of our Sierra Club members moved to Cape Cod to enjoy the the wild places and wild things of this special place. The nearby Stellwagen Bank National Marine Sanctuary is in the process of developing a revised comprehensive management plan that addresses right whale concerns (whale watching; gear interactions; ship strikes; etc.).The state Sierra Club chapter has been involved in this process. The NMFS proposed speed regulations appear to offer a flexible tool that will help reduce right whale deaths from ship strikes. Probably more needs to be done to protect the female right whales that form the basis for the reproduction required to increase the right whale populations in the future.

Not being an expert on right whale natural history, population dynamics and conservation issues, I don't know what the most cost/time effective strategies might be. NMFS as a fishery management agency might examine lessons learned from trying to protect the large female spawners that contribute more to egg production (subject to high mortality) and successful recruitment (i.e. lobsters which have a high yield in spite of being overfished). This would have to be adopted for marine marine mammals which have a much lower potential rate of increase from live bearing their young. The marine mammals should have greater survival rates than fish larvae/juveniles, so that the key is increasing the survival into the adult reproductive stage and having a larger percentage of the adult females being reproductively active.

Thanks for providing the public a chance to comment on the DEIS.

David Dow
18 Treetop Lane
East Falmouth, Ma. 02536-4814

e-mail: ddow@cape.com

▸ 87

From Heather Deese <hdeese@gmail.com>
Sent Tuesday, October 3, 2006 3:03 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject north atlantic right whales

Chief, Marine Mammal and Sea Turtle Conservation Division

Attn: Right Whale Ship Strike Reduction Strategy DEIS

Office of Protected Resources, NMFS

1315 East-West Highway

Silver Spring, MD 20910

I am writing to express support for the NMFS proposed action to limit vessel speeds in an effort to protect the North Atlantic Right Whales from ship strikes. I realize that travelling at slower speeds will result in a major inconvenience and higher operating expenses for some vessel operators, but we as a society have clearly stated through our support for legislation such as the endangered species act, that a short-term economic burden is worth it in order to minimize our detrimental impacts of species at risk of extinction. We must minimize the chances of future ship strikes and preventable injuries or deaths of this beleagured whale population.

Thank you,

Heather Deese-Riordan
2670 North Union Road
Union, Maine 04862

October 1, 2006

Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Projected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
ShipStrike.EIS@noaa.gov

Summary:

The National Marine Fishery Service (NMFS) has proposed regulations to enact speed restrictions on vessels in certain locations to protect the endangered North Atlantic right whale (*Eubalaena glacialis*). These comments are in response to the proposed regulations.

Background:

The North Atlantic right whale is critically imperiled, with only 300 or so individuals remaining. They only occur along the east coast of North America. Right whales travel slowly, make shallow dives, and often stay near the coast. Because if this, they were hunted nearly to extinction. Despite the end of whaling in 1935, the species has not recovered.

Human-related activities continue to be the main reason for the species' lack of recovery. According to the Woods Hole Oceanographic Institution, the right whale suffers what is called the urban whale syndrome. Right whales are subject to ship strikes, entanglement in fishing gear, water pollution, the effects of climate change, naval exercises and other man-made noise, and potential oil and gas exploration. Off all these impacts, the reduction of ship strikes is the most immediate step that can be taken to protect right whales. It is also the most necessary step, as ship strikes are one of the greatest known causes of injury and mortality.

Ship strikes are responsible for about half of all known, human-caused deaths of right whales, according to NMFS. From 1986 to 2005, 19 known ship-strike deaths have occurred. Three of these, possibly a fourth, occurred since March 2004 (Kraus *et al.*, 2005). The actual number of collisions and deaths is probably much higher, as some may be unreported or undetected.

Numerous measures have been taken to aid in the recovery of the right whale; however, this delicate species still succumbs to human-related deaths. NMFS believes that existing measures have not been sufficient to reduce the threat of ship strikes or improve chances for recovery. A study of mariner compliance with NOAA-issued speed advisories in the Great South Channel off Cape Cod reported that 95 percent of ships tracked (38 out of 40) did not slow down or route around areas in which right whale sightings occurred (Moller *et al.*, 2005). Accordingly, NMFS determined that further action was required.

Proposed Measures:

The National Marine Fisheries Service (NMFS) has issued a draft environmental impact statement (EIS) in which operational measures for ships are proposed to protect the whales. Those measures include:

1) Ship speed restrictions within a 30 nautical mile radius around nine east coast ports during seasons when right whales are likely to be present. Vessels under 65 feet and federal vessels are exempt.

2) Right whales observed outside speed restriction areas will be protected by short-term dynamic management areas (DMAs) which ships must route around or adhere to the speed restriction. The size of the area would depend on the number and distribution of animals sighted, and last for at least 15 days. It could be extended if the whale aggregation persists.
3) Ship routing measures are recommended around Cape Cod, where right whales congregate during the summer, and around Jacksonville and Fernandina Beach, Florida and Brunswick, Georgia, where right whale calving occurs in the winter.

Position:

We commend the National Marine Fisheries Service for taking this vital step to protect North Atlantic right whales with the proposed ship strike reduction strategy. We strongly support the lowest (10 knots) proposed speed restriction in order to provide the greatest protection to the whales.

We request that US government vessels and vessels under US contract also be required to observe speed restrictions. Exceptions should only be allowed under extreme circumstances, such as human safety missions, times of warfare or national disaster, or when the Federal vessels are already operating under mitigation measures from a Section 7 consultation under the Endangered Species Act.

If federal vessels are exempted, we encourage NMFS to immediately re-initiate Section 7 consultation to ensure that federal agency vessels and activities are not jeopardizing North Atlantic right whales. Vessels exempt from the speed restriction should be required to have two on-board trained marine mammal lookouts at all times and use either aerial spotters or passive sonar, and should travel at the slowest speed possible at night and during times of inclement weather, when whales are most difficult to detect.

We support alternative 5, which would provide a higher level of protection for the species than the preferred alternative (6) by expanding the times and areas in which speed restrictions apply.

If alternative 6 is implemented, we encourage NMFS to consider using telemetry devices to track individual whales whenever possible. This would allow vessels to be notified well in advance of the presence of right whales, and would greatly improve the effectiveness of the DMAs.

NMFS describes the North Atlantic right whale as a population, not a distinct species from the North Pacific right whale (*Eubalaena japonica*). Recent genetic analyses indicate that they are separately evolving species and have not interbred for millennia (Reeves *et al.*, 2002). We hope that this designation does not affect the level of protection proposed.

The first true whales graced our planet approximately 45-50 million years ago, developing into the highly adapted ocean dwellers we know today. Much more recently, approximately 2.4 to 1.6 million years ago, the first humans, *Homo habilis*, came upon our planet. *Homo sapiens* (modern humans) made their first appearance a mere 100,000 years ago, roughly.

Unlike humans, whales do not have the capacity to change the future or direction of the planet we share. We hold in our hands the tenuous fate of many other species. There is a broad moral consensus that we do not have the right to forever extinguish another species, one born millions of years before human antiquity, when we have the means and the knowledge to take steps to protect it.

We feel strongly that if the ship speed reduction and other proposed measures are not implemented, the North Atlantic right whale's existence is in jeopardy. Humans should not alter their behavior with regard to this species only when money is *not* a factor. This could easily be the right whale's last stand; the need to prevent ship strikes is critical.

We hope that these protective measures will be implemented as soon as possible, before the next calving season. Finally, we hope that flexibility will be maintained to modify the proposed regulations if new temporal or spatial distribution data are collected in the future.

Thank you for considering our comments.

Sources

Kraus, S.D., M.W. Brown, H. Caswell, C.W. Clark, M. Fujiwara, P.K. Hamilton, R.D. Kenney, A.R. Knowlton, S. Landry, C.A. Mayo, W.A. McLellan, M.J. Moore, D.P. Nowacek, D.A. Pabst, A.J. Read, R.M. Rolland. 2005. North Atlantic Right Whales in Crisis. Science 309: 561–562.

Moller, J.C., Wiley, D.N., Cole, T.V.N., Niemeyer, M., and Rosner, A. 2005. Abstract. The behavior of commercial ships relative to right whale advisory zones in the Great South Channel during May of 2005. Sixteenth Biennial Conference on the Biology of Marine Mammals, San Diego, December 2005.

Reeves, R.R., Stewart, B.S., Clapham, P.J., and Powell, J.A. 2002. Guide to Marine Mammals of the World. National Audubon Society. Alfred A. Knopf, New York.

▸ 89

From Serda Ozbenian <serda@awionline.org>
Sent Tuesday, October 3, 2006 7:00 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject Attn: Right Whale Ship Strike Reduction DEIS
Attachments att7ce49.jpg 13K att7ce88.jpg 2K

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October 3, 2006

Chief, Marine Mammal and Sea Turtle Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Dear Sir or Madam:

Re: Draft Environmental Impact Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy

The Animal Welfare Institute (AWI) welcomes the opportunity to comment on the above-referenced Draft Environmental Impact Statement (DEIS).

We agree that the North Atlantic Right Whale (NARW) is perilously close to extinction. Ship strikes pose the greatest immediate threat to the future survival of this population. However, other anthropogenic threats present synergistic threats that put this population in an extremely precarious state over the long term.

We are pleased that the National Marine Fisheries Service is planning to implement the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy. This measure is long overdue and unless action is taken immediately, the future of these whales is dismal.

Alternative V is the most protective option and, if implemented along with an imposed speed restriction of 10 knots, offers the only chance, albeit slim, of recovery for the NARW. Even with a speed restriction of 10 knots, the DEIS states that there is a 45 percent chance of serious injury or mortality from a ship strike. Obviously a speed restriction of 10 knots is an already inadequate measure for a population facing such a grave and uncertain future, therefore raising the speed restriction even higher would be nothing short of absurd.

Our primary concerns are that federal vessels are exempted from the proposed action and that cumulative effects of other threats are not adequately addressed in the DEIS.

Federally Owned, Operated and Contracted Vessels
The proposed action should not exempt vessels which are owned, operated or under contract to the U.S. Federal agencies as well as foreign vessels engaged in joint exercises with the U.S. Navy. We oppose this exemption because the reasons given for the exemption are unsatisfactory; despite internal measures, federal vessels continue to strike and kill a significant number of NARWs; federal vessels are more likely to strike NARWs due to their inherent design characteristics; and because the number of federal vessels is set to increase in the near future.

The DEIS states that the NMFS did initially consider including Federal vessels in the proposed action. AWI finds it disturbing that in the DEIS NMFS has decided to justify this exemption by citing national security, navigational and human safety issues without further expansion or explanation. A thorough explanation as to why these issues take precedence over the last remaining NARW is warranted.

Federal vessels continue to strike and kill NARW. While we recognize that these vessels have internal procedures for reducing NARW ship strikes as mentioned in the DEIS, these measures do not appear to be significantly decreasing the NARW ship strike rate. Exempting these vessels from the provisions of the regulations significantly undermines the effectiveness of the proposed action.

As discussed in the DEIS, military vessels are typically designed to be quiet. As a result, these vessels are less readily heard by whales which increases the likelihood of such a vessel striking a whale. In fact the ability of NARWs to hear vessels in order to take evasive action is discussed in the Cumulative Impacts section of the DEIS and has also been examined by the International Whaling Commission's Ship Strikes Working Group First Report to the Conservation Committee, dated May 2006. The report states that "*High levels of ambient noise may make it difficult for cetaceans to detect approaching vessels and to judge their relative location and movement. Cetacean responses to approaching vessels may also be affected by habituation to vessel noise. In addition, exposure to very loud sounds may cause damage to the auditory system and reduce the ability to detect oncoming vessels.*"

The incidences of ship strikes from federal vessels will likely increase in coming years in the MAUS and SEUS areas if the U.S. Navy East Coast Undersea Warfare Training Range (USWTR) is built. The Navy's Marine Mammal and Sea Turtle Mitigation Plan, which is currently in place, relies solely on surface observation which is inadequate. This range, as NMFS is aware, is planned for the a 550 square mile area off the coast of North Carolina, with alternative locations lying off the Florida and Virginia coasts. The number of multi-vessel exercises planned for the range is 161 every year. The DEIS fails to address the ship strike threat from vessels transiting to and from the OPAREAS from port.

Cumulative Effects
The DEIS acknowledges that cumulative negative impacts on the NARW are numerous and include climate change; fishing gear entanglement; anthropogenic noise; habitat destruction; whale watching; naval activities in addition to noise including explosions; and the construction of Liquefied Natural Gas vessels and deepwater ports in NARW habitat. In the NARW Biology section of the DEIS NMFS discusses the declining productive performance in the 1990s as being due to: contaminants and endocrine disruptors, body condition/ nutritional stress, genetics, infectious diseases and marine biotoxins. The DEIS does not discuss these stressors in the cumulative impacts section though they are still present and likely increasing. Furthermore, the DEIS does not discuss additional potential threats facing these whales such as overfishing of prey species and ingestion of foreign objects.

When summarizing the overall impact of other threats to the NARW, the DEIS states that "[w]hen the ship strike measures are coupled with the fisheries regulations of the ALWTRP (the second leading cause of mortality), as well as other conservation measures, the mortality rate should decrease." This statement is complete nonsense. It implies for example, that climate change - a massive issue and probably the biggest long term threat to the NARW - is being resolved and can therefore be ignored. The DEIS deliberately dismisses this threat by making glib justifications such as "air inventories", Climate Action Reports and participation in the United Nations Framework Convention on Climate Change. Similarly, this summary statement ignores the

uncertainty which NMFS acknowledges exists for some of the additional threats, notably for example, anthropogenic ocean noise. On page 4-129 the DEIS states that "[c]umulative impacts are difficult to analyze without greater understanding of the effects of noise on right whale hearing and behavior." In the presence of uncertainty, the precautionary principle is the widely-accepted course of action to follow. This is especially true when one considers the precarious future facing the NARW.

We appreciate the opportunity to provide our comments, and we look forward to an expedited process to help these whales immediately.

Sincerely,

Cathy Liss
President

October 1, 2006

Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Projected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
ShipStrike.EIS@noaa.gov

Summary:

The National Marine Fishery Service (NMFS) has proposed regulations to enact speed restrictions on vessels in certain locations to protect the endangered North Atlantic right whale (*Eubalaena glacialis*). The North Carolina Chapter of the Sierra Club (hereinafter, "Sierra Club") is presenting comments in response to the proposed regulations.

Background:

The North Atlantic right whale is critically imperiled, with only 300 or so individuals remaining. They only occur along the east coast of North America. Right whales travel slowly, make shallow dives, and often stay near the coast. Because of this, they were hunted nearly to extinction. Despite the end of whaling in 1935, the species has not recovered.

Human-related activities continue to be the main reason for the species' lack of recovery. According to the Woods Hole Oceanographic Institution, the right whale suffers what is called the urban whale syndrome. Right whales are subject to ship strikes, entanglement in fishing gear, water pollution, the effects of climate change, naval exercises and other man-made noise, and potential oil and gas exploration. Off all these impacts, the reduction of ship strikes is the most immediate step that can be taken to protect right whales. It is also the most necessary step, as ship strikes are one of the greatest known causes of injury and mortality.

Ship strikes are responsible for about half of all known, human-caused deaths of right whales, according to NMFS. From 1986 to 2005, 19 known ship-strike deaths have occurred. Three of these, possibly a fourth, occurred since March 2004 (Kraus *et al.*, 2005). The actual number of collisions and deaths is probably much higher, as some may be unreported or undetected.

Numerous measures have been taken to aid in the recovery of the right whale; however, this delicate species still succumbs to human-related deaths. NMFS believes that existing measures have not been sufficient to reduce the threat of ship strikes or improve chances for recovery. A study of mariner compliance with NOAA-issued speed advisories in the Great South Channel off Cape Cod reported that 95 percent of ships tracked (38 out of 40) did not slow down or route around areas in which right whale sightings occurred (Moller *et al.*, 2005). Accordingly, NMFS determined that further action was required.

Proposed Measures:

The National Marine Fisheries Service (NMFS) has issued a draft environmental impact statement (EIS) in which operational measures for ships are proposed to protect the whales. Those measures include:

1) Ship speed restrictions within a 30 nautical mile radius around nine east coast ports during seasons when right whales are likely to be present. Vessels under 65 feet and federal vessels are exempt.
2) Right whales observed outside speed restriction areas will be protected by short-term dynamic management areas (DMAs) which ships must route around or adhere to the speed restriction. The size of the area would depend on the number and distribution of animals sighted, and last for at least 15 days. It could be extended if the whale aggregation persists.
3) Ship routing measures are recommended around Cape Cod, where right whales congregate during the summer, and around Jacksonville and Fernandina Beach, Florida and Brunswick, Georgia, where right whale calving occurs in the winter.

Sierra Club Position

The Sierra Club commends the National Marine Fisheries Service for taking this vital step to protect North Atlantic right whales with the proposed ship strike reduction strategy. We strongly support the lowest (10 knots) proposed speed restriction in order to provide the greatest protection to the whales.

We request that US government vessels and vessels under US contract also be required to observe speed restrictions. Exceptions should only be allowed under extreme circumstances, such as human safety missions, times of warfare or national disaster, or when the Federal vessels are already operating under mitigation measures from a Section 7 consultation under the Endangered Species Act.

If federal vessels are exempted, we encourage NMFS to immediately re-initiate Section 7 consultation to ensure that federal agency vessels and activities are not jeopardizing North Atlantic right whales. Vessels exempt from the speed restriction should be required to have two on-board trained marine mammal lookouts at all times and use either aerial spotters or passive sonar, and should travel at the slowest speed possible at night and during times of inclement weather, when whales are most difficult to detect.

We support alternative 5, which would provide a higher level of protection for the species than the preferred alternative (6) by expanding the times and areas in which speed restrictions apply.

If alternative 6 is implemented, we encourage NMFS to consider using telemetry devices to track individual whales whenever possible. This would allow vessels to be notified well in advance of the presence of right whales, and would greatly improve the effectiveness of the DMAs.

NMFS describes the North Atlantic right whale as a population, not a distinct species from the North Pacific right whale (*Eubaleana japonica*). Recent genetic analyses indicate that they are separately evolving species and have not interbred for millennia (Reeves *et al.*, 2002). The Sierra Club hopes that this designation does not affect the level of protection proposed.

The creatures we collectively refer to as "whales" found their origins approximately 60 million years ago. Their predecessors were small mammals, not unlike our own ancient mammalian ancestors, who jointly survived the "great extinction" that wiped out the dinosaurs. The first true whales graced our planet approximately 45-50 million years ago, developing into the highly adapted ocean dwellers we know today.

Much more recently, approximately 2.4 to 1.6 million years ago, the first humans, *Homo habilis*, came upon our planet. *Homo sapiens* (modern humans) made their first appearance

a mere 100,000 years ago, roughly.

Like modern humans, modern whales breathe air, give birth to live young, express intelligence, communicate with each other to coordinate complex group behavior, and invest considerable time and energy in raising their young. Many whales, right whales included, demonstrate benign social behavior.

Unlike humans, whales do not have the capacity to change the future or direction of the planet we share. Humans have become the guardians of this earth. We hold in our hands the tenuous fate of all other species that reside here with us. There is a broad moral consensus that we do not have the right to forever extinguish another species, one born millions of years before human antiquity, when we have the means and the knowledge to take steps to protect it.

The Sierra Club feels strongly that if the ship speed reduction and other proposed measures are not implemented, the North Atlantic right whale's existence is in jeopardy. Humans should not alter their behavior with regard to this species only when money is *not* a factor. This could easily be the right whale's last stand; the need to prevent ship strikes is critical.

We hope that these protective measures will be implemented as soon as possible, before the next calving season. Finally, the Sierra Club hopes that flexibility will be maintained to modify the proposed regulations if new temporal or spatial distribution data are collected in the future.

Thank you for considering our comments.

Vic D'Amato, Coastal Subcommittee Chair, NC Sierra Club

Contact: Mary Frazer, frazem4@hotmail.com

Sources

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Moller, J.C., Wiley, D.N., Cole, T.V.N., Niemeyer, M., and Rosner, A. 2005. Abstract. The behavior of commercial ships relative to right whale advisory zones in the Great South Channel during May of 2005. Sixteenth Biennial Conference on the Biology of Marine Mammals, San Diego, December 2005.

Reeves, R.R., Stewart, B.S., Clapham, P.J., and Powell, J.A. 2002. Guide to Marine Mammals of the World. National Audubon Society. Alfred A. Knopf, New York.

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From Charlie Sutlive <sma_1@bellsouth.net>
Sent Wednesday, October 4, 2006 4:06 pm
To Shipstrike.Comments@noaa.gov
Cc ShipStrike.EIS@noaa.gov
Bcc
Subject Right whale - vsl speed restrictions

Gentlemen:

We refer to previous exchanges in connection with the NOAA proposal for seasonal speed restrictions at several East Coast Ports. These restrictions, if enacted, are intended to afford additional protection for right whales againsrt ship strikes. There is insufficient data to support this theory.

We support NOAA in its historic efforts to minimize harm to right whales. However, requiring vessels over 65 feet in length to reduce speeds to 10 knots would, in our opinion, cause considerable financial harm to the maritime community. NOAA is fully conversant with these problems via correspondence and public hearings.

The Savannah Maritime Aassociation would like to propose two alternative measures in the effort to protect right whales:

A) utilize electronic tracking devices. this method has worked in tracking Polar bears, seals and other animals. Local maritime authorities would be alerted when whales are in shipping lanes or nearby.

B) Utilize local air Coast guard units to patrol our ship channels. Again local maritime authorities would be alerted when whales are spotted nearby. This additional responsibility would be in lieu of having to enforce speed restrictions or levying fines.

Thank you for your consideration of the above.

Charles E. Sutlive
Executive Director
Savannahy Maritime Association

SEA STAR

Comment regarding Speed Restrictions
And
Comments regarding the Environmental Impact Study

50 CFR Part 224 [Federal Register/Vol. 71, No. 122/Monday

June 26, 2006/Proposed Rules

Introduction:

Sea Star Line, LLC (SSL) appreciates the opportunity to comment on the proposed rules regarding the implementation of speed restrictions and the environmental impact statement. SSL is a privately held company providing integrated transportation services between the United States, Puerto Rico and the U.S. Virgin Islands. With high-speed combination roll-on/roll-off and container vessels, Sea Star is proud to play a key role in providing ocean transportation services for this vital commerce channel. Among a full range of cargoes, these ships carry fresh produce, chilled meat, live dairy cattle, groceries and pharmaceutical products, which are all time-sensitive and essential for the people of Puerto Rico. An average speed of 20.5 Kts. for the voyage to Puerto Rico is required to maintain schedule. These ships travel through the SEUS seasonal management area (in and out of Jacksonville, FL) about 300 times per year. (Our comments relate primarily to the SEUS area, where SSL has direct operating experience.)

Our company, our employees, the officers on our ships, all want to help save the endangered North Atlantic Right Whales. We want to assist with any effective and sensible conservation measures that will help further this cause. In twenty (20) years of Sea Star Line and Sea Barge operations from Jacksonville, **we have never hit a whale**, or even came close!

Two years ago, Sea Star Line voluntarily instituted an additional, special "Bow Watch" to improve our ability to sight whales while transiting within 20 miles of the Jacksonville Pilot Station, during the November 15th to April 15th whale season. In all these hundreds of transits **over the last two years, we only saw one whale!** It was observed about half a mile off, swimming away from the ship, and no diversionary actions were required by the ship, (although the ship would have had plenty of time to turn or slow down further if it had been necessary.)

Sea Star Line agrees that some of the steps proposed by the National Marine Fisheries Service (NMFS/NOAA) are very likely to reduce the likelihood of ship strikes by vessels, and should be implemented. However, we concluded that the proposed 10 Kt. speed restrictions, during the entire 5 month whale season in the SEUS area would **not** significantly reduce the likelihood of ship strikes or whale deaths, and may, in fact, create the opposite result of **increased danger to whales!**

Mandatory Speed Restrictions: (Seasonal Management Areas.)

We have carefully read the documentation provided by NMFS/NOAA and did not find a convincing argument that slowing vessels to 10 Kts. will actually reduce the likelihood of ship strikes. NMFS/NOAA presented the opinion that *"an examination of all known strikes indicates vessel speed is a principal factor. . . . The authors concluded that most deaths occurred when a vessel was traveling in excess of 13 knots."* Not considered in the findings is that most vessels travel in excess of 13 knots in normal operations, and as a result there can be little or no data substantiating vessel activity at speeds less than 13 knots compared to vessels traveling at 18 knots! The data noted in the 50 CFR Part 224 basically reiterates that the percentages of vessels operating at specific speed ranges is about the same percentage as ship strikes upon whales. Further study should be made to verify the quantity of vessels in the three specific speed ranges with the percentages of vessel strikes. **We think that this data actually suggests that speed is not very relevant!** The proximity of vessels and whales is probably the most pertinent factor to be considered. Reevaluation of the study is needed to confirm validity of information and the suppositions for the rule-making, and to help insure a logical conclusion.

An NMFS/NOAA analysis of five speed-reduction studies (Knowlton and Russel – A Review of Vessel Speed and How it Relates to Vessel/Whale Collisions.) indicated the following: *"No definitive answer can be given as to what speed would most likely reduce the chance of a strike with a Right Whale."* While none of these studies indicated that speed reduction measures conclusively reduce the risk of Right Whale ship strikes and/or whale mortality, the **Clyne study suggested that there might be a positive correlation between increased vessel speed and a reduced risk of whale strikes."**

Another aspect of the proposed SMA speed restrictions that is of particular concern relates to the safe transit of ships through harbor breakwaters. The Jacksonville Pilots' comment included the following:

> *"Especially large, high-sided vessels such as large containerships or car carriers, as well as deeply loaded tankers or bulk vessels will require speeds, well in excess of the proposed 10 knot restriction in order to pass through the breakwater safely."*

We agree with the Pilots' statement that *"faced with the prospect of choosing between the safety of the ship or being fined, we would obviously chose the safety of the ship."* It's clear to us that if any speed restrictions are adopted, a "waiver" would have to be included to allow the pilots to perform their duty, particularly during periods of strong cross-winds and currents, or even a sudden squall line. Certainly, no rule-making should be contemplated that would put the pilots, ships, and sailors at risk, and could even cause the loss of human life. Furthermore, any potential grounding of a cargo ship (or tanker) on the rocks of the Jacksonville jetties due to (overly) reduced speed, could conceivably cause a disastrous oil spill with the potential of widespread destruction of the marine environment, marine life and food sources, as well as the Right Whales which we all want to protect!

The proposed restrictions did not seem to sufficiently differentiate between the three distinct coastal areas. The presented data for our area, only showed **one (1) unconfirmed ship strike whale mortality in the Jacksonville transit area, during the last 10 years!** In the entire SEUS area including the Georgia coast, there were three possible whale strikes in the last 10 years. The data ([50 CFR Part 224 [Federal Register/Vol. 71, No. 122/Monday, June 26, 2006/Proposed Rules (IRFA para. 2)] *"NMFS recognizes that there may be disproportionate impacts between or among vessels servicing different areas or ports."* We concluded that the presented data does not actually substantiate any speed restrictions in Florida waters. In fact, slowing ships down to 10 Kts. may cause greater dangers to Right Whales, as well as the ships. There is no doubt that slowing down the ships will cause ships to spend about twice as much time traveling through the coastal SEUS areas where the whales may be passing. An effective rule-making should be more "tailored" to fit the particular circumstances in each different zone or area of the East Coast.

Although some of the suggested solutions (traffic lanes, DMA's, detection and tracking technologies) offer some encouraging promises of success with very reasonable costs, the 10 knot speed restrictions (SMA's) would offer the least potential success and the largest economic impact to commercial vessels. At least $116 million per year, (or $272 million per year,) as shown in the Economic Analysis for the Environmental Impact Statement – draft EIS report May 23, 2006.

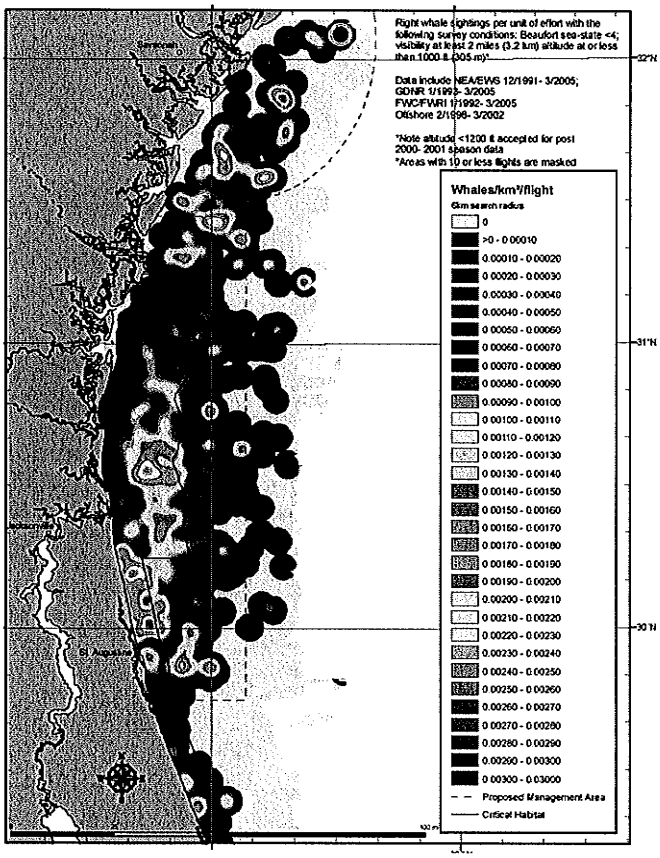
We noticed that the annual total cost for all "containerships" at Jacksonville FL is shown as $765,600 per year in this Economic Analysis (2004). This seems to be incorrect, since our own calculations of the direct economic impact, just to Sea Star Line, would total $575,000 per year, and we only operate three ships. There are many more containerships coming in and out of Jacksonville, so there may be an error in the methodology of the study. (It should be noted that over $500,000 of our cost would simply be the cost of additional fuel burned to try to make-up the lost time – a waste of this scarce resource, and an increase in emissions.)

If the methodology used for the whole analysis was consistent, it is likely that the economic impact to shipping (on the entire coast) may be underestimated by a significant multiple of costs, and the actual economic impact could be much larger!

It should also be noted that these speed restrictions would create a large obstacle to the **Short Sea Shipping Initiative,** which is supported by MARAD/DOT as the solution to take cargo trailers off the East coast highways, as well as reducing fuel use and air pollution.

In any case, any expenditure and use of resources of this magnitude should not be undertaken for an unclear result that could even cause more harm than good to the Right Whales!

The present Southeast Seasonal WHALESOUTH Mandatory Ship Reporting (MSR) area is the proposed management area (speed restriction zone) and does not coincide with the known critical habitat of right whales. Even though SSL believes that speed restrictions in Florida waters don't really promise improvement, and will not really impact the reduction of right whale deaths in the MSR area, the consideration of implementing any speed restrictions should be limited to the critical habitat area, only.



The NMFS chart above identifies whale sightings and the probability of whales, the critical habitat area, and the proposed management area. The extension of the management area beyond the critical habitat area would substantially enlarge the management/speed restriction zone well beyond the known concentration of whale congregation areas.

Routing Measures: (Recommended Traffic Lanes)

Sea Star Line enthusiastically supports the establishment of the recommended traffic lanes through the SEUS coastal area. It is entirely logical that concentrating ship traffic into the designated lanes will insure a large undisturbed "Whale Habitat Area" encompassing at least 90% of the proposed management area!

Furthermore, we compliment NMFS/NOAA because the proposed traffic lanes for entering and departing Jacksonville FL coincide well with the avoidance of the known Right Whale congregation areas (as noted in the NMFS Spatial Distribution map). In fact, the **implementation of these recommended traffic lanes will concentrate vessel traffic in the less whale-inhabited areas!**

The limitation of ship traffic into the designated traffic lanes will also radically reduce the required "whale surveillance" area. The best way for ships to avoid whales is for them to know where they are! The reduced "watch area" will make it much easier to concentrate all the available resources to sight and track any whales, and to promptly notify the ships. The combination of routing and targeted surveillance offers a very good likelihood of success, through efficient use of available resources.

From personal experience sailing as a Deck Officer on containerships, I noticed that whales, seem to have a general tendency to avoid ships at a great distance. The navigation bridge of a large ocean vessel is normally over 100 feet above the water and offers a great viewing platform to see whales on the surface, or near the surface. We saw them, yet I never had to alter course because the whales were clearly aware and moved away from the ship's direction. (We once sighted an old floating mine, dead-ahead in Mid-Atlantic, and were able to turn to avoid it while traveling at 23 Kts. This demonstrates a ship's ability to see even a 3 foot partially submerged object, and to turn quickly to avoid collision.)

We agree that the combination of increased vigilance by the ship's crew in the traffic lanes, as well as concentrated aerial and surface whale monitoring efforts in this greatly reduced "watch area", will surely decrease the likelihood of ship strikes!

Dynamic Management Areas (DMA's):

Sea Star Line also fully supports temporary speed restrictions (DMA's) in direct response to the presence of whales, immediately upon sighting, and for as long as the whales remain near a vessel traffic area. This fits well with concentrated surveillance in the recommended traffic lanes, and should be "dynamic" enough to allow immediate and sufficient communication with the nearby ships to help them to take prompt and appropriate avoidance actions in response to any whales passing through the designated ship lanes. Once any whales have been sighted, in or near the traffic lanes, a concerted tracking effort should be maintained until the whales are clear of the area. The speed restrictions should be lifted as soon as the traffic lanes are clear of whales, rather than an arbitrary time period, such as the suggested 15 day duration, which would serve no purpose after the whales have moved out of the shipping channel.

Technological Solutions:

Even though commercial shipping activities only cause a small percentage of whale deaths, Sea Star Line believes that **implementation of new technology for whale avoidance measures can improve the detection of whales**. Scientists are introducing promising, environmentally-sound methods of whale detection which can enhance the present efforts of NOAA/NMFS. Combining methods of detection to achieve optimum results, with the continued development and application of whale detection methods may help reduce whale/vessel interaction.

Pop up buoys are a promising methods of detection. NMFS indicated that pop up buoys are being considered in the whale strike strategy. In the NOAA/IFAW website Patricia Gerrior and Bruce A Russell recommend the "continuation of **whale tagging research,** and addressing gaps" as part of the pop-up buoy improvement process.

Passive Acoustic Detection has improved and should be considered for implementation in the SEUS area. In the NOAA/IFAW website Patricia Gerrior and Bruce A Russell recommend continued whale detection research and real time passive acoustic opportunities. Other efforts are identified by the Woods Hole Oceanographic Institution including: "Acoustic Detection of Right Whales" by Doug Gillespie, IFAW, and Christopher Clark, Cornell University which study Acoustic systems—*"towed subsurface or placed on the seafloor—offer the potential to detect whales and avert ship strikes."* "Reducing the Risk of Ship Collision" by Peter Tyack, Woods Hole Oceanographic Institution presents experiment data on acoustics and whale behavior to test the efficacy of strategies.

Transmitter Tagging and Surveillance. Even though NMFS indicated that beacon/transmitter tagging was problematic because whales shed the transmitters shortly after implanting the units, Sea Star Line encourages research to develop a permanent GPS or similar attachment to the whales. The development of the units will prove cost effective over the long term if they result in the reduction of the more traditional aerial and water surveillance methods.

Additional Whale Sighting Notification Enhancements. Automated Identification System (AIS) with VHF radio communication and mandatory Ship Reporting (MSR) should be considered for the link for real time, whale strike avoidance. The effort will require the combined efforts of NOAA/NMFS, (USCG), and commercial shipping interests. NOAA/NMFS can spot whales in or near traffic lanes, and with AIS and VHF radios on board search planes, vessels can be cautioned when there is a whale present. The MSR in concert with USCG vessel arrival notification will present a vessel list for notices to mariners in the area. Commercial shipping and government vessels will need to monitor, and, then take measures to avoid collisions.

NOAA/NMFS, USCG, and commercial interests can create and improve a notification system including, but not limited to, the above detection measures. Sea Star Line encourages these individual research efforts as well as combining/sharing new technological solutions to develop and improve whale detection and surveillance.

Causes of Whale Deaths:

We all understand that NAMFS/NOAA's purpose and objective is to try to protect the Right whales. We retrieved the following statement on November 13, 2005, from the NOAA/Fisheries Office of Protected Resources web site: (http://www.nmfs.noaa.gov/prot_res/species /Cetaceans/rightwhalefacts.html):

"About two-thirds of the known deaths are likely owing to natural causes. Of the one-third caused by human activities, the most significant contributing factors are ship strikes and entanglement in fishing gear... more than half of the adult population carries scars likely related to entanglements. In some cases, these are direct causes; in other cases, they contribute to deterioration of the individual's health and eventual death, or weaken an animal suffering from illness or other injuries and contribute to its failure to recover. (para.12)."

Therefore, since two-thirds of known deaths are due to *"natural causes"*, the greatest number of whales can probably be saved by researching what factors are really killing most of them, and addressing the primary causes. On April 29, 2006, we read (in *Northern Right Whales in Florida,* Winter Issue) *"Food supply, climate and birth rate are also believed to have an effect on Right whale population:"* Since *"natural causes"* is the largest cause of whale deaths, the greatest benefit could be achieved by helping to prevent their diseases, by protecting or enhancing their food supply, or reducing critical sources of pollution that harm them. Even a ten percent reduction of right whale mortality due to "natural causes", the largest cause of whale deaths, might be enough to save the species!

Of the remaining one-third caused by direct human activities, we understand that about half (47%) is related to fishing, and particularly fishing gear. David Able's (Globe Staff) report January 13, 2005 included the following:

"About 72 percent of whales show scars from entanglements in fishing lines, a rise of about 8 percentage points from the mid-1990s, scientists say. Observers believe that about 13 right whales are now dragging entangled fishing lines, a problem that can lead to infection or death. . . ."

Since fishing, (and fishing gear) is a very significant factor (47% of 33%=**15.5%)** in the cause of all whale deaths, there is another great opportunity to reduce whale mortality by addressing this specific cause. Since so many Right Whales show scars from gear entanglement, there should be some improvements in the location, placement or technology of fishing equipment that could have very significant impact on Right Whale survival rates.

The remaining (53% x 33% = **17.5%)** of whale deaths are attributed to all the categories of ship strikes. The World Shipping Council comments noted that 24% of Right whale ship strikes involved Navy and Coast Guard vessels (Large Whale Ship Strike Database, (Jensen and Silber) NAMFS, January, 2004.) Since this portion seems to be nearly half of all ship strikes (33% x 24%=**7.9%** of all deaths), we were very encouraged to hear that, although they would be exempted, U.S. Government vessels will also be making very concerted efforts to avoid the Right Whales.

Of the remaining categories of ship strikes (Large Whale Ship Strike Database,) whale-watching boats were shown to account for (33% x 14% = **4.6%** of all deaths.) about as many Right whale deaths as all other commercial ships. Certainly, there must be a way to devise specific rules and safeguards that can help reduce the possibility of whale strikes by to this small group of whale-watching boats that have little other purpose than providing human pleasure from proximity to whales!

In fact, some whale-watching boats may be entirely exempted, with all other vessels under 65 feet, and these should also be strongly urged to protect the whales they purposely approach. The entire category of exempted vessels under 65 feet includes some very high-speed pleasure craft which should be included in this overall environmental effort. I learned at the Baltimore public hearing on August 10, 2006. That one recent whale death was apparently caused by a fast pleasure boat. (This one boating incident alone, equals the one reported ship strike by a vessel in the Jacksonville area, during the last ten years!)

The final category in the Large Whale Ship Strike Database is containerships and freighters which have had about the same impact as whale-watching boats (33% x 14.9% = **4.9%** of all deaths). How can this one minimal threat to the Right whales (4.9%), be the only category of human impact that is being addressed as the focus of this proposed rule making? So many more significant steps can be taken to fully address 95% of the causes, that a broader, more effective, overall plan must be considered to achieve the desired results!

Furthermore, since the proposed 10 Kt. Speed restriction doesn't even show convincing promise of reducing the threat, and could actually increase the danger to the Right whales, this part of the proposed rulemaking is not even likely to yield actual improvement for the 4.9% portion of the problem that it does address. We believe that the proposed seasonal speed restrictions would impose and inordinate waste of resources (at least $116 million per year (or more) cost to commercial shipping) without a good enough reason! This would certainly not be the best way of "minimizing the economic effect on the shipping industry and marine commerce", or most effectively furthering the stated purpose of "contributing to the recovery and sustainability of the species."

Conclusions:

We sincerely believe that there are numerous initiatives that must be urgently undertaken, and which indicate a great likelihood of helping the endangered Right Whales:

- The establishment of the proposed traffic lanes in concert with a concentrated "Watch" and "Whale Tracking" efforts during the season will clearly help ships to know where whales are, and to avoid them.
- A reasonable program of dynamic and immediate speed restrictions (DMA's) in response to the sighting of whales in the shipping lanes will clearly help ships to avoid whales, and could therefore save some Right Whales.

- The development of new searching devices, identification methods, or sensor systems to detect and track the whales should be among the top priorities in trying to save the whales. Anything that will help to warn vessels before they are near a whale could have the greatest impact in aiding successful avoidance by vessels.
- A comprehensive program to address all the causes of harm or death to Right Whales must be pursued by NAMF/NOAH involving all interested parties.
- Any solution for improving the food supply, avoiding disease, reducing debris, pollution, and toxins in coastal waters could reduce the 66% of whale deaths that don't involve any type of vessels.
- Creative solutions to reduce the impact of fishing activities and trapping gear could reduce a portion of the 17% of Right Whale deaths related to fishing.
- The renewed efforts of Coast Guard and Naval Vessels to avoid whales should provide a significant improvement in this 8% category.
- Certainly, whale watching boats should be a priority to try to eliminate this 5% category entirely.
- The general pleasure boat public and all boats under 65 feet must also be made aware and participate in this effort to help the Right Whales.

All these efforts are reasonable and will all help to further the main purpose as stated, much more than the proposed seasonal speed restrictions!

There is also some good news that NMFS/NOAA should be proud of: We are encouraged with David Abel's (Globe Staff) report January 13, 2005. The Globe indicates that there is an increase of the Right Whale population. We hope that other studies will validate the Globe report indicating:

> *"Many of the estimated 325 to 350 Right Whales believed to exist are known to feed off the New England coast....An estimated 13 calves have been born this breeding season, giving marine scientists hope that the whales will rebound. Though about 25 percent of calves typically die within the first year, the population has grown by as many as 50 Right Whales since 2000...."*

In Florida, the U.S. Navy's Fleet Area Control and Surveillance Facility in Jacksonville sends an automated message to ships in the area with current information about Right Whale locations and how to avoid hitting the whales. Jamie Smith, a marine research associate in the Florida Fish and Wildlife Conservation Commission's Florida Marine Research Institute (FMRI), says the system has been successful (Para 10, 15, 16).

The current "de facto" traffic lanes in Jacksonville have been used for decades at current vessel speeds, and the whale population has responded by staying clear. The one ship strike in 10 years very much supports this, when considering how many whales congregate here over the winter. To a great extent, the routes, speed, and vessel generated sound waves appear to play an important part in defining our marine environment. Changing vessel speed alters the sound of the vessel and in essence changes an environment familiar to generations of whales. It is the one place on the East Coast where these animals actually thrive (more leave than arrive). A "broad brush" policy change could tip this delicate balance with disastrous results!

Sea Star Line, the maritime industry at large, and the consumers who rely upon the safe and efficient transport of goods along these trade routes will ultimately bear the hundreds of millions of dollars in additional costs if speed restrictions are imposed. However, the greater tragedy lies with the likelihood that such a measure will not only fail to save the whales from their plight, but may very well accelerate their demise. Sea Star Line is committed to do all that we can to assist in the revitalization of these magnificent animals, through continued research and education as well as the adoption of sensible and effective policy. We will continue to participate actively with the NMFS/NOAA, in any way we can, to help the Right Whales.

Philip V. Bates
SVP Operations

Sea Star Line, LLC
100 Bell Tel Way, Suite 300, Jacksonville, FL 32216
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From Marcia Wilkins <marciawilkins@hotmail.com>

▸95

Sent Wednesday, October 4, 2006 10:51 pm

To ShipStrike.EIS@noaa.gov

Cc

Bcc

Subject Ship Strike Comments

October 4, 2006

Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Projected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
ShipStrike.EIS@noaa.gov

Summary:

The National Marine Fishery Service (NMFS) has proposed regulations to enact speed restrictions on vessels in certain locations to protect the endangered North Atlantic right whale (*Eubalaena glacialis*). The Atlantic Coast Ecoregion Task Force of the Sierra Club (hereinafter, "Sierra Club") is presenting comments in response to the proposed regulations.

Background:

The North Atlantic right whale is critically imperiled, with only 300 or so individuals remaining. They only occur along the east coast of North America. Right whales travel slowly, make shallow dives, and often stay near the coast. Because if this, they were hunted nearly to extinction. Despite the end of whaling in 1935, the species has not recovered.

Human-related activities continue to be the main reason for the species' lack of recovery. According to the Woods Hole Oceanographic Institution, the right whale suffers what is called the urban whale syndrome. Right whales are subject to ship strikes, entanglement in fishing gear, water pollution, the effects of climate change, naval exercises and other man-made noise, and potential oil and gas exploration. Off all these impacts, the reduction of ship strikes is the most immediate step that can be taken to protect right whales. It is also the most necessary step, as ship strikes are one of the greatest known causes of injury and mortality.

Ship strikes are responsible for about half of all known, human-caused deaths of right whales, according to NMFS. From 1986 to 2005, 19 known ship-strike deaths have occurred. Three of these, possibly a fourth, occurred since March 2004 (Kraus *et al.*, 2005). The actual number of collisions and deaths is probably much higher, as some may be unreported or undetected.

Numerous measures have been taken to aid in the recovery of the right whale; however, this delicate species still succumbs to human-related deaths. NMFS believes that existing measures have not been sufficient to reduce the threat of ship strikes or improve chances for recovery. A study of mariner compliance with NOAA-issued speed advisories in the Great South Channel off Cape Cod reported that 95 percent of ships tracked (38 out of 40) did not slow down or route around areas in which right whale sightings occurred (Moller *et al.*, 2005). Accordingly, NMFS determined that further action was required.

Proposed Measures:

The National Marine Fisheries Service (NMFS) has issued a draft environmental impact statement (EIS) in which operational measures for ships are proposed to protect the whales. Those measures include:

1) Ship speed restrictions within a 30 nautical mile radius around nine east coast ports during seasons when right whales are likely to be present. Vessels under 65 feet and federal vessels are exempt.
2) Right whales observed outside speed restriction areas will be protected by short-term dynamic management areas (DMAs) which ships must route around or adhere to the speed restriction. The size of the area would depend on the number and distribution of animals sighted, and last for at least 15 days. It could be extended if the whale aggregation persists.
3) Ship routing measures are recommended around Cape Cod, where right whales congregate during the summer, and around Jacksonville and Fernandina Beach, Florida and Brunswick, Georgia, where right whale calving occurs in the winter.

Sierra Club Position
The Sierra Club commends the National Marine Fisheries Service for taking this vital step to protect North Atlantic right whales with the proposed ship strike reduction strategy. We strongly support the lowest (10 knots) proposed speed restriction in order to provide the greatest protection to the whales.

We request that US government vessels and vessels under US contract also be required to observe speed restrictions. Exceptions should only be allowed under extreme circumstances, such as human safety missions, times of warfare or national disaster, or when the Federal vessels are already operating under mitigation measures from a Section 7 consultation under the Endangered Species Act.

If federal vessels are exempted, we encourage NMFS to immediately re-initiate Section 7 consultation to ensure that federal agency vessels and activities are not jeopardizing North Atlantic right whales. Vessels exempt from the speed restriction should be required to have two on-board trained marine mammal lookouts at all times and use either aerial spotters or passive sonar, and should travel at the slowest speed possible at night and during times of inclement weather, when whales are most difficult to detect.

We support alternative 5, which would provide a higher level of protection for the species than the preferred alternative (6) by expanding the times and areas in which speed restrictions apply.

If alternative 6 is implemented, we encourage NMFS to consider using telemetry devices to track individual whales whenever possible. This would allow vessels to be notified well in advance of the presence of right whales, and would greatly improve the effectiveness of the DMAs.

NMFS describes the North Atlantic right whale as a population, not a distinct species from the North Pacific right whale (*Eubaleana japonica*). Recent genetic analyses indicate that they are separately evolving species and have not interbred for millennia (Reeves *et al.*, 2002).
The Sierra Club hopes that this designation does not affect the level of protection proposed.

The creatures we collectively refer to as "whales" found their origins approximately 60 million years ago. Their predecessors were small mammals, not unlike our own ancient mammalian ancestors, who jointly survived the "great extinction" that wiped out the dinosaurs. The first true whales graced our planet approximately 45-50 million years ago, developing into the highly adapted ocean dwellers we know today.

Much more recently, approximately 2.4 to 1.6 million years ago, the first humans, *Homo habilis*, came upon our planet. *Homo sapiens* (modern humans) made their first appearance a mere 100,000 years ago, roughly.

Like modern humans, modern whales breathe air, give birth to live young, express intelligence, communicate with each other to coordinate complex group behavior, and invest considerable time and energy in raising their young. Many whales, right whales included, demonstrate benign social behavior.

Unlike humans, whales do not have the capacity to change the future or direction of the planet we share. Humans have become the guardians of this earth. We hold in our hands the tenuous fate of all other species that reside here with us. There is a broad moral consensus that we do not have the right to forever extinguish another species, one born millions of years before human antiquity, when we have the means and the knowledge to take steps to protect it.

The Sierra Club feels strongly that if the ship speed reduction and other proposed measures are not implemented, the North Atlantic right whale's existence is in jeopardy. Humans should not alter their behavior with regard to this species only when money is *not* a factor. This could easily be the right whale's last stand; the need to prevent ship strikes is critical.

We hope that these protective measures will be implemented as soon as possible, before the next calving season. Finally, the Sierra Club hopes that flexibility will be maintained to modify the proposed regulations if new temporal or spatial distribution data are collected in the future.

Thank you for considering our comments.

Marcia Wilkins
Chair, Atlantic Coast Ecoregion Task Force
Sierra Club

Sources

Kraus, S.D., M.W. Brown, H. Caswell, C.W. Clark, M. Fujiwara, P.K. Hamilton, R.D. Kenney, A.R. Knowlton, S. Landry,

C.A. Mayo, W.A. McLellan, M.J. Moore, D.P. Nowacek, D.A. Pabst, A.J. Read, R.M. Rolland. 2005. North Atlantic Right Whales in Crisis. Science 309: 561–562.

Moller, J.C., Wiley, D.N., Cole, T.V.N., Niemeyer, M., and Rosner, A. 2005. Abstract. The behavior of commercial ships relative to right whale advisory zones in the Great South Channel during May of 2005. Sixteenth Biennial Conference on the Biology of Marine Mammals, San Diego, December 2005.

Reeves, R.R., Stewart, B.S., Clapham, P.J., and Powell, J.A. 2002. Guide to Marine Mammals of the World. National Audubon Society. Alfred A. Knopf, New York.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

October 4, 2006

Chief, Marine Mammal and
Sea Turtle Conservation Division
Attn: Right Whale Ship Strike Reduction DEIS
National Marine Fisheries Service
NMFS Office of Protected Species
1315 East-West Highway
Silver Spring, MD 20910

SUBJ: EPA NEPA Review of NOAA DEIS to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy; Western Atlantic Ocean; CEQ #20060278; ERP #NOA-A91074-00

Dear Sir or Madam:

Consistent with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the referenced National Oceanic and Atmospheric Administration/National Marine Fisheries Service (NOAA/NMFS) Draft Environmental Impact Statement (DEIS). This DEIS proposes implementation of operational measures for a ship strike reduction strategy for the endangered North Atlantic right whale (*Eubalaena glacialis*) in the western Atlantic Ocean along the East Coast of the U.S.

The NMFS right whale recovery plan was prepared consistent with the Endangered Species Act (ESA) and specifically references voluntary or mandatory measures to reduce whale ship strikes. Accordingly, the purpose of the DEIS is to propose strategies aimed at reducing the number and severity of vessel collisions with right whales, which have resulted in whale injury or mortality, to help promote species recovery. Current measures to reduce such collisions have not been very successful.

Due to regional variations in whale behavior and oceanographic conditions, three East Coast regions of implementation were considered: northeastern U.S. (NEUS), mid-Atlantic U.S. (MAUS) and southeastern U.S. (SEUS). Because these regions include the coastal waters of several other EPA regional offices (Regions 1-3), EPA Region 4 has coordinated these comments among those EPA regions in order to provide a single, consolidated EPA NEPA comment letter on the DEIS.

The proposed operational measures would apply to all vessels 65 ft and longer that are subject to the jurisdiction of the U.S., or vessels of such length entering or departing ports under the jurisdiction of the U.S. However, vessels owned or operated

by or under contract to the U.S. government would be exempt from such operational changes (e.g., U.S. Navy vessels).

▸ **Operational Measures**

The types of operational measures proposed include Seasonal Management Areas (SMAs), Dynamic Management Areas (DMAs) and Routing Measures. These are generally defined as:

* SMAs – SMAs are established management areas within all three regions (NEUS, MAUS, SEUS). SMAs require seasonal ship speeds restrictions within a 10-14 knots (kts) range. In the MAUS, for example, the SMAs management area would comprise a 30-nautical mile (nm) area around nine ports effective from November 1 to April 30.
* DMAs – These are circular restricted areas that are described around actual whale sightings. The length of the radius increases with the number of whales sighted, with an additional buffer zone added to allow for whale movement. Regulated vessels traversing through DMAs would have to reduce their speed or route around the defined area. Since DMAs are based on sightings, they are temporary but can be temporally extended if whales remain present.
* Routing Measures – These measures would only apply to the NEUS and SEUS. New shipping routes would be recommended that would deflect traffic from whale aggregations or specific ports, with SMA speed reductions being applicable if routes traverse these areas.

▸ **Alternatives**

The No Action (Alt. 1) and five action alternatives were considered (Alts. 2-6), with Alternative 6 being designated as NOAA's preferred alternative in the DEIS. All action alternatives would have some regulatory speed restrictions except Alternative 4. Brief descriptions of the action alternatives are:

* Alt. 1 (No Action) – None of the new operational measures would be proposed under the No Action Alternative, although existing measures would be continued and non-regulatory measures pursued by NMFS.
* Alt. 2 (Dynamic Management Areas) – This option would only implement DMAs.
* Alt. 3 (Speed Restrictions in Designated Areas) – Only longer termed speed restrictions, including year-round restrictions in the NEUS, are proposed, without adding any routing measures and DMAs.
* Alt. 4 (Recommended Shipping Routes) – This option provides several routing measures for the NEUS and SEUS (none proposed for MAUS).
* Alt. 5 (Combination of Alternatives 1-4) – All measures in Alternatives 1-4 are cumulatively included in this option.
* Alt. 6 (Preferred – Right Whale Ship Strike Reduction Strategy) – This option includes speed restrictions and DMAs (no routing measures) for specific

locations and timeframes within all regions, including U.S. territorial waters and the Exclusive Economic Zone (EEZ).

The current protection measures (Alt. 1), are not successfully promoting recovery of the right whale. While all action alternatives would increase whale protection, some of these appear too limited to be effective. However, the speed restrictions in Alternative 3, the combined measures in Alternative 5 and the specific measures in NOAA's Preferred Alternative 6 would seem to be the most beneficial to reducing ship-whale conflicts. We note that Alternative 6 is the only presented alternative that would incorporate all new operational measures (SMAs, DMAs, re-routing and speed restrictions). However, we also note (pg. ES-6) that Alternative 5 offers the highest level of protection to the right whale, and also protects other marine species. From a societal perspective, it is noteworthy that while substantive costs are projected for each alternative (usually based on monies lost due to reduced speeds), the overall shipping cost impacts were not deemed significant (pg. ES-7) in terms of the volume of merchandise traded, financial revenues for vessel operators, and costs to the commercial fishing industry. Alternative 5 would have the greatest economic impact, followed by Alternatives 3 and 6 (pg. 5-15).

Although considerable information is provide throughout the DEIS, the FEIS should provide a summary comparing whale protection benefits and costs for each of the action alternatives. Alternative 5, because of its maximum protection benefits, should be re-considered during the selection process of the final preferred alternative in the FEIS. The FEIS should also verify if any of the action alternatives would individually result in a significant economic effect on the shipping or fishing industry or if all alternatives would not have a significant economic effect (as suggested on pg. E-7) even though differences among alternatives exist. The rationale for selecting the final preferred alternative in the FEIS (Alt. 6 selected in the DEIS, or another) should be discussed in the FEIS and should include environmental aspects.

▸ Summary

Overall, EPA supports the proposed implementation of operational changes to reduce ship collisions with the endangered right whale. The option easiest to implement would seem to be regulatory reductions in ship speeds that do not involve route changes. While such speed restrictions would cost time and money (but may save fuel costs), the adverse cost impacts to the shipping and commercial fishing industries were not projected to be significant overall. Non-regulatory route changes, preferred by the maritime industry, can also be useful to avoid ship strikes when actual whale sightings have been made or where seasonal aggregations are known to occur. Because economic impacts are not projected to be overall significant and a substantial number of vessels (all federal vessels) are exempt, EPA favors Alternative 5 since it offers the greatest protection. However, we agree that NOAA's preferred alternative (Alt. 6) selected in the DEIS, as well as Alternative 3 (speed restrictions only), would also benefit right whale recovery and would have less economic effects. Whatever preferred alternative is identified in the FEIS, the FEIS should provide a rationale for its selection

and consider environmental aspects in the selection process. After implementation and monitoring, the operational measures should be adaptable by NOAA to improve right whale protection as needed.

▸ DEIS Rating

EPA rates the DEIS as 'LO' (Lack of Objections). Although we find Alternative 5 to be the environmentally preferred alternative, we have ranked the alternatives from most-to-least protective as follows: Alternative 5, 6, 3, 2 and 4. Thus, Alternatives 5, 6 and 3 all provide for good to reasonable right whale protection. EPA notes no substantive air and water quality issues with the proposed action.

EPA appreciates the opportunity to provide these comments on the DEIS, as well as our enclosed *Additional Comments*. Should you have questions, please contact Chris Hoberg of my staff at 404/562-9619 or hoberg.chris@epa.gov.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosure: *Additional Comments*

cc: Dr. Rodney F. Weiher (NEPA Coordinator): NOAA – Silver Spring, MD

ADDITIONAL COMMENTS

* *Federal Vessels* – Page ES-1 indicates that federal vessels are exempt from the proposed operational changes. We assume that this primarily would be U.S. Navy, Coast Guard and other military vessels. However, the FEIS should define "federal" vessels further and estimate the percentage that they comprise relative to the overall ships subject to the proposed new operational measures. It is also unclear if all federal vessels would need to be exempt at all times if reduced speeds or rerouting can be incorporated within the bounds of the mission. In particular, precautions should be taken when whales have been sighted. EPA will give deference to the Department of Defense in this regard, although compliance with ESA would still be required. We also note that NMFS is requesting that federal vessels provide voluntary compliance. The FEIS should clarify if foreign vessels would be subject to the proposed operational changes.

* *Ship Speeds* – For clarity, we request that the FEIS compare the proposed speed reductions to the current (normal) cruising speeds of typical commercial vessels that would be subject to the operational measures. This perspective should also be expressed as a percentage (e.g., 10 kts is about 50% of the normal cruising speed of an average affected vessel). Although the DEIS analyzes speeds of 10, 12 and 14 kts, NMFS is only proposing 10 kts in its proposed rulemaking (pg. 2-3). We therefore request that 10 kts be used for generating the above requested data. We also note that ship speeds of 10 kts (as opposed to 12 or 14 kts) should provide the greatest avoidance of whales and minimization of whale injury if ship strikes do occur.

Also, would there be any cost savings in diesel fuel consumption if ship speeds were reduced? If so, were such benefits included in the cost estimates (pg. ES-7)? Similarly, at what speed would a commercial trawler operate relative to the recommended 10-14 kt range? Finally, we also appreciate the discussion on page 2-14 regarding the basis (i.e., ship maneuverability, economics, etc.) of selecting the proposed speeds (10, 12 & 14 kts) for analysis as opposed to other ranges.

* *Enforcement* – If speed restrictions are to be regulatory via rulemaking, how would these measures be successfully enforced? What enforcement means would be applied to non-compliant vessels?

* *Observers* – On-board observers would be needed for whale sightings. The specifics of the whale sighting process should be discussed in the FEIS. This should include the minimum number of observers per vessel, any NMFS oversight of these observers, the source of observer compensation (by vessel owners or NMFS), and observer authority to modify ship movements or speeds once whales are sighted.

* *Affected Specific Vessels* – Although the proposed operational changes would have an overall positive restoration effect without significantly affecting the overall economics of the maritime industry, some specific vessels are predicted to be adversely economically affected. Although effects varied by alternative, it is noteworthy

that the DEIS preferred alternative (Alt. 6) would adversely affect ferry vessels and whale watching vessels, and also provide negative effects on charter vessels. No mitigation appears to be proposed since the overall project effects are positive (pg. 4-151). For the final preferred alternative, the FEIS should further evaluate such effects and consider reasonable mitigation or avoidance procedures such as those suggested on page ES-8 (i.e., charter boat captains might select alternate fishing areas located outside of speed restriction areas). Mitigative measures would be particularly relevant if vessel owners were minorities and were disproportionately affected.

* *Cost Effects* – As indicated, the adverse cost impacts of reducing ship speeds were summarized on page ES-7. We assume the provided dollar values are annual costs. The FEIS should provide a timeframe.

* *NEPA Process* – We note that the due date for public comments on this DEIS was formally extended from September 5 to October 5, 2006.

* *Cumulative Effects* – EPA appreciates the thorough cumulative effects section provided (pg. 124). This section considered project effects for a number of ongoing or proposed projects such as LNG terminals and offshore wind farms.

* *Modifications* – The DEIS states (pg. 4-151) that "[i]f right whale ship strikes continue, NMFS will modify these measures as appropriate." We concur with such an adaptable approach where, after implementation and monitoring, the operational measures should be adaptable by NOAA to improve right whale protection as needed. As part of this effort, the FEIS should discuss how whale ship strikes are monitored, enumerated, assessed (how are whale injuries versus mortalities determined?) and reported. Also, what performance measure might be used to determine success for the operational measures implemented (e.g., a 75% ship strike reduction was determined after operational changes were implemented)?

▸ 97

From Maggie Fielder <maggif@btinternet.com>
Sent Thursday, October 5, 2006 6:56 am
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject SHIP STRIKES TO RIGHT WHALES

I would like to add my voice to the growing concern about ship strikes to right whales and ask that all be done to remedy this situation. I believe there are only a small number of these whales and we need to do all we can to make sure that they are protected. Please take all steps necessary to ensure their protection.

Thanking you in anticipation ....

With best wishes
Margaret Fielder
member of WDCS (Whale and Dolphin Conservations Society, England)

" A Review of the NOAA/NMFS Proposed Rule (PR) to Implement Speed Restrictions, 26 June 2006, and the Corresponding Draft Environmental Impact Statement (DEIS) to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy, July 2006 "

S. Testaverde and J. Hain

4 October 2006

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Note: This paper was partially funded by a coalition of maritime and port interests.

Key Points in this Document

- From 1970 through 2005, about 25 right whale mortalities have been attributed to vessel collisions (Marine Mammal Commission, 2005); this is approximately 0.7 per year.

- The proposed rule and the Draft Environmental Impact Statement are flawed in: 1) presentation and interpretation of facts and 2) failure to meet generally accepted standards of data handling and statistical analyses.

- Based on records of whale collisions where vessel speed was reported, mortality and injury by vessels 65 ft and larger at speeds of less than 14 kts is not indicated. Additionally, there is no evidence in these records to provide for evaluating or discriminating possible effect of speeds between 10 and 13 kts.

- Consideration of vessel speed vs. whale collisions is not simple, but rather, involves a matrix of inter-related dimensions and probabilities. Not all factors point in the same direction, and indeed, to some degree at least, may be offsetting. Vessels traveling at higher speeds may: 1) provide a lesser response time for whales exhibiting avoidance behavior, 2) draw a whale into the vessel in the case of an "appearing whale" or at speeds of 20 kts or greater, and 3) increase level-of-injury IF a collision occurs. On the other hand, vessels traveling at faster speeds may: 1) provide an acoustic signature that allows for greater whale response time, 2) push the whale away from the vessel, thus avoiding a possible collision, and 3) reduce exposure and risk of a vessel/whale interaction. A third alternative in the matrix is the situation where speed is not a factor. In several of the hydrodynamic simulations, whether a collision did or did not occur was independent of vessel speed or at least over a wide range of vessel speeds.

- Of the 58 reported collisions, where speed of vessels is known, more than half were by vessels exempt by the proposed rule (PR): 20.5% were by vessels under 65 feet in length, 31.0% were by military vessels and several others occurred in Canadian waters.

- The cited studies' over emphasize the large whale speed database (a compilation of anecdotal records), which contains only 5% (3 of 58) right whale records, one citation of which is highly questionable, as it was a retroactive right whale categorization made 25 years after the collision incident.

1.0 Introduction

On June 26, 2006, as part of their Ship Strike Reduction Strategy, the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (now called NOAA Fisheries) proposed rules intended to reduce the threat of ship collisions with North Atlantic right whales (right whales) (Eubalaena glacialis) along the Atlantic seaboard (Federal Register, Vol. 71, No. 122, June 26, 2006 - pages 36299-36313). To achieve this goal, the Proposed Rules (PR) would implement speed restrictions for vessels with an overall length of sixty-five feet or greater, with specific speed management areas around major ports during certain periods of the year. These speed restriction periods will occur based on expected concentrations of right whales.

A review of both the PR and the Draft Environmental Impact Statement (DEIS) to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy, July 2006, was investigated to determine the merits of these significant operational speed restrictions and related components.

2.0 General Discussion of Statistics

Prior to discussing the documents, we would like to make an overall statement regarding the use of statistics. The purpose of statistics is to infer conclusions about an overall population by sampling individuals from that population. Sampling is particularly necessary in the ever-changing oceanic environment since it is generally impossible to locate all members of a desired population. Therefore, in order to compile meaningful data, researchers and statisticians work together to design surveys that will provide a reasonably representative sample from which statistically significant inferences can be made (the larger the sample, the more statistically significant the results). Additionally, it is generally accepted that statistically significant inferences should be based not only on reasonably representative, but also on randomly generated samples of a population. This practice, commonly known as random sampling, insures the statistician against criticisms of having a biased sample, since all members of the population at large are equally likely to be selected into the sample set.

All three of the publications cited within the proposed rules are based on non-random samples. This type of sampling can be referred to as "convenience sampling" since the "...sampling does not produce a representative sample of the population because people or items are only selected for a sample if they can be accessed easily and conveniently" (www.abs.gov.au). In conclusion, all of the cited studies lack randomness and are, therefore, merely anecdotal. They are not representative of the true impact vessels have on whale populations, and they are not predictive of future impacts.

3.0 Critical Review of Research

The PR is primarily based on the data provided by three studies: Knowlton and Kraus (2001), Laist et al. (2001), and Jensen and Silber (2003). However, neither the method of data collection, nor the standard by which the data were analyzed, nor the intended conclusion of these three studies, is consistent.

Since the accuracy of scientific data is contingent upon accurate sampling, it stands to reason that our critique of these documents must correspondingly begin with an analysis of the sampling methods.

Review of Studies. Knowlton and Kraus (2001) sought to create a database of all vessel-right whale interactions occurring between 1970 and 1999 in North American waters (from the Gulf of Mexico to Canada), as well as to create a working definition for ship-strike injuries. Alternatively, Laist et al. (2001) gathered data for all known collisions between motorized vessels and great whales (defined in the study as baleen and sperm whales), throughout the world from 1885 to 2000 from a variety of cetacean species stranding records. Jensen and Silber (2003) built upon the work of their predecessors by updating the existing databases to include formerly classified data collected by NOAA's Office of Enforcement, as well as known right whale ship strikes, which occurred after the 2001 publications. These data were not collected, compiled, or presented with a common purpose.

Lastly, in addition to the three principal documents, we reviewed a number of more recent updated studies concerning vessel interaction events with comparisons among all the studies **(Table 1)**. In addition, **Table 2** shows the differences in the number of right whales among each study by year. Note the wide-range of numbers within the three principal studies cited in the PR. **Table 3** also indicates the differences in the number of criteria used to define injury or serious injury by each study. The presence of these differences caused confusion, especially when making comparisons among the studies. **Table 4** reviewed the official NOAA Fisheries Northeast Fisheries Science Center's (NEFSC) database, started after an amendment in 1994 to the Marine Mammal Protection Act, and compared the number of vessel-right whale interactions with that of the Jensen and Silber database. Again, note the differences between the official NOAA maintained number of vessel interactions database to that of the Jensen and Silber study. **Figure 1** highlights these differences with a bar graph.

3.1 Data Integrity Within the Studies

Knowlton and Kraus (2001). Knowlton and Kraus initially reported only 45 confirmed right whale mortalities along the western North Atlantic Ocean (stranded or observed floaters). Sixteen were attributed to vessel strikes, three to entanglement, 13 to unknown causes, and 13 to natural causes. We note, however, that two additional unknown deaths, according to the first recovery plan - Right Whale Recovery Plan (2001) - where changes to vessel interactions were made for the purposes of this study. This change increased vessel interaction for the period of 1970-1991 by eight percent. This may be considered a small change, however, cumulatively and when dealing with a small Potential Biological Removal[1] level for right whales (PBR = 0.1 but set at zero, Waring, et al., 2005), each whale number is considered important.

Laist, et al., 2001. The data used by these authors also including a compilation of anecdotal records. Using the Smithsonian database that was collected from along the U.S. Atlantic coast (Maine to Dade County FL), Laist, et al. found that it contained the largest number of animals of all the databases reviewed: 407 whales representing seven large whale species. Overall, this east coast database revealed that 14% (58 of the 407, including 11 right whales) of collisions were, in fact, known vessel-whale collisions. Considering the proposed regulations are solely to be implemented on the east Atlantic coastal ports of the United States, it stands to reason that a small percentage such as this (14%) should have been noted by the framers of the proposed rule. In addition, the other standing dead whale databases each provided percentage of known vessel-whale mortality interactions to their total stranded dead animals listed: Gulf of Mexico – 3.2% of 31 whales, Italy – 12% of 113 whales, France – 13% of 127 whales and South Africa – 20% of 55 whales. All the attributed vessel strikes from these databases are 20% or less.

The major thrust of the Laist, et al. study was to collect vessel collisions that contained any combination of the following information: whale species (if known), type of vessel, speed of vessel at the time of collision, and length of vessel. Upon examining the database records, the authors found 58 collisions that had two or more of the characteristics necessary to evaluate them accurately, and 41 records were found in which information regarding the type of vessel and speed were both provided. Laist et al. graphically presented these parameters within their Figure 1 (number and fate of whales struck by different vessels) and their Figure 2 (severity of injuries to whales struck by vessels traveling at known speeds). Of the 58 records, only two North Atlantic right whale records were listed, with one such identification which is highly questionable, since it was categorized more than 25 years later.

Jensen and Silber, 2003. This study, built upon the two former studies, states "North Atlantic right whales … ship strikes are a primary culprit in the slowed recovery of a highly depleted population." The study's database " … contains a total of 292 records of confirmed or possible ship strikes to large whales (Table 1)." This number, however, represents eleven whale species. Unlike Laist, et al., this study appears to have a greater geographical distribution of vessel interactions throughout the world, especially the United States, since many records came from

[1] The maximum number of animals, not including natural mortality that may be removed but still allows the species stock to reach or maintain optimum sustainable population.

NOAA Regional Offices around the country as well as from the Office of Law Enforcement (OLE).

3.2 Whale Population and Status

According to the PR, "The North Atlantic right whale ... has not recovered. The population is believed to be at or less than 300 individuals ...". To corroborate this data, the NMFS Right Whale Recovery Plan, based on the 1998 IWC Workshop report also states, "... the best estimate of current population size is only 300 animals."

We believe these estimates to be conservative and outdated.

More recently, Kraus et al. (2005) describe, " ... recent population estimates of 350 right whales." Additionally, recent genetics analysis describes that a portion of the male population is unaccounted for and that there may exist 10% more males than originally suggested, based on the photo-identification catalog. Correspondingly, there may be 10% more females (T.R. Frasier, Trent University). This, combined with the calf production of recent years, gives cause to suggest that the current population may be on the order of 385 - 28% larger than the population referenced throughout the PR.

As for recovery and growth rate, the PR is ultimately inconsistent on the topic. It clearly states, "The North Atlantic right whale ... has not recovered," and " ... the lack of recovery." However, later, the PR goes on to describe [a] "... slowed recovery."

Based on the above-cited work, it is almost certain that the right whale population is larger than 300 individuals, and it is not unreasonable to believe that the number could be approaching 400. Likewise, rather than a species with a declining population and imminent extinction, based on a combination of photographically identified individuals, recent calf production, and genetic analysis, it is not unreasonable to believe that the population growth rate of 2.5% estimated by Knowlton et al. (1994) may continue to be valid. Therefore, population size, recovery status, and population growth may be different from what has been depicted in the PR. An incorrect assessment of these population attributes may lead to inappropriate or ill-advised actions, while an accurate assessment is more likely to yield appropriate action.

3.3 Whale Collisions

A central argument put forward in the PR and the DEIS is that vessel collisions with right whales are related to vessel speed, i.e., mortality and serious injury increase as vessel speed increases. This argument, however, is flawed in that, generally, vessels are traveling at normal transit speeds through areas inhabited by right whales. In areas where vessels slow (e.g., entering a port), there are few or no right whales. Therefore, the data "sample" primarily includes records from vessels traveling at higher speeds and none or few from vessels traveling at lower speeds. If, for example, all vessels transit through these areas at 15 kts, then any and all collisions that occur will be at 15 knots. The resulting data are self-selecting, rather than randomly generated. Therefore, the sample does not provide an adequate basis for the correlation claimed, and are not predictive of outcomes at speeds that were not observed in the data sampled.

3.4 Relationship of Vessel Speed to Mortality and Serious Injury of Right Whales

A central component of the PR is vessel speed reduction in designated areas and time periods. Several documents address this topic, including Laist et al. (2001), Jensen and Silber (2003), Vanderlaan and Taggart (in press), Pace and Silber (2005), as well as the DEIS. There is some inconsistency in approach and data drawn upon (Pace and Silber use 64 records, Vanderlaan and Taggart use 47 records, and the DEIS uses 58 records). To bring some clarity, we assembled the records where vessel speed and impact on the whale was reported, and re- analyzed the data. *In addition, we provided a discussion of the speed-length data found within the Jensen and Silber's document , including a number of figures of speed-length and types of vessels* ***(Appendix II).***

We used the authors' total of 58 records (Jensen and Silber, 2003), of which 29 were for vessels equal to or greater than 65 ft in length. The 29 records were found by eliminating vessels less than 65 ft, data in which whale fate was unknown and the unreliable 1885 pilot vessel cited. Addressing specifically the 29 resulting records (a divergence from the afore mentioned authors, but more directly focused on the PR), we compiled records of mortality and injury vs. 1-knot intervals between 10 and 20 knots. We also used categories < 10 and > 20 knots **(Figure 2)**. Only two reasonable records at speeds less than 14 knots exist: one, a whale-watch vessel that injured a humpback at 12 kts and another, a fishing vessel, which injured an unknown whale species at 9 kts. Another record, collected in 1885, was not used.

All other records were at 14 kts or greater. By inspection, mortality and serious injury to whales resulting from collisions with vessels 65 ft and greater in length occur at 14 kts and above. Excepting the two outliers, mortality and serious injury by vessels 65 ft and larger at speeds of less than 14 kts is not indicated. Additionally, there is no evidence in these records to provide for evaluating or discriminating possible effects of speeds between 10 and 13 kts (i.e. only two records, neither of which are right whales, only one of which was on the U.S. east coast, and in more than 40 years, does not allow for distinguishing effect or jeopardy of the individual speeds in the range of 10 to 13 kts).

We also note that the only three records of vessels colliding with right whales for which speed was known in the dataset are all for exempted vessels (one 43-ft vessel (Wood, 2005) and two government vessels).

Predominant in these records (13 of 33, or 39 %) are those for vessel collisions with whales at vessel speeds of 20 kts or greater. The modeling of Vanderlaan and Taggart (in press) infer increased jeopardy at higher speeds, with the probability of lethal injury approaching 1.0 at vessel speeds > 20 kts. Likewise, in several simulations, Korsmeyer and Hynes (1997) found that a whale offset from the centerline would collide with a vessel at 20 kts but not at vessels traveling at slower speeds.

There are a number of cautions in interpretation of these data. Pace and Silber (2005) point out that: a) their analyses did not include information on the probability of a vessel strike occurring, b) the collision data set is small and considerable uncertainty accompanies the results, and c) there appears to be a strong bias in reporting the rates of vessel/whale collisions among vessel types with fast ships, e.g., the U.S. military has much higher reporting rates than other vessels.

Likewise, Vanderlaan and Taggart (in press) point out that: a) the data are limited and do not incorporate all variables, and b) the uncertainty is large, particularly at low vessel speeds where there are few or no observations.

Predicting the outcome of a vessel/whale interaction will therefore depend on considering several probabilities:

A. **IF** a vessel strike occurs, what is the probability of a mortality or serious injury?
This area is addressed above.

B. **WHAT** is the probability of a vessel strike occurring?
This area has been partially addressed by Gerstein et al. 2005; Korsmeyer and Hynes, 1997; Knowlton et al. 1995, 1998; and Nowacek, 2003), and further detail is provided below. Several of the considerations contributing to this probability are:

1. Passive whale

    a. IF a whale is passive and on the centerline of the vessel track?

    b. IF a whale is passive and offset from the centerline of the vessel track?

2. Active or responding whale

    a. IF a whale is on or near the centerline and takes <u>effective</u> avoidance behavior?

    b. IF a whale is on or near the centerline and takes <u>ineffective</u> avoidance behavior?

    c. IF a whale "appears" after the initial bow wave has passed and takes <u>effective</u> avoidance behavior?

    d. IF a whale "appears" after the initial bow wave has passed and takes <u>ineffective</u> avoidance behavior?

The above probability considerations will be influenced by vessel characteristics, water depth, and other factors.

A consideration of vessel speed vs. whale collisions is therefore not simple, but rather involves many dimensions. Not all factors point in the same direction, and indeed, to some degree at least, may be offsetting.

3.5 Whale Collisions and Vessel Speed—Further considerations

As described, the probability of a serious injury or mortality increases with vessel speed – IF a whale is struck, the effect is likely to be more serious (Vanderlaan and Taggert, in press). However, we note that Vanderlaan and Taggert based this conclusion on a dataset that included all vessels, and not only those of 65 ft or greater in length. It has also been stated that a slower vessel speed will likely provide for more time for a whale to react and avoid (Knowlton et al. 1998). Yet, as it stands, the examination is incomplete, and as discussed below, a study of acoustic effects indicates that vessels moving at higher speeds may in fact provide longer reaction times. The interaction of whales and vessels, rather than being a simple and straightforward consideration, in fact, involves a matrix of factors.

Hydrodynamic Effects. Knowlton et al. (1995; 1998) performed studies of the forces created by pressure fields as water moves around a vessel's hull, extended to include the motion of a whale due to hydrodynamic influences. Some computer simulations resulted in a projected danger of collision, others resulted in a no-collision effect.

In the case of a passive whale below the surface, in front of the vessel, and at some distance within the beam of the vessel, the bow wave pushed the whale away from the ship before drawing it back in, and the whale did not collide with the ship. However, in a simulation where the whale surfaced or "appeared" in proximity to a passing ship and was not exposed to the initial positive bow wave effect, the whale did get drawn into the ship. In other scenarios with various water depths, whales were pushed down, and sometimes away from the centerline. At shallower water depths, the whale is driven into the bottom. Often the whale is pulled back toward the hull, but was not pulled close enough to make contact with the propeller. For all of the passive and appearing whale simulations, the effect of the passing ship on the whale is independent of ship speed. However, if the whale tries to avoid or escape, this has some bearing on whether the whale will collide with the vessel. For a whale moving perpendicularly to the ship at a speed of five knots, the whale at the starting point of the vessel's centerline collides with the vessel for vessel velocities of 10, 15, and 20 knots. For the moving whale positioned at 12.5 m from the centerline, a collision occurred for a vessel speed of 20 knots only. The collision occurred at the forward quarter of the hull. In all other cases, the moving whale avoided collision.

As described, varieties of outcomes are possible. In some instances, a whale is pushed away from the ship's hull. In other situations (e.g., a whale appears near the ship after a dive, and the forces could draw the whale into the ship, and perhaps through the propeller. A shallow-water situation may result in a whale getting pushed into the sea floor. How this affects the whale is not known.

Acoustic Effects. Another element in the matrix of consideration is acoustic effects. Gerstein et al. (2005) describe several factors that affect a whale's ability to hear and localize an approaching vessel. While the proposed regulations intuitively focus on reducing vessel speeds, these authors describe that marine mammals can detect fast vessels at farther distances and longer times than identical slower vessels. They show that the same vessel going twice the speed allows a whale eight times the "time to collision" as it has at the slower speed. Furthermore, due

to a combination of factors, there is less noise in front of the vessel and whales may actually seek refuge in the acoustical shadow directly ahead of the ship — a situation where the combination of acoustic effects and whale behavior may increase jeopardy. These authors caution that reducing vessel speeds without compensating for the acoustical consequences may actually increase the risk of collisions, and may be counter-productive to the protection of whales.

Whale behavior. Whale behavior is a factor in the outcome of a potential whale/vessel interaction. This behavior, while important, is largely unknown (Gerstein et al. 2005, Korsmeyer and Hynes, 1997; Vanderlaan and Taggert, in press). While, intuitively, we can imagine that whales will avoid vessels, this may not always be the case. As described, Gerstein et al. (2005) list at least one scenario where the whale's behavior may increase jeopardy. Likewise, a whale may respond to an acoustic cue by becoming immobile at a depth and position that will also increase jeopardy (Nowacek et al. 2001, Nowacek et al. 2003).

Exposure. A factor commonly used in risk assessment is "exposure." In the case of vessel/whale interactions, how long will the vessel and the whale occupy the same area? As a simplifying assumption, consider that the right whale is a fixed point or that its behavior will increase jeopardy. A quickly moving vessel will pass through the area quickly, and exposure will be small. A slowly moving vessel will take longer to pass through the area, exposure will be greater, and the whale will have longer to surface or move in a way that increases jeopardy.

4.0 Conclusions

The findings of this review are:

- From 1970 through 2005, about 25 right whale mortalities have been attributed to vessel collisions (Marine Mammal Commission, 2005); this is approximately 0.7 per year.
- The PR and the DEIS are flawed in: 1) presentation and interpretation of facts, and 2) failing to meet generally accepted standards of data handling and statistical analyses.
- Based on records of whale collisions where vessel speed was reported, mortality and injury by vessels 65 ft and larger at speeds of less than 14 kts is not indicated. Additionally, there is no reliable evidence in these records to provide for evaluating or discriminating possible effect of speeds between 10 and 13 kts.
- Consideration of vessel speed vs. whale collisions is not simple, but rather involves a matrix of inter-related dimensions and probabilities. Not all factors point in the same direction, and indeed, to some degree at least, may be offsetting. Vessels traveling at higher speeds may: 1) provide a lesser response time for whales exhibiting avoidance behavior, 2) draw a whale into the vessel in the case of an "appearing whale" or at speeds of 20 kts or greater, and 3) increase level-of-injury IF a collision occurs. On the other hand, vessels traveling at faster speeds may: 1) provide an acoustic signature that allows for greater whale response time, 2) push the whale away from the vessel, thus avoiding a possible collision, and 3) reduce exposure and risk of a vessel/whale interaction. A third alternative in the matrix is the situation where speed is not a factor. In several of the hydrodynamic simulations, whether a collision did or did not occur was independent of vessel speed or at least over a wide range of vessel speeds.
- Of the 58 reported collisions where speed of the vessels is known, more than half were by vessels exempt by the proposed rule (PR): 20.5% were by vessels under 65 feet in length, 31.0% were by military vessels and several others occurred in Canadian waters.

Tables and Figures

Table 1. Large Whale Publications Containing Databases of Vessel Srikes and/or Possible Events Referred to in the Proposed Rule

Document/ Database	Period Years	Number of Species (No. NARw)	Total Number of Records	Study Area	Comments
Knowlton and Kraus, 2001 [a]	1970-1999	1 (45)	45	Gulf of Mexico to Canada	Mortalities only
Knowlton and Kraus, 2001 [b]	1970-1999	1	56	Gulf of Mexico to Canada	Mortalities and non-fatalities re-assigned by newly created criteria
Laist, et al.	1885-2000	10	702 [c]	worldwide [d]	six different databases, worldwide
U.S. Stranding Database, Table 2	1975-1996	7 (10)	407	ME to FL	largest of databases examined
Anecdotal Database, Appendix 2	1885-2000	10 (2)	58	worldwide	Records sufficent parameters to construct Figures 1 and 2 (only 2 NARw was used in these figures)
Jensen and Silber, 2003	1975-2002	11 (38)	292	worldwide	All known vessel strikes or possible vessel strikes
Cole, et al. (2005, 2006)	1999-2005	7 (10)	484	Gulf of Mexico to Canada	Confirmed vessel strike effects
Northeast Fisheries Science Center [e]	1991-2005	many (1-2 per year)		Gulf of Mexico to Canada	Official NOAA NARw data

[a] Database I, Table 1.

[b] Database II, Table 3

[c] Larger number of records than Jensen and Silber study, since Laist, et al. study database contains stranded whales.

[d] States, Canada, France, Italy and South Africa, in addition to one historical database of

[e] 1999, 2000, 2001, 2002, 2003, 2005

TABLE 2. Summarized publications depicting North Atlantic Right Whale vessel interactions, either mortality and/or serious injury events, from along the Gulf of Mexico coast, U.S. East coast, and adjacent Canadian Maritimes, 1970 – 2004.

Year	Right Whale Recovery Plan, 1991	Knowlton & Kraus, 2001		Laist et al., 2001	Jensen & Silber, 2003	Cole et al., 2005, 2006	Waring et al., 1996, 1998-2003, 2005
		A	B*				
1970	0	0	0	0	1		
1971	0	0	0	0	0		
1972	1	1	1	0	1		
1973	0	0	0	0	0		
1974	0	0	0	0	0		
1975	0	0	0	0	0		
1976	0	2	2	2	2		
1977	0	0	0	0	0		
1978	0	0	0	0	0		
1979	1	1	1	1	1		
1980	0	0	2	0	2		
1981	0	0	0	0	0		
1982	0	0	0	0	0		
1983	1	1	1	1	1		
1984	0	0	1	0	1		
1985	0	0	0	0	0		
1986	1	1	2	1	2		
1987	1	1	3	0	3		
1988	0	0	0	0	0		
1989	0	0	0	0	0		
1990	0	0	0	0	0		
1991	1	1	2	1	3		2
1992		1	1	1	1		0
1993		2	2	2	4		2
1994		0	0	0	2		0
1995		1	2	0	3		2
1996		2	2	2	3		2
1997		1	1	0	1		1
1998		0	1	0	2		0
1999		1	1	0	2	1	1

2000					2	0	0
2001					1	2	2
2002						1	1
2003						1	1
2004						2	
2005							

n =	6	16	25	11	38	7	14

* Reflects adjustments made to previously collected data using the authors' criteria and definition for seriously injured whales; similarly, this is true for recent studies applying different criteria, thereby causing confusion among study results.

Table 3. Arbitrary Categories Used in Each of the Publications to Define Injuries to Large Whales on Present and Previously Collected Information, 1970-2005.

Publications	Number of Categories	Categories listed
Knowlton and Kraus, 2001	3	Fatal (Observed Dead), possibly fatal and non-fatal for NARw only.
Laist, et al., 2001	5	Killed (or observed dead), severe injury, minor injury, no apparent effect or unknown. Many large whale species considered.
Jensen and Silber, 2003*	2	Fatal (or Observed Dead) and injury, defined as "...evidence of injury or mortality is defined as blood noted in water; animal seen with cuts, propeller gashes or severed tailstock; animal observed sinking after strike indicating dead; fractured skull, jaw, vertebrae; hemorrhaging, massive bruising or other injuries noted during necropsy of animal.". Many large whale species considered.
NE Fisheries Science Center	2	Mortality and Seriously Injured. "Seriously injury" is defined in 50 CFR part 229.2 as an injury that was likely to lead to mortality." (MMPA)**. This rule applies to commercial fishing activities and not to vessel injury. NARw only
Pace and Silber, 2005	2	The authors created a database consisting of two categories - mortality/serious injury and no serious injury - in relationship solely to the speed parameter. However, since this is a poster, there is no stand-alone database to examine the sample database, N=64, other than the Jensen and Silber document; new data may have been added, but the reference is incomplete. Many large whale species considered.

* Jensen and Silber (2003) defined only the term "injury."

** Marine Mammal Protection Act of 1972

Table 4. Confirmed vessel strike mortalities and serious injury records of NA right whales, 1991 – 2003, NOAA Northeast Fisheries Science Center (NEFSC), Woods Hole, MA reported in annual publications (Stock Assessment Reports, Waring et. at.). Each year's publication verifies that no new information was learned to adjust the number of right whale events/records. Note the differences between the NOAA NEFSC confirmed data with the Jensen and Silber (2003) adjusted data; a significant difference for the period 1991-2001, N=25 or 13 more over the official mandated database (N= 12) using the Marine Mammal Protection Act definition.

	Total Number Attributed per Year									
	Waring, et al. (see publication year column)								NOAA	Jensen and Silber
Publication Year:	1996	1998	1999	2000	2001	2002	2003	2005	total	2003
1991	2	2							2	**3**
1992	0	0							0	**1**
1993	2	2	2						2	**4**
1994	0	0	1S*						0	**2**
1995	2	2	**1**	2	2				2	**3**
1996	2	1	2	2	2	2			2	**3**
1997				1	1	1	1		1	1
1998					0	0	0		0	**2**
1999					1	1	1	1	1	**2**
2000						0	0	0	0	**2**
2001							1	2	2	2
2002								1	1	
2003								1	1	

*S = Secondary Cause, not counted
Underline = indicates change with new information
Bold = indicates differences from confirmed NOAA data to Jensen and Silber's adjusted data.

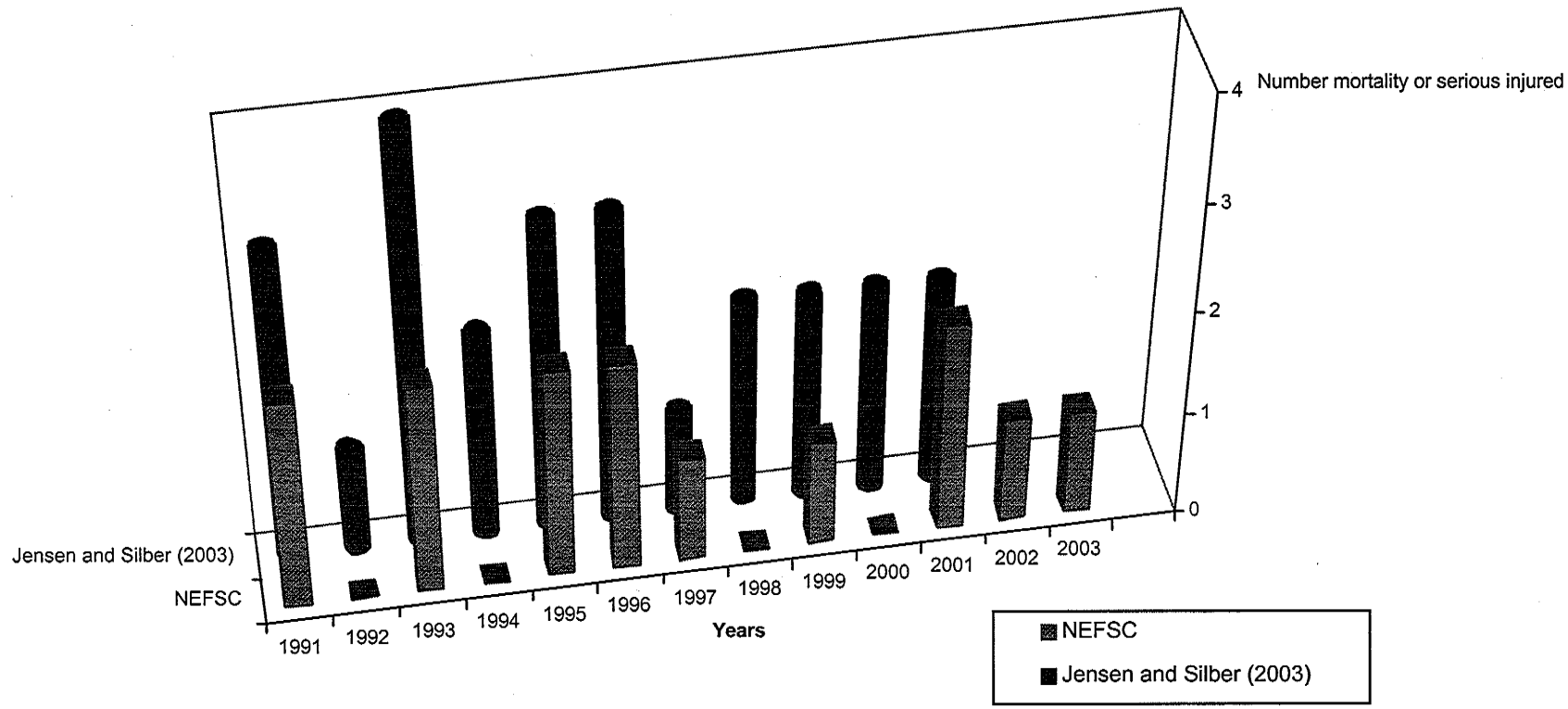


Figure 1. Comparison of NEFSC data (Stock Assessment Reports, Waring et al.) versus Jensen and Silber (2003) data for right whale and serious injury data, 1991-2003.

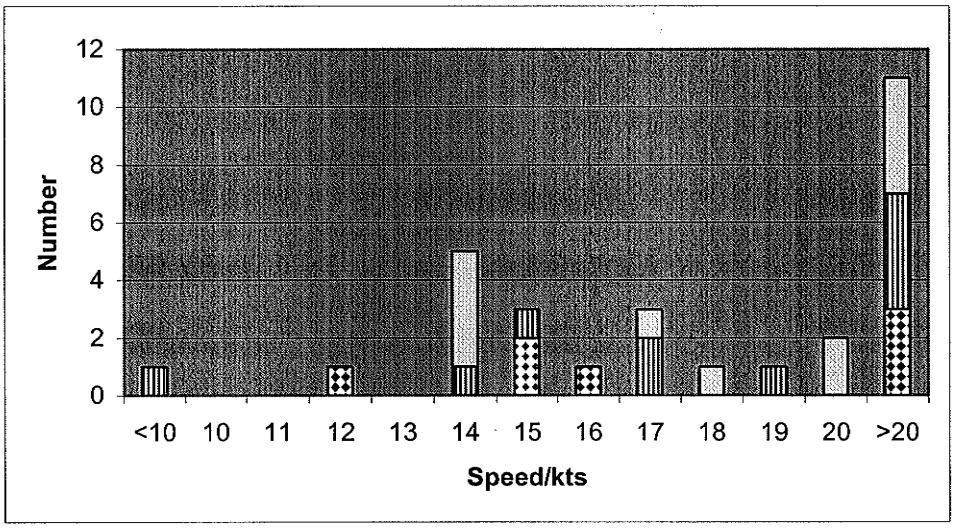


Figure 2. Vessel speed and number of combined mortalities and injuries for all species of large whales, where vessels are equal to or greater than 65 ft in length and where vessel speed was reported. Total N = 29. Key: Red diamond-U.S. east coast and Canada; Blue striped-U.S. west coast, Canada, and Hawaii; White clear-Worldwide, excluding two previous categories. .

Appendices

Appendix I. Estimated Whale Populations in Comparison to Jensen and Silber (2003) Sample Size.

Jensen and Silber (2003) stated their "database contains a total of 292 records of confirmed or possible ship strikes to large whales. They provide a geographical distribution stating that, "Ship strikes to large whales occur world-wide." Continuing, the authors found that, "eleven species were confirmed victims of ship strikes: blue, Bryde's, finback, gray, humpback, killer, minke, North Atlantic right, sei, southern right and sperm whales." Since this is a worldwide database collected from all sources that the authors found, one must consider what the 292 records represent to the estimated world populations of these representative large whale species. A number of sources provided rough estimates of world populations of large whales represented in the Jensen and Silber report (IWC; 1994, Oceanus, 1989, http://assets.panda.org/downloads/current_status.pdf).

World Estimates of Large Whales:

	IWC; 1994, Oceanus, 1989,	http://assets.panda.org/downloads/current_status.pdf
Blue Whale	14000	5000
Fin Whale	120000	70000
NA Fin	78020	70000
Sei Whale	54000	50000
Bowhead Whale	7500	8500
Sperm Whale	1950000	1,500,000
North Atlantic Rw	1000	325
Shemisphere Rw	3000	7000
Humpback	10000	28000
Gray Whale	21000	27000
Bryde's Whale	90000	60000
Minke Whale	941240	153000
Killer whale[a.]	76000	76000
Total	3365760	2054825

a. Source: http://ourworld.compuserve.com/homepages/jaap/orcinus.htm

An average whale number from all the sources provided an average estimated population of 2,710,793 large whales, all species represented and discussed in the Jensen and Silber document. Therefore, the 292 whales sample represents 0.00011 of one percent of the estimated worldwide population. The fact that this enormously diminutive sample is considered for proposed vessel speed regulations should be taken into serious consideration.

Appendix II – A Comparison of the Speed-Length Database to Proposed Regulated Vessels.

The Jensen and Silber (2003) information provided 58 records of speed whale-vessel events with 49 of the 58 possessing both speed and length data. Since no figures were presented within the author's document, we provided indications of the types of vessels and/or trends, patterns or potential clusters of these events.

Method

We noted that 58 speed records had various missing types of information per record. For example, not every record had both vessel speed and vessel length information. However, we did extract a subset of 49 speed-length sets. In addition, some of these records cited speed ranges, or a less-than or greater-than speed amount; those, we changed to a single speed amount. In the case of speed range information, the mid-point of that range was determined. In the cases of less-than or greater-than speed data, we decreased or increased the speed by one, to make a viable value. No tonnage information was used since it is too difficult to accurately translate tonnage to a length, especially since the data included many historical vessels.

Figure 3 presents the 49 records of speed-length information graphically. As discussed previously, but worth repeating, only two right whales were confirmed within the Jensen and Silber's 58 data sets, both of which were killed by military vessels. A third right whale that was included in their report was not included since it is highly unlikely that it was identified correctly.

Results

Initially, when examining **Figure 3**, one can detect two (2) irregular cluster formations: a lower, less than 50-meter vessel-length cluster, which extended from a vessel speed doing less than 5 knots out to a speed of 45 knots. The second cluster, albeit a somewhat irregular grouping, formed in and about the region of the 150-meter vessel-length, centered approximately at 20 knots.

The lower and longer cluster, suggesting whale interactions with smaller vessels less than ~40 meters, extended the entire speed axis. This appears to support the belief by some researchers that vessel size is not the sole factor in causing injury or mortality to large whales. Indeed, if one examines the smaller vessels represented, one finds that the majority are whale-watching and recreational vessels. If there is a correlation, this observation is the first indication of "vessel behavior" causing numerous vessel strikes. This correlation makes sense, as these vessels are frequenting areas of whale concentrations (i.e. whale watching), thereby increasing the probability of vessel strikes, in addition to the greater number of vessels conducting a particular activity.

The larger grouping suggested that larger vessels, including numerous military vessels, ranging from 80 to 200-meters in length, interacted with large whales at speeds ranging from about 15 or 16 knots to about 26 knots

Figure 4 provides a view of the speed-length data minus the less-than 65-foot vessels and military vessels, all of which are exempted by the proposed rule. This figure represents mostly whale watch, ferries, cargo and passenger vessels, as well as one research and one fishing vessel. Again, we see a number of vessels above 20-meters but less than 40-meters in length, at speeds extending from 2 to 45 knots. Between 40-meters and 100-meters, we find one research vessel and one ferry. The elongated cluster at 120-meters to greater-than 240-meters in length represented 11 cargo and passenger vessels.

Figure 3. Total Known Vessel Speed-Length Database, Jensen and Silber (2003), N=49.

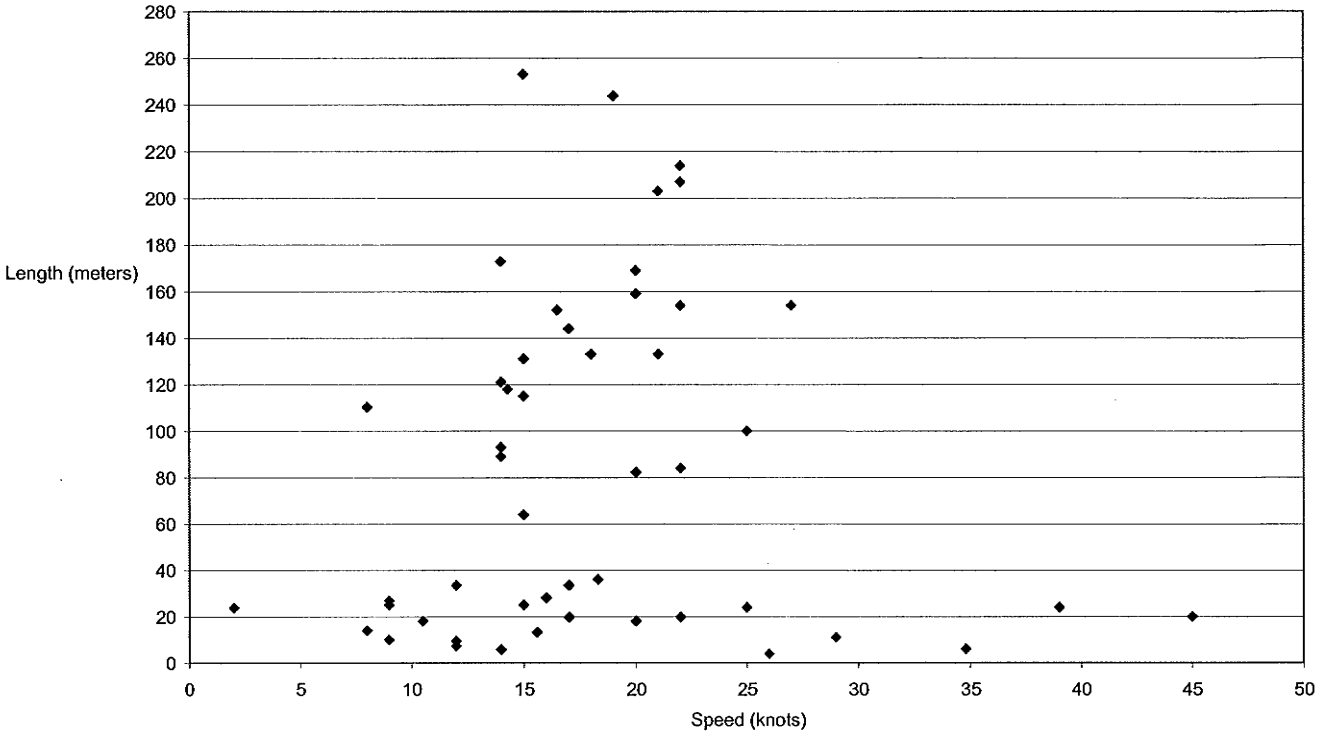
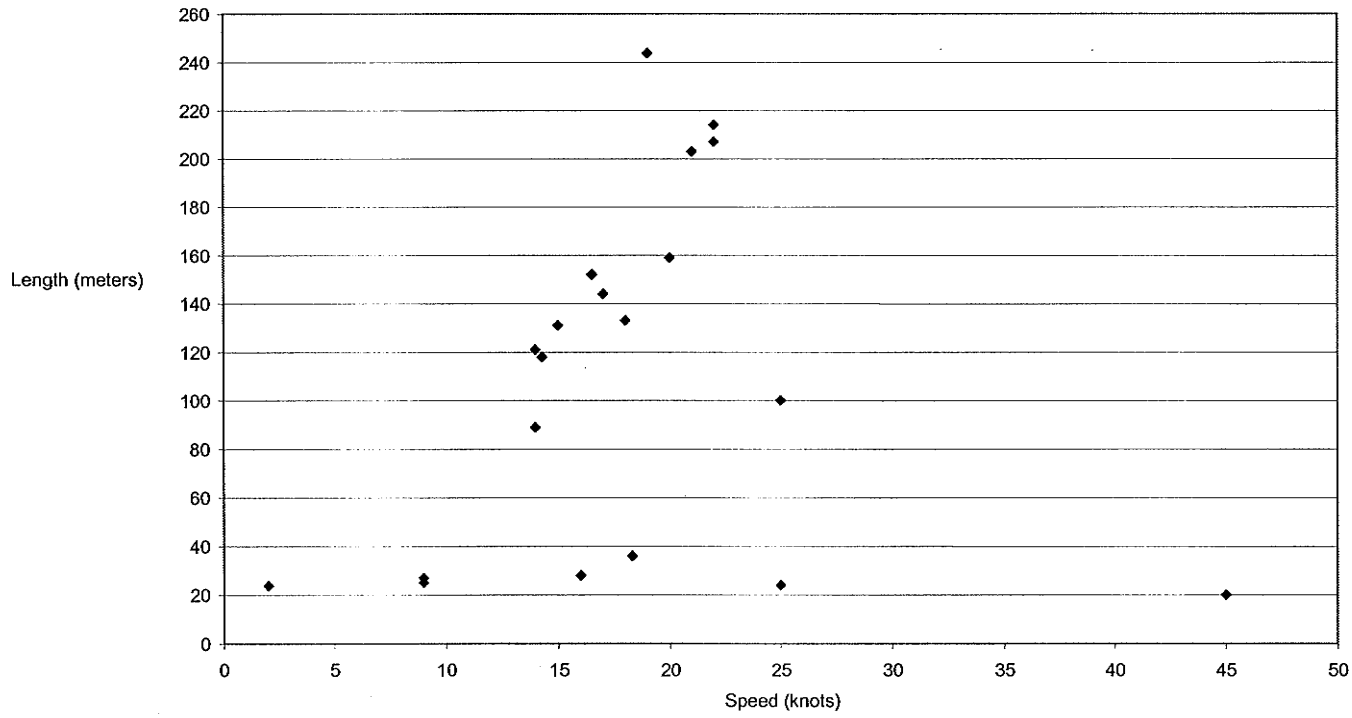


Figure 4. Known Speed-Length Data for Vessels Equal to or Greater Than 65 ft Vessel, Minus the Exempted Governme and the Less Than 65 ft Vessels, N=20. These data include all interaction events, including unknown and no effects.



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The Whale Center
of New England

A non-profit organization emphasizing whale
research, conservation, and education.
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Chief, Marine Mammal and Sea Turtle Conservation Division
Attn: Right Whale Ship Strike Reduction DEIS
Office of Protected Resources
NMFS
1315 East-West Highway
Silver Spring, MD 20910

October 3, 2006

To Whom It May Concern,

I am writing on behalf of the Whale Center of New England to submit comments on the Draft Environmental Impact Statement (DEIS) to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy (SSRS).

The Whale Center of New England has been conducting research on endangered whales and other cetaceans in New England waters since 1979. We have published over 25 peer-reviewed papers on a variety of topics, including the distribution and annual movements of North Atlantic right whales. Starting in 2003, we initiated a project to conduct boat-based surveys for right whales on Jeffreys Ledge during the fall and early winter. Our staff has served in a formal capacity on relevant policy committees and task forces including the Atlantic Large Whale Take Reduction Team, the Northeast Large Whale Recovery Plan Implementation Team, and the Stellwagen Bank Sanctuary Advisory Council. Specifically related to the SSRS, we have played an active role on the Ship Strike sub-committee of the Implementation Team for many years, and were invited participants at the 2001 workshop which helped formulate the current strategy. In addition, I recently chaired a working group for the Stellwagen Bank Sanctuary's Management Plan Review that specifically dealt with issues surrounding ship collisions with all whales, including right whales. Hence, we have a great familiarity and years of experience with the issue, and feel we are in in a strong position to comment on the DEIS and the SSRS overall.

To start with, we commend NOAA and NMFS for finally addressing the issues of ship collisions and North Atlantic right whales with a series of meaningful and protective measures. The problem has been known for decades. All of the current projections of population trends and demography show the right whale population in decline, largely because of ship collisions, entanglements, and other human-induced mortality. If we are to have any hope of saving this species from extinction, we need to act on both of these issues in a timely and productive manner. The SSRS presents a laudable step in taking the required actions on this issue.

In addition, we feel that the proposed solutions (routing of vessels to minimize the risk of encounters between ships and whales, and reduction of speed to allow the whales the ability to escape from ships when they do encounter each other) are the only measures that are currently shown to be operationally feasible. While we are aware that the industry would like there to be a "warning signal" to make whales move away from the path of an oncoming vessel, or for there to be some way to alert mariners to the immediate presence of whales in their path, neither is practical and/or functional at this time. Should new technologies develop, it may be worth re-addressing some of these measures in the future. We also concur with NMFS that voluntary measures are unlikely to be effective (as discussed on page 2-16 of the DEIS).

We support alternative 5 as presented in the DEIS, as it provides the maximum protection for right whales from ship collisions. We are somewhat puzzled why Alternative 6 is the preferred alternative. No explanation as to its benefits over Alternative 5 are given in the DEIS. Further, even NMFS themselves notes that "Alternative 5 would provide the highest level of protection to the right whale population and the measures mentioned above cover larger areas for longer periods than the other alternatives. This alternative would significantly reduce the amount and/or severity of ship strikes. If deaths and serious injuries are reduced, a higher probability exists that the population growth rate would increase. An increase in the population growth rate would increase the number of whales in the population, which would bring them closer to recovery and farther from extinction." It further notes that "Alternative 6 is not as beneficial to the recovery of the right whale population as Alternative 5." While it is true that the preferred alternative, option 6, contains many "similar" measures to alternative 5, it provides a more limited set of speed and routing measures. Many of the times and areas that would not be covered in Alternative 6, but are in Alternative 5, are areas with low levels of observer coverage both leading to a paucity of data on which to make informed management decisions, and making it unlikely that observers would note the need for a DMA. We feel that NMFS must err on the side of caution. In order to statistically determine the effectiveness of this suite of measures, data will need tobe gathered over years, if not decades. Hence, the strongest possible measures over the widest possible area should be instituted initially. Only after trend data can clearly show that the SSRS has been effective can some of the more peripheral regulations be relaxed to determine if the same level of protection would then exist. The status of right whales is precarious; we do not have the time to underestimate the time and area coverage needed to protect the species.

Specifically, we support the following measures of the SSRS:

- Speed limits of 10 kts or less – This uses the best available science to determine an appropriate speed for fatal collision avoidance, as detailed in the proposed rule that is out now. We also note that the DEIS considers speeds of 12 knots and 14 knots. As far as we can tell, a limit of 14 knots is not supported by any published data as a safer speed; Laist et al. (2001) specifically list 13 knots as a key threshold below which fatal collisions were less frequent. As noted in the text of the proposed rule, using a total of 64 records of ship strikes in which vessel speed was known Pace and Silber (2005) tested speed as a predictor of the probability of a whale death or serious injury. The authors concluded that there was strong evidence that the probability of death or serious injury increased rapidly with increasing vessel speed. Specifically, the predicted probability of serious injury or death increased from 45 percent to 75 percent as vessel speed increased from 10 to 14 knots. Hence, 10 knots stands as the scientifically supported safest speed for vessels to travel in order to avoid collisions with right whales;

- The size of the vessels to be managed. We note that the smallest vessel that is known to have killed a right whale is an 82 foot Coast Guard vessel traveling at 15 knots, indicating boats just over 65 feet long are capable of serious collisions even when traveling at moderate speeds. However, the DEIS *does* disregard an incident where a 43' foot vessel off of Florida collided with a right whale in March, 2005. The whale sustained a serious injury to its tail flukes from the collision, and is not expected to survive based on its condition in an August 2005 sighting off of New England;

- Proposing an Area to be Avoided in the Great South Channel and a shift in the Traffic Separation Scheme coming into Boston Harbor to the International Maritime Organization (IMO);

- Speed restrictions (10 knots or less) in the in the Great South Channel and in the "Off Race Point Area" (although see below for comments on the dates of both the Great South Channel and Race Point restrictions);

- Formation of a shipping lane on the western side of Cape Cod Bay, and institution of speed restrictions throughout the Bay;

- Seasonal Management Areas (SMA's) with speed restrictions (10 knots or less) in the mid-Atlantic;

- Speed restrictions and shipping lanes in SMA's in the southeastern U.S.

Given our overall support for the more restrictive SSRS, we still would like to express a few concerns and cautions:

1) Dynamic management areas – We appreciate that there are many times and places where right whales can aggregate that are not addressed in the specified time-area restrictions that are listed in the DEIS, and it is critical that such aggregations receive protection similar to that afforded the predictable ones in the Great South Channel, Cape Cod Bay, and Race Point area. However, we are concerned about the time it may take to implement such protections. Similar actions, with similar triggers, have been used as a management strategy to reduce the risk of fishery gear entanglements for a number of years. Such actions have taken weeks to implement and, as often as not, by the time they have been put into effect, many of the whales have left the location where the measure had been introduced. Fishermen have therefore often been inconvenienced with little added protection for whales. While we understand that there may be great differences between the time needed to implement such dynamic measures between restrictions on ship speeds and restrictions on fishing gear, we would like to see the details of the mechanism by which such measures can be swiftly enacted. *Without insuring the timeliness of such actions, we have concerns about the effectiveness of DMA's for the protection of whales.* The DEIS also does not address whether acoustic monitoring data, commonly used in the Northeast and the Mid-Atlantic, could be used to initiate a DMA, or whether the whales have to be visually observed to confirm their presence. Requiring visual observation would necessitate a greater observer effort than currently exists for many locations in order to make DMA's effective regardless of their timeliness.

2) Year-round presence in the Gulf of Maine – While specific measures are proposed for Cape Cod Bay in winter and early spring, Great South Channel in the spring, and Race Point for the spring, recent data has confirmed the consistent presence of large right whale aggregations in the Gulf of Maine in the fall and winter. Our own survey work on Jeffreys Ledge, funded by NMFS, has shown consistent aggregations of whales from October through December, and NMFS aerial survey work has spotted similar aggregations of whales on Jeffreys Ledge and in the deeper waters to the east of the Ledge during two of the past three winters. These habitats are unprotected in the current SSRS except by DMA's. Similarly, recent data from passive acoustic studies from a research team combining NMFS, Stellwagen Bank National Marine Sanctuary (SBNMS), and Cornell University staff have shown the consistent presence of right whales in the SBNMS during January through March 2006, especially in the northeast and southwest portions of the sanctuary (Dickey et al. 2006). We acknowledge that they, too, would be covered by the possibility of dynamic management, but that relies on the ability of researchers to be in the field to detect the aggregations. Winter weather is notoriously inhospitable for researchers, making coverage difficult. Further, the recent restrictions on research coverage by both NMFS and external researchers, necessitated by federal budget restrictions, makes us wary of the ability to detect such aggregations when and where they occur. Certainly no one reported the right whales present in the northeastern part of the Sanctuary, near Jeffreys Ledge, during that period. *A preferred way to capture protections for these animals would be wider area restrictions for the Gulf of Maine from October through June.* A less-preferred option would be a formal commitment, as part of the SSRS and its subsequent rules, to insure the necessary area coverage despite the unpredictable and regular fluctuations to both agency-wide and line-item budgets.

3) Great South Channel and Race Point area timing – The SSRS suggests restrictions to Cape Cod Bay from January through May, but the Great South Channel and the Race Point area restrictions are not instituted until March 1st (Race Point) and April 1st (Great South Channel). However, whales arriving into Cape Cod Bay must be passing through at least one of these two areas to enter into the Bay. Both tag and sighting data has shown these whales were in the Southeastern United States and in the Gulf of Maine prior to their Cape Cod Bay sightings. Aerial survey work in the Great South Channel in 2006 showed aggregations there well before April 1, and the lack of sightings prior to that in other years may be more related to a lack of survey effort than a lack of whales. Right whales were often detected on passive acoustic monitoring systems in the southwestern portion of the Stellwagen Bank National Marine Sanctuary during January through March 2006 (Dickey et al. 2006). *We suggest that protection for both of these areas should be started on January 1st, to match that of Cape Cod Bay.* This is also consistent with our suggestion above of more wide-spread regulations throughout the Gulf of Maine from October through June.

4) Timeliness and enforcement of the SSRS – The SSRS does not contain any information on either a timeline for implementation or a mechanism by which the rule will be enforced. Both are important issues. In the summer of 2005, 16 leading right whale scientists noted the importance of timely actions to prevent ship collisions, actually calling for emergency regulations because of the sensitivity and urgency of the issue (Kraus et al. 2005). *It is critical that the final rule be implemented in a timely manner, and that timeline be contained in the rule itself.* Further, the manner by which the rule will be enforced is also critical. Moller et al. (2005) showed the near-total disregard for voluntary compliance with suggested speed limitations, indicating the need for an enforcement plan to insure the measure's effectiveness. Given the increase in current

technology and requirements of ships in U.S. waters (e.g. the AIS system) we can understand that enforcement is possible, but *we would like to see a plan detailed in the SSRS so that its effectiveness can be evaluated.*

5) The exemption for all sovereign vessels (all vessels owned and operated by the Federal Government, detailed in Appendix 1 of the DEIS) seems a bit too widespread. We concur that U.S. military vessels and U.S. Coast Guard vessels may need to operate in ways that are not be consistent with the SSRS at times for both national security and human safety. However, the current exemption would also include all NOAA fleet vessels, Minerals Management Service vessels, Fish and Wildlife Service vessels, and military and Coast Guard vessels operating under normal procedures, among others, that should be able to operate within the scope of the SSRS without undue hindrance. *We would therefore like to see the exemption more specifically focused on those vessels unlikely to be able to comply with the regulations because of service in the national interest*, or for NMFS to at least include a more detailed explanation as to why all such vessels should be included in the exemption.

While we feel that these are important issues that need to be addressed to insure effective protection of the North Atlantic right whale, they should not overshadow the overall importance of instituting the strongest possible SSRS for the whale's protection in the immediate future. We commend NMFS on their willingness to take such actions, and hope they will do everything they can to insure that the maximum protection is given to this critically endangered species.

Sincerely,

Mason Weinrich
Executive Director and Chief Scientist

P.S. As an aside which does not have significant bearing on policy decisions, please note that in section 3.3.1.2, Jeffreys Ledge is incorrectly listed as being in the SBNMS; only a small sliver of its southeastern side is included in the Sanctuary. This sliver is not the location where the majority of our right whale sightings during our Jeffreys ledge surveys have taken place. Please also note that Jeffreys is misspelled throughout the section; there is no possessive apostrophe in the name (it is correct in Figure 3-2, accompanying the section).

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October 5, 2006

Chief, Marine Mammal Conservation Division
Attention: Right Whale Ship Strike Reduction Strategy
Office of Protected Resources
NOAA Fisheries
1315 East West Highway
Silver Springs, MD 20910

To Whom It May Concern:

On behalf of the Maryland Port Administration (MPA), I am writing to express this agency's position about the Notice of Proposed Rulemaking and the Draft Environmental Impact Statement regarding the National Marine Fisheries Service's North Atlantic Right Whale Ship Strike Reduction Strategy. This rulemaking would have major impacts on East Coast ports (including the Port of Baltimore). Until such time more substantiated information about the proposed Ship Strike Reduction Strategy would be made available to ports, the MPA opposes this proposed rulemaking and strategy.

Ramifications of this proposed rulemaking to the Port of Baltimore would include impacts to ships entering and leaving the Chesapeake Bay to call at the Port of Baltimore. The Port is within the Middle Atlantic United States (MAUS) region, and while it is geographically to the west and outside the boundaries of the Seasonal Management Area (SMA), ships calling at Baltimore must transit the SMA.

The Port of Baltimore would be also impacted by two SMAs – the Chesapeake Bay Seasonal Management Area and the Delaware Seasonal Management Area. One geographical area of impact would be at the northern passageway to the Port, via access and egress through the Chesapeake and Delaware Canal (C & D Canal) from Delaware Bay. This passageway is within the *southern boundary* of the Delaware Seasonal Management Area. This particular boundary of the Delaware SMA, as it relates to the C& D Canal and the Port of Baltimore, is not pointed-out in this document and discussed in connection to impacts of this aspect of the Delaware SMA on the Port of Baltimore. Another geographical area of impact would be at the southerly entrance to the Chesapeake Bay via Cape Henry.

Once a ship completes traveling through the MAUS SMA (in the Atlantic Ocean) and enters into the Chesapeake Bay from the northern and southern ends, it should no longer be subject to these particular speed restrictions while traversing waters of the Bay and entering and leaving the Port of Baltimore. Ships, however, would still be subject to appropriate U.S. Coast Guard regulatory requirements.

This document does not adequately account for economic impacts to businesses (direct and indirect) within the Port of Baltimore that rely on timely delivery of products and goods from these ships. If these ships were to reduce sailing time to the Port of Baltimore, there would be significant lag time for ships to reach the port and thereby, produce filter-down negative impacts to businesses within the port.

When considering ocean freight costs, financial revenues, and financial performance of vessel operations calling on east coast ports, once again, there would be a filter-down negative impact on the Port of Baltimore and maritime commerce dependant businesses and jobs. Ships traveling to the Port of Baltimore from the Chesapeake and Delaware Canal or from the southerly entrance of the Chesapeake Bay (via Cape Henry) must first go through the MAUS SMA. Some ship lines could choose to take their business to other ports that either do not have these restrictions or may be more easily accessible.

Because interior waters of the Chesapeake Bay and the Port of Baltimore are geographically outside the boundaries of the SMA, there may not be direct impacts to the physical environment of the Bay and the Port as a result of these ship speed reductions. This DEIS indicates that North Atlantic right whales spend majority of their time in (although closer to land than other large whales) the eastern coastal waters of the Atlantic Ocean and that they may enter shallower waters to give birth. There is no documentation within this DEIS that specifies whether these whales enter shallower waters of the Chesapeake Bay.

There are no in-depth references or discussions in the DEIS on the impacts of the ship strike reduction or speed restrictions on passenger vessels, such as cruise ships.

There is no discussion in the DEIS on what the ship strike reduction strategy or speed restrictions would be based on - science or technology. At the August 10, 2006 public hearing in Baltimore, there was discussion by some shipping lines that sailors are asked to visually watch for whales. This document does not go into discussion about techniques that are currently used to spot the North Atlantic right whale, nor does the DEIS have any discussion on what techniques or technologies are used during nighttime hours to spot these whales.

There is no discussion in the DEIS on active communications between the National Marine Fisheries Service and the Maryland Port Administration (Port of Baltimore) about the ship strike reduction strategy.

Although the document mentions that federally-owned or managed ships are exempt, it does not adequately specify the type of ships; such as military ships.

There could be increased possibility of air pollution from ships that would be required to adhere to speed restrictions in the SMA. Factors that may contribute to this issue may be related to consumption and type of fuels, speed and acceleration, number of vessel trips, distance to travel, engine type and age, emissions control technologies, and climate.

Navigational capabilities and safety of vessels that call on the Port of Baltimore, due to the proposed speed restrictions of this strategy, would be of concern to the Maryland Port Administration. Chesapeake Bay pilots have also expressed great concerns regarding the safety of these vessels at the proposed speeds. The MPA recommends that a reevaluation of these proposed speed reductions be performed with input from port communities.

Attached for your consideration is a table that references specific sections and pages within the DEIS and includes additional comments to this document.

These issues are of particular importance to the Port of Baltimore. The MPA would welcome communication from the National Marine Fisheries Service (NMFS) on the proposed rulemaking and ship strike reduction strategy. In addition, the MPA encourages the NMFS to work closely with this agency to establish an accurate effect of the proposed rules on port communities and fashion a rule that would not adversely impact the shipping industry or port communities, while protecting the North Atlantic Right Whale from vessels.

Sincerely,

Frank L. Hamons, Deputy Director
For Harbor Development

nkb/FLH

cc: Brooks Royster, MPA
M. Kathleen Broadwater, MPA

Attachment

Environmental Impact Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy

Draft Environmental Impact Statement, July 2006

Page No.	Chapter/Section	Review Comments
ES-3	ES.3.2 Alternative 2 – Dynamic Management Areas	"DMAs are temporary and provide protection for a minimum of 15 days". How does this apply relative to the Chesapeake Bay? During which particular days of the year does this apply relative to the Chesapeake Bay?
ES-4	ES.3.3 Alternative 3 – Speed Restrictions in Designated Areas	Please note that according to the terms of the definition of the MAUS (Middle Atlantic United States), the Chesapeake Bay would be outside of and west of the boundaries of the MAUS region.
ES-5	ES.3.6 (Preferred) - Right Whale Ship Strike Reduction Strategy – Table	This table needs a title.
1-5	1.2.2.3 Other Anthropogenic Causes of Whale Mortality	In the list of human activities, "dredging and associated disposal of dredged materials" is included. It is also listed as a form of pollution. This statement is critical about dredging and too broad. It is assumed the document is referencing ocean dredging and not dredging from within the Chesapeake Bay. This statement needs to be revised to reflect type of dredging. Dredging is a necessary activity to allow large ships to safely access and leave the Port of Baltimore.
1-7	1.2.1.4 Regional Recovery Plan Implementation Teams	Is there representation from the MAUS on the Recovery Plan Implementation team?
	Figure 2-5 & Figure 2-6	The Port of Baltimore is also impacted by the Delaware Bay Seasonal Management Area in that ships also enter the Chesapeake Bay from the north via the Chesapeake and Delaware Canal.
4-101	4.4.5.1 Cruise Industries	More in-depth discussion is needed in Sections 4.4.1 & 4.4.3 on impacts of the proposed action and the alternatives to the cruise industry. This proposed action would also have an impact on the cruise business in the Port of Baltimore.
4-125	4.7.1 Cumulative	There is no discussion on impacts of the proposed

	Effects on the Physical Environment, 4.7.1.1 Air Quality	action on neither air quality by ships calling on and leaving the Port of Baltimore, nor any of the other East Coast ports.
4-139	4.7.2.7 Liquefied Natural Gas Vessels and Deepwater Ports	There is no discussion on impacts of the proposed action to the Cove Point LNG plant in the Chesapeake Bay.
4-151	4.9 Mitigation Measures	This section does not address mitigating economic losses on east coast ports, such as the Port of Baltimore.
5-5	5.3.2.3. Impacts to Other Commercial Operations	There is no discussion pertaining to impacts to the cruise ship industry.

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

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October 3, 2006

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Chief, Marine Mammal Conservation Commission
Attn: Right Whale Ship Strike Strategy
Office of Protected Resources, NMFS
1315 East-West Highway
Silver Spring, MD 20910

RE: Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales, 50 CFR Part 224, Docket No. 040506143-6016-02, I.D. 101205B, RIN 0648-AS36

Dear Chief:

The Division of Habitat and Species Conservation, Imperiled Species Management Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated agency review of the referenced Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales, prepared by the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS). We provide the following comments under the National Environmental Policy Act (NEPA). In previous correspondence with the Florida State Clearinghouse, we had provided review of the draft Environmental Impact Statement for this rule under the Coastal Zone Management Act/Florida Coastal Management Plan, as well, and copied your office on that correspondence.

Project Description

NOAA Fisheries Service (NMFS) proposes a uniform mandatory vessel speed restriction of 10 knots (about 11 mile per hour) or less in specific locations along the U.S. East Coast during times when whales are likely present to reduce the risk of collisions between ships and endangered North Atlantic right whales. In the rule, NMFS also seeks comment on a uniform mandatory speed restriction of 12 knots or less, and 14 knots or less.

Speed restrictions are proposed to apply to all vessels subject to the jurisdiction of the United States greater than or equal to 65 feet (19.8 meters) in overall length. Vessels operated by

federal agencies are exempt from the regulations; however, operation of these vessels will be subject to guidance provided through consultations under the Endangered Species Act. Most agencies already have protective measures in place on behalf of right whales.

The proposed rule divides the U.S. east coast into three large subareas: Southeast U.S., Mid-Atlantic U.S., and Northeast U.S. Within each, NMFS proposes seasonal rules restricting vessels speed to 10 knots (about 11 miles per hour) or less. The areas, and the times in which they would be in effect, are as concisely and specifically defined as possible to reflect the known occurrence of right whales.

For all areas of the Atlantic, the agency proposes to establish temporary "dynamic management areas" when right whales occur outside the three subareas, or during such times both within as well as outside these areas when the seasonal management measures are not in effect. In the designated area, mariners will have the option to traverse at a speed no greater than 10 knots, or route around the area. The size of the area would depend on the number and distribution of animals sighted and last for at least 15 days. It could be extended if the whale aggregation persists.

Potentially Affected Resources

North Atlantic Right Whale (*Eubalaena glacialis* - endangered)
The North Atlantic right whale (*Eubalaena glacialis*) is one of the most endangered large whales in the world, with an estimated population of approximately 350 individuals (Kraus et al. 2001). North Atlantic right whales migrate south from their feeding grounds in the northeastern U.S. to their calving grounds in northeastern Florida. The calving grounds are federally designated critical habitat for this species. Mainly adult females and calves, along with some juveniles and adult males, migrate to the southeastern calving grounds each winter, and may remain in the area for four to five months. Migration from the northeastern feeding grounds typically begins in October, although some individuals may not travel as far south as the southeastern critical habitat. Most right whales have left the calving grounds by March/April for the return trip to the northern feeding and nursing areas. Migratory patterns are variable, in part because they are subject to variability of weather and climatic influences. Individuals may also venture south outside of their typical feeding areas at other times of the year, such that right whales could be found in the mid-Atlantic during much of the year. For instance, carcasses and entangled whales have been recorded off of the mid-Atlantic region in the summer months.

Although North Atlantic right whales are thought to concentrate within 55 km of the coast on their mid-Atlantic migration (Knowlton et al. 2002), sightings do occur beyond this distance from shore. We concur with Hain and Kenney (2005) that uncertainty in predicting right whale occurrence is increased with distance from the shoreline because of reduced search efforts offshore compared to nearshore areas. In the southeastern calving grounds, recent aerial survey efforts have located right whales approximately 70 kilometers (km) from the shoreline. In addition, an entangled whale, equipped with a satellite tag during disentanglement operations, was recorded at approximately 118 km off the Florida shoreline on December 5, 2005. Despite

uncertainties, data and anecdotal evidence indicate that right whales can occur at distances greater than 55 km along the eastern seaboard. Recent modeling efforts indicate that the loss of as few as two females per year may ensure the extinction of the species (Caswell et al. 1999). As recently as January 2006, a dead right whale calf was found floating in the Atlantic Ocean approximately one-half mile east of the Mayport Jetty, near the mouth of the St. Johns River. A necropsy determined that the whale was killed as a result of a ship strike. The winter inhabitants off the coast of Jacksonville include the most vulnerable component of the right whale population.

The potential for right whale presence declines south from Port of Jacksonville and into the Gulf of Mexico with increasing distance from the critical habitat, but right whales have been known to venture south along the Florida coastline, and even rarely into the Gulf of Mexico. A mother and calf were observed and photographed off Miami Harbor on January 30, 2004. One early recorded sighting of right whales in the Gulf of Mexico was near Sarasota in March 1963. This past winter (January 2006), two right whales were photographed off Texas and the west coast of Florida.

Recommendations

1. We recommend that NMFS reduce the speed limit to 10 knots rather than either 12 or 14 knots. Literature cited in the Proposed Rule (Laist et al. 2001, Jensen and Silber 2003, Pace and Silber 2005, and Vanderlaan and Taggart in press) is generally based upon stranding records, reports of whale strikes, and anecdotal records. These sources of data are likely to be biased with respect to many aspects of the information, such as vessel types or collision locations. Laist et al. (2001) developed a largely inferential case that speed contributes to the severity of whale injuries. Since then, Jensen and Silber (2003) compiled a large whale-ship strike database that currently provides the best available source of data on ship strikes, albeit it includes many of the same kinds of sources noted above. Pace and Silber (2005) and Vanderlaan and Taggart (in press) attempted to compare ship strike speeds to non-strike ship speeds (Mandatory Ship Reporting data). However, the sources of the two data sets are disparate on many levels, they do not provide metrics for goodness of fit, nor do they compare their models with alternative models (particularly a "no-effect" model).

The most scientifically rigorous studies cited in the Proposed Rule are the probabilistic models of the increase in severity of impacts to large whales with increasing ship speed (Pace and Silber 2005, and Vanderlaan and Taggart, in press). In both studies, the probability of serious injury or mortality increases rapidly between speeds of 9 to10 knots and 14 to15 knots and continued to increase slowly above that. Two corroborating studies provide the most convincing evidence that reducing ship speed may increase protection to whales by reducing severity of impacts. Additionally, Vanderlaan and Taggart models the probability of occurrence of whale-ship collisions, showing that although the probability of encounter diminishes with increasing speed, the probability is relatively constant over the range of speed in question.

None of these studies, however, including the two probability models, provide scientific analysis of speed effects in the probability of occurrence of whale-ship collisions. In fact, reduced speed could potentially increase the probability of occurrence because slower ships would spend more time within whale habitat (although the two probabilistic studies indicate that the collisions would be less catastrophic).

The large whale ship strike database used by Pace and Silber (2005) and Jensen and Silber (2003) includes ship strikes from around the world with various vessel types and a number of whale species. Likewise, Vanderlaan and Taggart reportedly used all available records. While providing the necessary quantity of data for analysis, neither focused on the North Atlantic right whale in particular. Although it appears safe to assume that similar factors would contribute to whale-ship collisions regardless of species and location, the North Atlantic right whale is unusual in the proximity of distribution to the shoreline and shallow bathymetry during migration and calving. Further, the southeastern United States calving grounds (SEUS) would differ fundamentally from the various geographic locales included in the databases. A high proportion (75%) of struck right whales along the U.S. Atlantic Coast between 1975 and 1996 were either juveniles or calves (Laist et al. 2001), potentially indicating a higher vulnerability among younger whales. These analyses, based on a database that includes all demographic groups, may not indicate adequate protection for calves.

Careful interpretation of available literature does implicate speed as a factor in the severity of impacts to whales, and the threshold at which the rise in probability becomes steep is approximately 9-10 knots. We do recommend, however, that NMFS monitor compliance carefully and given high compliance, try to evaluate the impact, both on probability of occurrence and on severity of injuries, that reduced ship speed has on whale-ship collisions where and when restrictions are imposed.

2. We recommend NMFS consider reducing the size threshold for vessels included in speed restrictions. At a minimum we would suggest increased education outreach to vessel operators below the proposed 65-foot threshold. On March 10, 2005 an 11-year-old female (right whale #2425) was struck by the propellers of a 43-foot yacht causing a near amputation of part of its tail. The yacht was traveling at approximately 20 knots and was located about 7 miles from Cumberland Island, Georgia. This whale was re-sighted in Cape Cod Bay in September of 2005. The condition of the whale at that time was very poor and it is presumed that the whale has died.

3. We recommend NMFS utilize Section 7 Consultation to ensure that large vessels that are excluded from the proposed rule by virtue of federal affiliation adhere to speed restrictions under normal circumstances and to allow them latitude only when deemed necessary. Navy vessels are the single largest category of vessel types to report whale-ship collisions (Jensen and Silber 2003). While naval ships may be more likely to report collisions than other vessel types because of military protocols, nonetheless, federally affiliated vessels are clearly involved in ship strikes. Including these vessels in speed restrictions whenever possible

would likely contribute to the protection of right whales, especially in the southern United States where the most vulnerable portion of the population (mothers and especially calves) is found.

4. We strongly support the designation of shipping lanes within areas delineated in the Proposed Rule and advocate NMFS enforcement of mandatory shipping lanes should data reveal that ships are not complying with recommended routes. Two risk assessment models, a generalized additive model (GAM) and a Bayesian hierarchical model, estimated the risk reduction to right whales via implementation of shipping lanes. These were conducted for the right whale southeast critical habitat by Lance Garrison of NOAA and Chris Fonnesbeck of FWC. Each examined reduction of risk index for the co-occurrence of ships and right whales within 4-km x 4-km cells, using combinations of lane restrictions associated with three ports: Brunswick (Georgia), Fernandina, and Jacksonville (both in Florida). Total reduction of the risk index over that associated with the status quo was greatest for the shipping lanes examined by the U.S. Coast Guard in their Port Access Routing Study (PARS). Of a suite of six scenarios representing different traffic patterns (including status quo), three reduced risk in the 36-40% range relative to the status quo, while the other two had a 26-31% reduction. Each scenario was run under both the GAM and Bayesian models. This represents a substantial reduction in risk of co-occurrence and would likely contribute to protection of right whales in their calving grounds.

Neither implementation of shipping lanes nor speed restrictions alone completely eliminated risk to right whales. Further, the two methods complement one another in the aspect of protection provided to right whales: shipping lanes reduce the potential for occurrence of a ship strike but do not reduce severity of injuries, whereas speed restrictions would likely reduce severity of injuries but do not reduce the potential for ship strike. Given that the Marine Mammal Commission has set the Potential Biological Removal level for this species at 0, as well as the current intensity of ship strikes, combining methods to provide better protection for right whales than either provides alone may be essential for preventing pending extinction of this species.

5. We support the proposed recommendation to extend the Seasonal Management Area (SMA) out to 30 nautical miles (nm), opposed to 20 nm, as well as the regional SMA of November 1 to April 30 in the MAUS region. Although this area is primarily used as a migratory route by the right whale, there is some evidence from aerial surveys performed off the MAUS that at least some right whale mothers may calve in the vicinity rather than continue migrating to the SEUS. Despite reduced aerial effort in this region compared to the SEUS, at least a few identified mothers with calves were observed in MAUS that were never seen in the SEUS during the same season. Although it is relatively certain that right whales do not occupy the MAUS at densities as high as in the SEUS, reduced aerial survey effort contributes greater uncertainty to assessment of right whale use in the MAUS. Further, a recent predictive habitat model for calving right whales predicted extension of habitat further north than current intensive aerial surveys, based upon average sea surface temperatures and bathymetry (Garrison et al. in preparation). Highly suitable habitat is predicted by this model to extend out to approximately 50 nm in some areas and potentially suitable habitat to extend past 150 nm.

6. In order to avoid confusion, we recommend that the SEUS implementation period extend from November 15 to April 16 (rather than April 15) to match those used by the Mandatory Ship Reporting System. Furthermore, we recommend that Port Canaveral be included within the SEUS Seasonal Management Area. The FWC has surveyed the central Florida coast for many years, although less intensively in comparison to the northern region near the Georgia/Florida border. Nonetheless, right whale sightings near the central Florida coastline have been reported in the majority of years that aerial surveys were flown in that region. The Port Canaveral area is currently defined as designated critical habitat; therefore, we believe it would be prudent (and consistent) to include the entire critical habitat region within the rulemaking boundary.

7. We support the use of Dynamic Management Areas (DMA) for protecting right whales in those areas where whale occupancy is less predictable and lack of aerial survey effort does not support the use of Seasonal Management Areas. We concur with the Area of Enforcement extending out to 200 nm as described in the Preferred Alternative (Option 6) of the DEIS and in the Proposed Rule. In the southeastern calving grounds, recent aerial survey efforts have located right whales approximately 70 km (37 nm) from the shoreline. In addition, an entangled whale, equipped with a satellite tag during disentanglement operations, was recorded at approximately 118 km (64 nm) off the Florida shoreline on December 5, 2005. However, the criteria for establishing a DMA are cumbersome, and the delay from sighting to declaration diminishes effectiveness of DMAs. This is especially true for regions in which right whales are mainly in transit and would likely be gone before a DMA could be established. We recommend streamlining procedures, such as eliminating density requirements, for declaring a DMA and making the DMA effective upon verification and broadcast of right whale locations to mariners. Likewise, under these circumstances, the DMA should be ended upon verification that the whale is no longer in the vicinity.

8. We recommend that NMFS investigate the use of additional means beyond aerial survey for locating right whales, such as passive acoustics, to increase the effectiveness of DMAs as a management strategy. Although aerial survey is an invaluable tool for locating right whales in high-density areas such as the SEUS, the efficacy of aerial surveys for detecting all right whales in an area is fair at best and is dependent upon flight specifications as well as environmental factors (visibility, Beaufort Sea State levels, winds, etc.). Detectability of mom/calf pairs for standardized aerial surveys in the southeast has been estimated to be as low as 33% (Hain et al. 1999). In addition, much of right whale migratory and residency behavior on the calving grounds remains unknown. Timing of migration is variable among years and is influenced by a number of environmental factors. The offshore extent of right whale migration, and influencing factors, are also poorly known.

Passive acoustic monitoring (e.g., using hydrophone arrays) provides greater detectability of vocalizing mammals than passive listening. Passive acoustic monitoring has been used previously by the Navy (Jarvis et al. 2002) and other researchers (i.e., Clark et al. 1996). Satellite tagging of right whales could provide valuable information on migratory behavior that

is difficult to obtain through traditional means, such as vessel or aerial studies, and would reduce uncertainty of right whale presence in unpredictable areas.

While recognizing the difficulties with DMAs, we also recognize the function that DMAs serve in areas in which right whale activities are less predictable and where more stringent management would be unreasonable. Any additional means for increasing the efficacy of DMAs would seem prudent, however, given the current constraints of DMAs (as noted above), the extreme endangerment of this species, and the vulnerability of mothers and calves in mid-Atlantic and southeastern United States regions.

9. We recommend that the proposed rule provide for an exemption for law enforcement vessels of a state or political subdivision thereof when engaged in law enforcement or search and rescue duties.

We appreciate the opportunity to provide input on this proposed rule and are available to provide additional assistance for our suggestions, if needed. Please do not hesitate to contact me at 850-488-6661 if you would like to coordinate further, or Chérie Keller or Tom Pitchford at 727-896-8626 if you have any technical questions regarding these comments.

Sincerely,

Mary Ann Poole

Mary Ann Poole, Director
Office of Policy and Stakeholder Coord.

map/mh
ENV 1-3-2
North Atlantic Right Whale Proposed Rule_388
cc: shipstrike.comments@noaa.gov
Jessica Gribbon, NOAA/NMFS
Lauren Milligan, Florida State Clearinghouse, DEP

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AAPA American Association of Port Authorities

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October 5, 2006

Chief, Marine Mammal Conservation Division
Attention: Right Whale Ship Strike Strategy
Office of Protected Resources
NOAA Fisheries
1315 East West Highway
Silver Spring, MD 20910

To Whom It May Concern:

On behalf of the U.S. member ports of the American Association of Port Authorities, I am writing to express serious concern about the detrimental impact on maritime commerce of the Notice of Proposed Rulemaking and the Draft Environmental Impact Statement regarding the National Marine Fisheries Service's North Atlantic Right Whale Ship Strike Reduction Strategy. Since this rulemaking would directly affect East Coast ports, AAPA fully endorses and supports the detailed comments filed by the North Atlantic Ports Association, the South Atlantic and Caribbean Ports Association and the individual ports in the region. However, we are concerned that imposing speed restrictions and seasonal management areas as part of the ship strike reduction strategy may set a precedent for endangered species preservation that could adversely affect the entire U.S. port industry.

The U.S. port industry is extremely concerned about the proposed speed restrictions. Pilots have expressed major concerns regarding the safety of navigation at the proposed speeds as they pertain to ship strikes. The port industry does not believe that the existing science makes a compelling case that speed restrictions will, in fact, reduce ship strikes. While the Draft Environmental Impact Statement concludes that a majority of ship strikes occurred at speeds of greater than 13 knots, the document does not list the distribution of ships traveling at given speeds. It is probable that the majority of ship strikes occurred at those speeds because those are the speeds most traveled, not necessarily because they are the most dangerous. Also, all conclusions about the effectiveness of speed restrictions are based on a universe of approximately 60 ship strikes in the past 30 years, whereas more than 300 ship strikes have occurred during that time. The Draft Environmental Impact Statement does not adequately address the issue of whether the 20 percent of ship strikes where ship speed is known is a representative sample of the total number of ship strikes and, thus, can be interpreted as statistically significant.

We are also extremely concerned that the economic impact analysis completed by National Marine Fisheries Service doesn't fully measure the effect these rules would have on commerce and international trade. While the economic analysis attempts to measure the impact of

individual vessels slowing down on their way into port and considers the additional cost to vessels operating on multi-ports strings, we are not convinced that it accurately calculates the cost associated with ship diversions, or ship dislocations. The port industry believes that ship diversions are likely, especially for those vessels that call on multiple ports on the East Coast. If speed restrictions are in effect for several ports on a vessel's schedule, the cumulative impact is likely to be significant enough to cause shipping lines to alter their routes. We are especially concerned about those vessels that transit the Panama Canal and must adhere to the Canal's strict schedule. Those vessels are likely to alter their schedules on the East Coast to accommodate Canal transit.

The port industry is also concerned that the National Marine Fisheries Service is not investing enough money in technology that could provide at least a partial solution to the problem. We believe that finding accurate and reliable ways to track whales and be aware of their whereabouts is critical to the success of any right whale ship strike reduction strategy.

These issues are of particular importance to AAPA's North Atlantic and South Atlantic member ports. We hope that the National Marine Fisheries Service will work closely with the North Atlantic Ports Association, Inc., and the South Atlantic and Caribbean Ports Association to determine an accurate effect of the proposed rules on port communities and craft a rule that will protect the Atlantic right whale from vessels but will not adversely affect the shipping industry, port communities and international commerce.

Sincerely,

Kurt J. Nagle

kjn:mhm

▸ 104

From "Nurthen, William" <wnurthen@panynj.gov>
Sent Thursday, October 5, 2006 1:18 pm
To Shipstrike.Comments@noaa.gov , ShipStrike.EIS@noaa.gov
Cc David_Rostker@omb.eop.gov
Bcc
Subject Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales and Draft EIS

October 5, 2006

Chief, Marine Mammal Conservation Division
Attention: Right Whale Ship Strike Strategy
And
Chief, Marine Mammal and Sea Turtle Conservation Division
Attn: Right Whale Ship Strike Reduction DEIS
Office of Protected Resources
NMFS
1315 East West Highway
Silver Springs, MD 20910

Subjects: (1) Endangered Fish and Wildlife; Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisio Right Whales - 2006 Federal Register 36299 Vol. 71, No. 122

(2) EIS No. 20060278, Draft EIS, NOA, 00, North Atlantic Right Whale Ship Strike Reduction Strategy, To Implement to Reduce the Occurrence and Severity of Vessel Collisions with the Right Whale, Serious Injury and Deaths Resulting from Collision Federal Register 38641 Vol. 71, No. 130

Dear Sir or Madam:

On behalf of the Port Commerce Department of the Port Authority of New York and New Jersey, I would like to thank you for the opp the Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales and the 20060278.

The Port Commerce Department of the Port Authority of New York and New Jersey has consistently supported efforts to develop mea Atlantic Right Whale. The Port Authority participated in the Right Whale Ship Strike Workshop held in New London, CT on April 10 shipping industry data and provided it to Ship Strike staffers in June 2001 and sponsored a Regional Right Whale Presentation in July so that NMFS and the Ship Strike Committee could brief the regional maritime community on preservation efforts. On October 25, 2 NMFS-sponsored Industry Stakeholder Meeting, and have provided comments to NMFS in November 2004 on the Advanced Notice c as well as the joint NMFS/Massport report entitled "Economic Implications of Possible Reductions in Boston Port Calls due to Ship St Measures" in May 2005 and, the Scope of the EIS in July 2005.

The Port Commerce Department of the Port Authority of New York and New Jersey continues to support the National Marine Fisherie preserve and enhance the North Atlantic Right Whale population and will continue to coordinate with the shipping industry to promote invaluable species. We recommend implementation of Dynamic Management Areas, Alternative 2, as the most effective measure to p Right Whale, and suggest that the DEIS provide a more complete assessment of the socio-economic impact of the proposed alternative specific suggestions for making a more thorough assessment of the socio-economic impacts in the attached document.

Sincerely,
R M. Larrabee
Port Commerce Department
Port Authority of New York and New Jersey

cc: David Rostker, OMB (David_Rostker@omb.eop.gov)

ATTACHMENT

Suggestions For Making A More Thorough Assessment Of The Socio-economic Impacts Of The Propose

A. Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales - 200 Vol. 71, No. 122

Alternative 2 would appear much more effective than measures contained in Alternative 6, which would establish Seasonal Manageme within 30 NM of the harbor for six months of the year, regardless of whether Right Whales are actually present. In this regard it is ins NMFS Data Base of Right Whale sightings for 2002-2006 shows only three Right Whale sightings within 30 NM of the Port of NY/N. only two of which were within the six month time period identified in Alternative 6.

The existing science does not make a compelling case that speed restrictions will, in fact, reduce ship strikes. The Proposed Rule conc ship strikes occurred at speeds of greater than 13 knots, but does not list the distribution of ships traveling at given speeds. It is probat ship strikes occurred at those speeds, because those are the speeds most traveled, and not necessarily because they are the most danger about the effectiveness of speed restrictions appear based on a universe of approximately 60 ship strikes in the past 30 years, whereas i strikes have occurred during that time. The Proposed Rule does not appear to adequately address the issue of whether the 20 percent (ship speed is known is a representative sample of the total number of ship strikes and, thus, can be interpreted as statistically significar

B. Draft EIS - 2006 Federal Register 38641 Vol. 71, No. 13 - Socio Economic Impact of the Proposed Action

The DEIS notes the following direct and indirect economic impact on the Port of NY/NJ for Alternative 6 with a 10 kts speed restricti

- $11.2 million/year (2004) in direct economic impact, with an additional direct economic impact of $1.2 million/year for ves based on 12 kts speed restriction

- $21.2 million/year (2004) in indirect economic impact as a result of vessels diverted from our port

These direct and indirect economic impacts, while significant in dollar value and more severe for the Port of NY/NJ than any other poi the jobs, wages and tax revenues lost or Gross Regional Product not realized, even though the MARAD Port Economic Impact Kit tha capable of producing such results. Using a model developed for the Port of NY/NJ by the Center for Urban Policy Research at Rutgers that for the 1.5% diversion cited in the DEIS the direct and indirect annual economic impact would result in a total for 2004 of 171 job wages lost, $3.8 million in lost tax revenues and $16.9 million in GRP not realized.

The DEIS does not assess the indirect economic impact resulting from lost ship calls due to cumulative delays of vessels engaged in m addition, there is no clear methodology for the indirect economic impact to the ports (as opposed to the direct economic to carriers) du delays to multiple East Coast port calls. The DEIS provides no explanation how the average delay of 30 minutes per port for carriers w was determined.

The Port of NY/NJ handles the most container ships on the East Coast, and as a result is more affected by inherent time delays that occ port strings. The report notes on page 120, "While some of the ranking (between ports participating in multi-port strings) change sligh note that the port areas of New York/New Jersey or Hampton Roads are part of each of the top ten multi-port strings in 2003 and 2004 are recognized for the carriers and they are substantial. Container lines and vehicle carriers calling at the Port of NY/NJ face the large: delays to East Coast carrier strings -- $1.5 million in 2004, which is nearly a third higher than the area with next largest cost impacts fr delays (Hampton Roads at $1.2 million).

This is significant to the Port of NY/NJ because meeting tidal windows is critical. The report notes the loss of potential port calls as th problems on all-water container services via the Panama Canal. For the Port of NY/NJ, All Water Services (AWS) have grown from 7 strings in 2005 and 19 of these strings transit the Panama Canal. Because of its location at the end of these strings traveling through tl Port of NY/NJ is especially subject to diversions at various South and North Atlantic ports on the route up the entire length of the East

Any impediment that would keep the ships from making a given daily tidal window increases the unreliability of this all-water service assess the potential trade-offs between all water services via the Panama Canal and overland rail service to the East Coast from West C years shipping lines have introduced AWS because shippers frustrated by the delays and unreliability of delivery from the West Coast, distribution centers and have encouraged ocean carriers to provide AWS to them. In the period from 2002 to 2005, cargo from Asia ha 8.7 million to 12.8 million tons. It is clear that most of this cargo moves to NY/NJ through the Panama Canal. However, because of sc making tidal windows, a shipping line could elect to drop all port calls on its Panama service in favor of a mini-land bridge by rail, wh competitive balance between East and West Coast ports. This same problem also affects AWS through the Suez Canal, but not to sam

The DEIS assessment of indirect economic impact resulting from port diversions uses a .5 % diversion of ship calls for a 12 kts speed a 10 kts speed restriction, but does not explain how these diversion percentages were determined.

Our July 2005 comments on the EIS Scope noted that there were no calculations of the impact of these strategies on marine terminal o logistics costs. To a certain extent in the DEIS these increased terminal operating costs are included as part of the indirect economic ir are somewhat considered in the analysis in Table 4-41, which examines increases in ocean freight costs as a result the adoption of thes compared to value of cargo handled at the East Coast ports. However, there still is no analysis of the changes in logistics costs as a res which creates the necessity of shipping these goods to their ultimate destinations by inland modes over longer distances rather by the e This same analysis needs to be extended to the environmental impacts resulting from transportation modes shifts, such as air emissions usage, where port diversion occurs.

The DEIS does not provide rationale to support its assumption that the average value of the indirect ship calls diverted from the Port o would apply to all other large East Coast ports or that a value of $500,000 would apply per vessel call diverted from smaller ports. In assumes, without providing justification, that for Mid Atlantic ports all these vessel calls will be diverted to Canada. As discussed abo Panama Canal could be just as easily diverted to a South Florida port, such as Miami, which is not included in the proposed rule, or ev

▸105

From David White <david@portofhamptonroads.com>
Sent Thursday, October 5, 2006 1:23 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject SAMTSO Comments - North Atlantic Right Whale DEIS

South Atlantic Marine Transportation System Organization

P.O. Box 3487
Norfolk, Virginia 23514
757-622-2639
FAX 757-622-6302
hrma@portofhamptonroads.com
www.portofhamptonroads.com

October 5, 2006

Chief, Marine Mammal Conservation Division
Attention: Right Whale Ship Strike Strategy
Office of Protected Resources
National Marine Fisheries Service
1315 East West Highway
Silver Springs, MD 20910

RE: Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales; 50 CFR Part 224 [Docket No. 040506143-6016-02.I.D. 101205B]

Dear Sir or Madam:

The South Atlantic Marine Transportation System Organization (SAMTSO) is a regional organization dealing with marine transportation related issues affecting the Southeastern United States and provides regional representation to the Marine Transportation System National Advisory Council (MTSNAC). SAMTSO is comprised of port authorities, maritime associations, and other stakeholder groups from the South Atlantic ports of the United States as well as government agencies involved with the Maritime Industry. As part of SAMTSO's mission it is our responsibility to articulate the importance of the regional MTS to the economy of the nation and the South Atlantic; to foster a common vision for the future of the region's MTS; and to energize continued efforts to protect and advance the interests of the region's MTS. In fulfilling those responsibilities we offer the following comments on the proposed rule to implement speed restrictions to reduce the threat of ship collisions with North Atlantic right whales.

We wish to clearly state that SAMTSO members have been and will continue to be a partner with NOAA in efforts to protect and restore the right whale population. However, we must oppose the implementation of blanket speed restrictions on vessels as a measure to reduce ship strikes. We oppose speed restrictions for several reasons. First, it must be recognized that in many instances ships become less maneuverable at the proposed reduced speeds. By reducing the control over a ship the risks are increased for incidents that could result in the loss of human life or environmental damage. Stunningly, section 4.6.6.2 of the DEIS wrongly concludes maritime safety will be improved. We are aware that numerous examples of navigational safety concerns have been provided during the comment period. It is clear the National Marine Fisheries Service (NMFS) has not adequately accounted for the very real navigational safety concerns.

We also oppose blanket speed restrictions based on the certain negative impacts on the nation's and the South Atlantic's Marine Transportation System (MTS) and economies when weighed against the uncertainty of any positive impacts on the right whale population. Citing economic impact figures from the DEIS, which we believe grossly underestimate the true economic impacts, the costs of NMFS' preferred measures (Alternative 6) to the nation's maritime industry will be $116 million annually. Recognizing that 95% of imports arrive by ship and the time sensitive schedules of our MTS, we believe these figures grossly underestimate the impacts and costs to our nations supply chain.

We find no convincing evidence that ship strikes are less likely to occur at slower speeds. NMFS has produced studies indicating that if a ship strike occurs, a strike at a higher speed may be more likely to cause death or serious

injury than a strike at a lower speed. However, if seeking to reduce the probability of a strike in the first place, speed restrictions are not a scientifically supported solution. For this and other reasons, we question the validity of the studies calling for the use of blanket speed restrictions as a means of improving the right whale population.

We are concerned that there has been little or no accounting for enforcement of blanket speed restrictions. To whom will enforcement of these regulations fall? What will be the costs of enforcement and where is the funding? If enforcement responsibilities are foisted upon the U.S. Coast Guard, what resources will be used and how will it compromise the Coast Guard's national security and maritime safety responsibilities?

We find the proposed regulations contrary to national policy and to demonstrate a lack of identification and coordination with other priorities within the same agency, NOAA. Speed restrictions are contrary to two elements of the President's U.S. Ocean Action Plan. One of the Plan's priorities is improving the MTS. Clearly, blanket speed restrictions are a detriment to the MTS. Another of the Plan's priorities is advancing knowledge of the oceans through improved technologies and Integrated Ocean Observing Systems (IOOS). NOAA's National Ocean Service (NOS) is putting significant energy and funding into developing IOOS and improving technological capabilities. There seems to be little coordination, or desire for coordination, between NMFS and NOS to seek technological and observational solutions to improving the right whale population. We recommend better coordination of the objectives of NMFS with NOS and the pursuit of technological and observing solutions with higher probabilities of improving the right whale population.

We note there are no provisions for terminating speed restrictions. Should speed restrictions be implemented we recommend including provisions for the sun-setting of the regulations when they are determined to be ineffective, or if the right whale population reaches 400 or experiences sustained growth of say 4% over five years. The maritime industry does not accept that speed restrictions will be necessary in perpetuity.

SAMTSO maintains that the human and environmental navigational safety risks and the certain negative impacts on the economy and the nation's supply chain far outweigh the very uncertain positive impacts of blanket speed restrictions. We encourage NMFS to focus its resources instead on finding technological and observation based solutions with a higher probability of achieving the goal of improving the right whale population. Please contact me at (757) 622-2639 should you desire additional information or have any questions.

Very truly yours,

David White
Chairman

CC: Mr. John Gaughan, Chairman, Marine Transportation System National Advisory Council
Ms. Helen Brohl, Executive Director, Committee on the Marine Transportation System

▸ 1016

From David White <david@portofhamptonroads.com>
Sent Thursday, October 5, 2006 1:26 pm
To ShipStrike.EIS@noaa.gov
Cc
Bcc
Subject VMA Comments - North Atlantic Right Whale DEIS

VIRGINIA MARITIME ASSOCIATION

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October 5, 2006

Chief, Marine Mammal Conservation Division
Attention: Right Whale Ship Strike Strategy
Office of Protected Resources
National Marine Fisheries Service
1315 East West Highway
Silver Springs, MD 20910

RE: Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales; 50 CFR Part 224 [Docket No. 040506143-6016-02.I.D. 101205B]

Dear Sir or Madam:

The Virginia Maritime Association (VMA) is the trade association representing over 400 businesses, employing over 70,000 people, directly and indirectly engaged in the flow of international commerce through the Port of Virginia. As the "Voice of the Port", representing these interested parties, we write to express our opposition to ship speed restrictions for the protection of right whales and encourage the pursuit of alternative measures more closely aligned with national interests.

We wish to clearly state that the VMA has been and will continue to be a partner to NOAA in efforts to protect and restore the right whale population. However, we must oppose the implementation of blanket speed restrictions on vessels as a measure to reduce ship strikes. We oppose speed restrictions for several reasons. First, it must be recognized that in many instances ships become less maneuverable at the proposed reduced speeds. By reducing the control over a ship the risks are increased for incidents that could result in the loss of human life or environmental damage. Stunningly, and demonstrating the preparer's lack of understanding of navigational factors, section 4.6.6.2 of the DEIS wrongly concludes maritime safety will be improved. We are aware that numerous examples of navigational safety concerns have been provided during the comment period. It is clear the National Marine Fisheries Service (NMFS) has not adequately accounted for the very real navigational safety concerns.

We also oppose blanket speed restrictions based on the certain negative impacts on the nation's Marine Transportation System (MTS) and economy when weighed against the uncertainty of any positive impacts on the right whale population. Citing economic impact figures from the DEIS, which we believe grossly underestimate the true economic impacts, the costs of NMFS' preferred measures (Alternative 6) to the shipping industry in the Port of Hampton Roads will be in excess of $21 million annually and the costs to the nation's maritime industry will be $116 million annually. Recognizing that 95% of imports arrive by ship and the time sensitive schedules of our MTS, we believe these figures grossly underestimate the impacts and costs to our nations supply chain.

We find no convincing evidence that ship strikes are less likely to occur at slower speeds. NMFS has produced studies indicating that if a ship strike occurs, a strike at a higher speed may be more likely to cause death or serious injury than a strike at a lower speed. However, if seeking to reduce the probability of a strike in the first place, speed restrictions are not a scientifically supported solution. For this and other reasons, we question the validity of the studies calling for the use of blanket speed restrictions as a means of improving the right whale population.

We are concerned that there has been little or no accounting for enforcement of blanket speed restrictions. To whom will enforcement of these regulations fall? What will be the costs of enforcement and where is the funding? If enforcement responsibilities are foisted upon the U.S. Coast Guard, what resources will be used and how will it compromise the Coast Guard's national security and maritime safety responsibilities?

We find the proposed regulations contrary to national policy and to demonstrate a bewildering lack of identification and coordination with other priorities within the same agency, NOAA. Speed restrictions are contrary to two elements of the President's U.S. Ocean Action Plan. One of the Plan's priorities is improving the MTS. Clearly, blanket speed restrictions are a detriment to the MTS. Another of the Plan's priorities is advancing knowledge of the oceans through improved technologies and Integrated Ocean Observing Systems (IOOS). NOAA's National Ocean Service (NOS) is putting significant energy and funding into developing IOOS and improving technological capabilities. There seems to be little coordination, or desire for coordination, between NMFS and NOS to seek technological and observational solutions to improving the right whale population. We recommend better coordination of the objectives of NMFS with NOS and the pursuit of technological and observing solutions with higher probabilities of improving the right whale population.

If speed restrictions are implemented, we suggest it would be inappropriate to implement the same blanket speed restrictions along all three implementation regions (northeastern, mid-Atlantic, and southeastern). Right whale encounters in the mid-Atlantic region are rare. The DEIS states there is less than one right whale sighting per year in each of the mid-Atlantic ports and concludes Dynamic Management Areas (DMA's) would likely be required only once each year in mid-Atlantic ports. With the rarity of right whale encounters in the mid-Atlantic, instead of blanket speed restrictions, we recommend utilizing alternative measures without the severe risks and impacts of speed restrictions. There are numerous alternatives that have not been attempted in mid-Atlantic ports, such as utilizing DMA's only, requiring ships to post spotters, and whale reconnaissance flights.

We note there are no provisions for terminating speed restrictions. Should speed restrictions be implemented we recommend including provisions for the sun-setting of the regulations when they are determined to be ineffective, or if the right whale population reaches 400 or experiences sustained growth of say 4% over five years. The maritime industry does not accept that speed restrictions will be necessary in perpetuity.

The VMA maintains that the human and environmental navigational safety risks and the certain negative impacts on the economy and the nation's supply chain far outweigh the very uncertain positive impacts of blanket speed restrictions. We encourage NMFS to focus its resources instead on finding technological and observation based solutions with a higher probability of achieving the goal of improving the right whale population. Please contact me at (757) 622-2639 should you desire additional information or have any questions.

Very truly yours,

Arthur W. Moye, Jr.
Executive Vice President

Cc: Mr. Meade Stone, Jr., President, Virginia Maritime Association
Mr. Edward Barham, III, Chairman, Navigation Rules Committee
Mr. Raymond Newlon, Chairman, Steamship Trade Committee

Wednesday, October 04, 2006

Mr. Stewart Harris
Chief, Marine Mammal Conservation Division
Office of Protected Resources, NMFS
Room 13635
1315 East-West Highway
Silver Spring, MD 20910

Re: Docket No. 040506143–6016–02. I.D. 101205B

Dear Mr. Harris,

The Boston Harbor Pilots are a group of professional Mariners the majority of which hold the highest maritime credential, (Unlimited Master Ocean licenses) along with their pilotage credentials. We as a group bring hundreds of years of accumulated maritime experience. The Boston Harbor Pilots were formally recognized and commissioned by the Commonwealth of Massachusetts in 1783. We are charged in representing the public trust in moving vessels safely and efficiently within the state waters of District One Boston.

The Boston Pilots have participated in the NEIT and Ship Strike Committees, and Stellwagen Bank advisory council. We interact with mariners by passing on guidance on sightings and identification of Right Whales. We are instrumental in aiding in the compliance of the Mandatory Ship Reporting System (MSR). We strongly believe that educating mariners regarding Right Whales works. Mariners need the proper tools and knowledge to avoid contact with all whales without restricting the Master's (Captains) responsibility to navigate his/her vessel safely required by international law. How will NOAA address this? Does NOAA have the authority to Regulate Speed conflicting with Maritime Law? The citizens of the United States have spent millions of dollars on Right Whale research without the benefit of passing on whale behavior information to the mariner that could be used to avoid contact with whales. When will NOAA pass on information on how the mariner can best avoid contact with a whale when sighted? If the Tail flukes go up are they sounding? If this is the case would it not behoove the vessel to clear the area as soon as possible?

This NPR falls short in maintaining safety of navigation because it severely restricts the Master's authority and obligation to navigate safely. Under International Regulations for Avoiding Collisions at Sea (COLREGS) of which the United State is signatory requires:

Rule 6

Safe Speed

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

In determining a safe speed the following factors shall be among those taken into account:

(a) By all vessels:

(i) The state of visibility;

(ii) The traffic density including concentrations of fishing vessels or any other vessels;

(iii) The manageability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;

(iv) At night the presence of background light such as from shore lights or from back scatter from her own lights;

(v) The state of wind, sea and current, and the proximity of navigational hazards;

(vi) The draft in relation to the available depth of water.

(b) Additionally, by vessels with operational radar:

(i) The characteristics, efficiency and limitations of the radar equipment;

(ii) Any constrains imposed by the radar range scale in use;

(iii) The effect on radar detection of the sea state, weather and other sources of interference;

(iv) The possibility that small vessels, ice and other floating objects may not be detected by radar at an adequate range;

(v) The number location and movement of vessels detected by radar;

(vi) The more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.

So what does this all mean to the professional mariner? We have never heard of a speed restriction imposed on a vessels Master in open waters. This NPR if enacted will undermine the Master's authority in his ability to maneuver at a safe speed. There is sound reason that the COLREGS do not attach a number to safe speed. Safe speed does not equate to the same rate of speed for all vessels. As an example a 150,000 Ton, 993 ft in length, 135ft Beam, and a depth of 148ft Passenger ship restricted to a speed of 10kts under this NPR in a gale is severely restricted in its ability to maneuver safely as opposed to a 656 Ton, 144ft Length, 31 Ft beam, and 17ft depth ship. Although both vessels will face the challenges of operating safely in the wind and sea states created by the gale

winds, both will not maneuver the same in order to maintain a safe speed. The amount of force of a gale wind on the hull of the larger vessel equates to hundreds of tons of force on the ships hull. This NPR could equate to nothing short of an assisted regulated maritime casualty.

Ships have a design sea service speed according to its hull and power plant for the most safe and efficient maneuvering capabilities on open water. The Master intimately knows his/her ships maneuvering characteristics. Ships do not normally reduce from sea speed unless the surrounding conditions warrant it always maintaining a safe speed regardless. Ships will normally reduce speed when entering confined waters and or picking up a pilot. The pilot boat is maneuvered to safely transfer the pilot to the ship in open waters. Some pilot boats would fall under this NPR and boarding a pilot safely would be compromised. Pilot boats regularly have to maneuver in speeds in excess of 10kts to make a safe transfer. How can NOAA ensure the safety of life at sea by reducing maneuverability of vessels in open water?

Pilots are local knowledge experts. They have years of service in the area they operate. Conditions change regularly. Wind, Current, Tide, Depth of water, and channel configuration, and dredging projects are some of the influences on how a vessel will have to be maneuvered safely to port. Channel entrances are subjected to all these influences. Here in the Northeast our weather patterns bring strong low pressure areas with high wind and sea states. It is necessary in many instances where a speed in excess of 10 Kts is required to bring a ship safely across the bar. The fact is that during times of strong wind and sea conditions the NPR if enacted would greatly effect the movement of Petroleum products to the region supplying heat, electricity, and cooling for many business and homeowners in the Commonwealth of Massachusetts. How will NOAA ensure the citizens of the Commonwealth have an adequate supply of petroleum products? This NPR will compromise the continued safe efficient movement of commerce through the port of Boston. Boston services Product Carries, LNG, Auto, Container, Passenger, Cement, Refrigerated cargo, Bulk, and Scrap metal ships. Boston has a robust ferry, fishing, and yachting community.

Moreover, we hope NMFS takes these comments seriously as the recent Port Access Route Study (PARS) conducted on the Traffic Separation Scheme (TSS) to Boston was filed in April 2006 at the International Maritime Organization (IMO) before notice of public comment was sent in the Federal Register in May of this year. The PARS study recommends to IMO a less than favorable route which narrows the approach to Boston making less sea room for safe maneuver and more congestion in the approaches to the Boston Precautionary area. Why is NOAA supporting the PARS recommendation sent to IMO before taking public comment in May?

In closing thank you for extending the comment period for this NPR. This was a massive document, and we still feel more time was needed. We have spent 100's of hours reviewing and compiling information. This was a large burden on our organization and our duty as pilots in Boston. We, however, can not support the enactment of these rules because of increased risk of a serious marine casualty, and its negative influence of the safe continued movement of commerce to the port of Boston. We urge NMFS to seek

other more effective solutions that will not compromise safety of navigation while continuing to work with maritime professionals to develop other means of protecting whales and our environment.

Sincerely,

Captain Gregg H. Farmer
President

109

College of Marine and Earth Studies
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Newark, DE 19716-3501
(302) 831-0228 and (302) 831-0768
(302) 831-6838 fax
jf@udel.edu and jcorbett@udel.edu

Chief, Marine Mammal and Sea Turtle Conservation Division
Attn: Right Whale Ship Strike Strategy and DEIS
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
shipstrike.comments@noaa.gov
shipstrike.eis@noaa.gov

October 5, 2006

Re: Comments of Jeremy Firestone, James Corbett, and Shannon Lyons, College of Marine and Earth Studies, University of Delaware on:
(1) Docket Number 040506143-6016-02: Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales, 71 Fed. Reg. 36299 (June 26, 2006).
(2) EIS No. 20060278, Draft DIS, NOA, 00, North Atlantic Ship Strike Reduction Strategy, to Implement Operational Measures to Reduce the Occurrence and Severity of Vessel Collisions with the Right Whale, Serious Injury and Deaths Resulting from Collisions with Vessels, 71 Fed. Reg. 38641 (July 7, 2006).

Dear Chief:

We respectfully submit the following comments on the Office of Protected Resources' Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales ("Proposed Rule"), 71 Fed. Reg. 36299 (June 26, 2006) and its associated Draft Environmental Impact Statement ("DEIS") EIS No. 20060278, Draft DIS, NOA, 00, North Atlantic Ship Strike Reduction Strategy, to Implement Operational Measures to Reduce the Occurrence and Severity of Vessel Collisions with the Right Whale, Serious Injury and Deaths Resulting from Collisions with Vessels, 71 Fed. Reg. 38641 (July 7, 2006). Our comments are based on our research regarding ship-right whale encounter probabilities, North Atlantic right whale

migration patterns, and predictions of lethal ship strikes based on force of impact analyses derived from ship speed and mass. We provide broad overview comments and explain in detail how our research findings contribute to these comments. Our analyses related to comments 1 and 2 are presently embodied in manuscripts undergoing peer review.

1. Ship Length/Mass and Area to be Avoided

Ship-whale collisions are both geospatial and bio-physical in nature; that is, it is important to consider both where interactions occur in time and space and what forces act on the whale body at the time of impact to understand the nature of the risk. According to the physics of the interaction between a ship and a whale, for ships larger than 500 tons, speed is more important than the size of a ship in determining a lethal injury to a whale. For ships less than 500 tons, both mass and speed may be important. Empirical analysis of the data indicates that impact forces approaching 25 metric tons have an 80% probability of causing a lethal injury while impact forces less than or equal to 12 metric tons have less than a 5% probability of causing a lethal injury. Reducing ship speed of large ships could reduce the ton-force significantly. In the major shipping lanes, the distribution of ton-force of ship traffic is rather uniform, and thus, the distribution of whales rather than ton-force determines the distribution of risk of potential severity of injury to whales.

The proposed rule applies generally to vessels greater than 65 foot in length. Presumably length is being used as a proxy for mass, as the force of a collision is in pertinent part a function of the mass and speed of the vessel. While NOAA's proposal to slow down large ships is supported by theoretical and empirical analyses, we recommend NOAA employ a ship mass criterion rather than a ship length criterion. We would note in that regard that NOAA is employing ship mass (300 gross tons) as the Area to be Avoided (ATBA) criterion.

As noted above, ship speed continues to play a significant role in the force equation for ships less than 500 metric tons. Thus, setting the standard at 300 gross tons is not inconsistent with our analysis. Moreover, as we stated in comments on the Coast Guards PARS (Firestone and Corbett, 2006) "There are three major aggregation areas for right whales in US waters: the southeast, the great south channel and Cape Cod Bay. Of the three areas, the Great South Channel from the perspective of numbers of vessels presents the greatest risk to right whales."

2. Mid-Atlantic

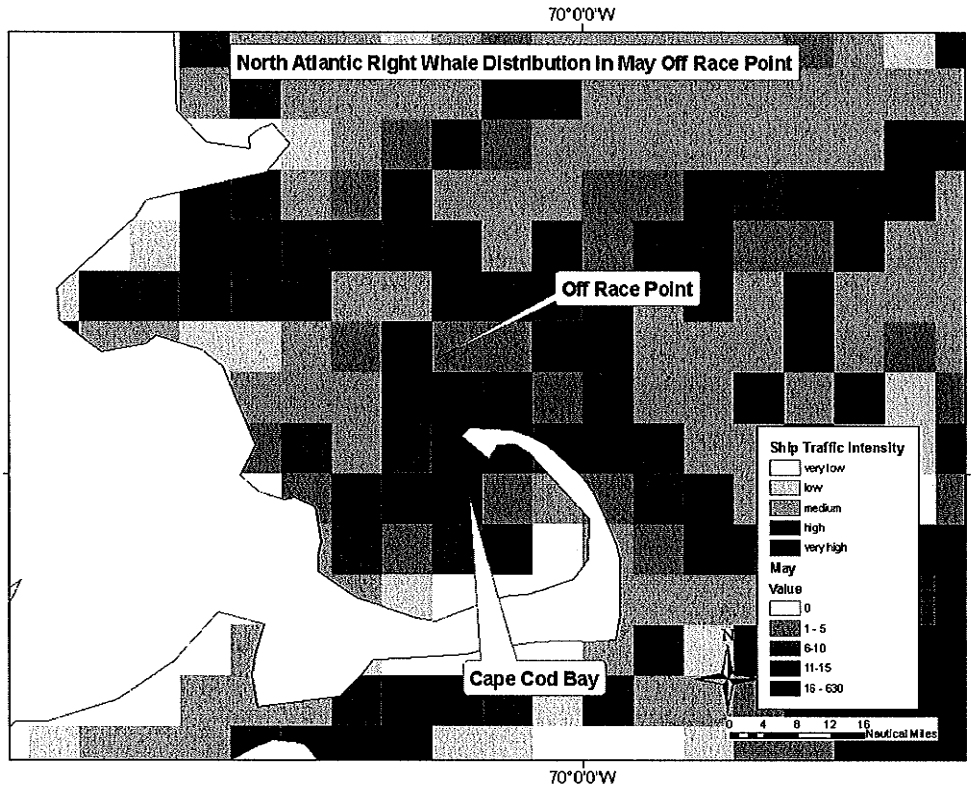
The proposed rule sets up two regimes for the mid-Atlantic – static and dynamic management. In pertinent part, the proposed rule provides that vessels shall travel 10 knots or less in the period November 1 to April 30 each year ... within a 30-nautical mile (nm) (55.6 km) radius" of "the center point of ... [major] port entrance[s]." We have used descriptive and regression analysis of historical Right Whale Consortium data (through 2004), including survey and opportunistic data, in SPUE and non-SPUE formats to examine the migration of right whales in the mid-Atlantic.

First, looking at northerly migration we determined that right whales in the presence of one or more calves migrate past the Florida-Georgia border ***on average*** around March 15 and reach the tip of Long Island around April 8. We also generated standard errors of the latitude predictions.
Using a range of three standard deviations, we can predict the mean latitude on any given day during this migration within ± 2 to 3 days. Our analysis also suggests that right whales without calves depart 3 to 6 days earlier, suggesting an overall mean departure date of approximately March 13 (as there are relatively similar numbers of observations of right whales in the presence and absence of calves). When we look at the data descriptively, we determined a modal departure period of March 7-11 (using the FL-GA border as our departure criterion) and that right whales departure varies from around March 2 to March 31. This suggests that the ***actual variation*** in right whale northerly migration is ~± 15 days. In addition, given that right whales travel at approximately 3-4 km/hour, a right whale that is migrating from the south and that arrives at the entrance of a major port could have been more than 30nmiles from that port during the same day.

Several things are apparent. First, the period of protection for the northerly migration should extend to May 1 rather than April 1. Second, NOAA should use this information to direct and stratify survey efforts in the mid-Atlantic. Third, the 30nmile buffer's protection is limited. And thus, NOAA should consider employing spatial and temporal management windows within the mid-Atlantic migratory corridor during which speed restrictions would be imposed over a wider significantly wider swath than 30 nm around ports as presently contemplated. These temporal windows, however, would be much shorter than the approximate half year window proposed by NOAA, be tailored to individual ports rather than apply throughout the entire corridor, and be rolling. Because mean latitude predictions can be generated on a date-specific basis, and the migration for the most part can be pinpointed within ± 15 days, 30-day precautionary date-range specific speed reductions could be instituted for ships entering, leaving and traversing major mid-Atlantic port complexes. Similar analysis can be undertaken for the southern migration, although the data is much more sparse and the confidence intervals much wider.

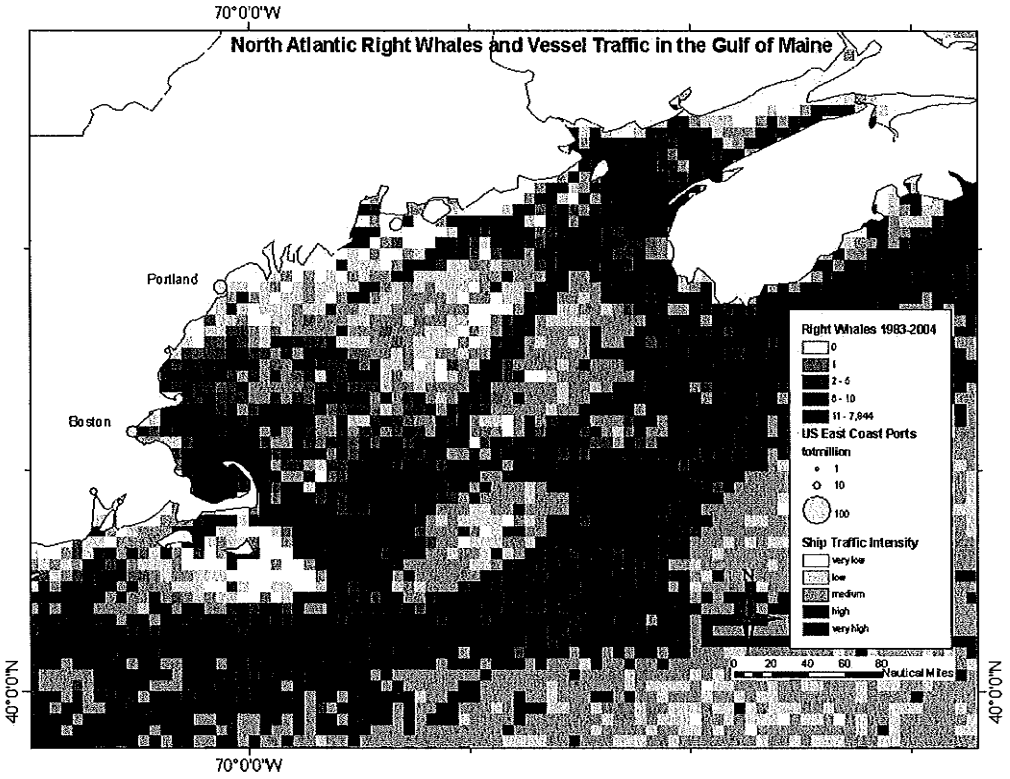
3. Extension of the SMA time period near Race Point

The current DEIS considers a Seasonal Management Area in the region known as Off Race Point for the period from March 1 – April 30. While we agree that this area is critical for right whales, our research indicates that the proposed management window may be too narrow for right whale safety. Opportunistic and survey data indicate that right whales are present in this area outside of the time period recommended in the DEIS. Specifically, these data suggest that right whales utilize this area in the month of May as revealed in the figure below depicting North Atlantic right whale distribution off Race Point during May.



4. Gulf of Maine

The current DEIS and Proposed Rule do not recommend any speed restrictions or re-routing measures for the Gulf of Maine. Opportunistic and survey sightings data from the Right Whale Consortium indicate that this region is utilized by North Atlantic right whales. Further, the Gulf of Maine hosts several of the areas busiest ports including Portland, whose shipping traffic intensity and annual gross tonnage parallels the port of Boston. Additionally, the Gulf of Maine is host to several smaller but active cargo ports including Searsport and Eastport. Therefore, right whales present in the Gulf of Maine are very likely to encounter large vessels transiting through this area. Subsequently, we recommend that the Agency consider similar speed restrictions in the Gulf of Maine as those in the Mid-Atlantic.



5. Consideration of other large whale species

The DEIS notes that North Atlantic right whales are not the only species of large whales affected by vessel collisions. Indeed, humpback, fin, and minke whales are among the large whale species also impacted by strikes along the Atlantic coast of North America.[1] While the DEIS acknowledges that other large whales may benefit from the proposed speed restrictions if their distributions overlap with right whale critical habitat, the DEIS does not consider that the proposed alternate routes may negatively impact other species if their distributions fall outside of right whale habitat. Opportunistic and survey data on other whales species is maintained by the Right Whale Consortium; and there may be other data sources as well. Therefore, we recommend that the DEIS analyze potential negative impacts on other species of large whales if the proposed speed restrictions are implemented and vessels transiting near these areas choose alternate routes.

6. Other Considerations

The DEIS does not consider the potential benefits of speed reductions in terms of fuel economy and reduced costs of operations. Although vessels transiting through management areas may realize some increase in time and/or cost, the economic benefits associated with reduced fuel use may partially offset longer voyage costs; this phenomenon is not fully explored or discussed in the current DEIS.

Additionally, the DEIS may benefit from a more holistic approach to marine vessel traffic by including federal vessels in the current proposed regulations as opposed to creating separate measures for this sector of the fleet.

Respectfully Submitted,

Jeremy Firestone James Corbett Shannon Lyons

[1] Laist, D. W., Knowlton, Amy R., Mead, James G., Collet, Anne S. and Podesta, Michel (2001). Collisions between ships and whales." Marine Mammal Science 17(1): 35-75.

WDCS
Whale and Dolphin Conservation Society

Dr. David Cottingham
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Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

01 October 2006

Re: Right Whale Ship Strike Reduction DEIS

Dear Dr. Cottingham:

On behalf of the more than 370,000 members and constituents of the Whale and Dolphin Conservation Society (WDCS) and Oceana, we would like to offer the following comments regarding the National Marine Fisheries Service's (NMFS) Draft Environmental Impact Statement (DEIS) to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy [71 FR 38640].

First of all, we appreciate the efforts by the NMFS to pursue the enhanced protection of critically endangered North Atlantic (NA) right whales. As stated in the DEIS: "A continued lack of recovery, and possible extinction, will occur if deaths from ship strikes are not reduced." And "Today, the right whale population is sufficiently fragile that the premature death of a single mature female could make recovery of this species untenable (for biological reasons, the number of reproductive-age females is more essential to a species' ability to maintain itself or grow than the number of males)"[p.1-2]. As such, we believe implementing a strategy to reduce the threat of ship strikes is long overdue and acknowledge the publication of the DEIS as a necessary step in this process.

While we commend NMFS for the data analyses undertaken and utilized in the DEIS, we have a number of concerns with the document including, but not limited to: selective use, or omission of available data; selective illustrations of data tables; ambiguous conclusions; and uncertain logic as to how the Alternatives were considered. Our comments will largely focus on Sections 1-4 of the DEIS, but these general concerns are applicable to the document as a whole. We have attempted to condense our comments using examples of our concerns, rather than demonstrate them individually in each section. These concerns are not listed in order of importance and should not be viewed as such.

Selective use, or omission, of available data:

In a number of places, throughout the document, available data are either not considered fully, or not at all. Following are examples of where we feel this has occurred.

1. No maps/tables of right whale distribution or ship strikes.

Since the mandate of the document is to analyze the relative benefits to the species and the degree of economic impact caused by instituting a NA right whale ship strike reduction policy, we question why the only figure in the document to illustrate right whale sightings is Fig. 2-15, a plot of baleen whale density in the vicinity of the Stellwagen Bank National Marine Sanctuary. We believe it is difficult to evaluate the effectiveness of the proposed Alternatives when right whale sightings are not included, or overlaid, on the figures where the Alternatives are plotted. We also believe a map showing where known strikes have occurred, or carcasses located (with associated drift pattern analyses) should also have been included.

Furthermore, we question why a table of known strikes and serious injuries to right whales was not included. This is of particular concern as data included in the discussion may not be accurately represented. For example, page 4-12 of the DEIS says "In 2004 and 2005 there have been four instances where one ship strike resulted in the death of both the pregnant female and the fetus" but no citation is offered. This is inconsistent with the data we have tabulated (Table 1) and we ask NMFS for clarification.

The DEIS (4.1.1.1) also states that there were two known ship strikes in 2004 but does not consider a third mortality in December of 2004 for which the carcass was not retrieved (Table 1). Even NMFS acknowledges in the DEIS, that "based on a recent estimate of the mortality rate and records of ship strikes, scientists estimate that less than a quarter (17 percent) of ship strikes are actually detected" (Kraus et al. 2005). While we acknowledge that the above mentioned mortality can not be documented as a ship strike, we are concerned that its omission may underestimate the impact on this species. Since the carcass was not retrieved for necropsy, we do not feel that ship-strike can be ruled out as a cause of death, and this mortality should be noted in the DEIS.

2. Inconsistent information regarding species.

The information in the provided in the box on page 1-1 is not consistent for the three species mentioned. While abundance, distribution, and IUCN population status are considered for Southern right whales, they are not included for either the North Pacific or North Atlantic populations of the species.

In Section 3, impacts on other species are not listed consistently. For instance, anthropogenic threats are taken into consideration for sea turtles and manatees yet no threats to bottlenose dolphins or sea birds are considered in the DEIS discussions for those species.

3. Inconsistent information regarding data analyses.

We point out that NMFS is obligated to analyze equally for all alternatives and we question why the information in the document is inconsistent. For example:

- The Data Tables in section 4 are inconsistent. Data Charts 4-9 and 4-10 do not indicate they are specific for a speed of 12kts while 4-19 says the presented data are calculated for 12 kts.
- Data Chart 4-42 considers the estimated economic impacts for Alternatives 2, 3 and 6 only. It is unclear why Alternatives 4 and 5 are omitted.
- Section 4.4.1.7 -Comparison of Direct Economic Impacts by Alternative- indicates the NMFS compared for data for 2003 and 2004 yet the text only discusses 2003. However, on page 4-67, when discussing the impacts of alternate speeds, it appears that only 2004 data are considered.
- Section 3.3.3.2 -Air Pollutants from Marine Vessels- describes pollutants from marine vessels and presents a table (3-7) of emissions at normal cruising speed. It also notes that speed is one of the factors influencing emissions. However, we could not find in this section any reference to potential changes in emissions (either positive or negative) based on the proposed speed restrictions of 10, 12, or 14 kts.
- Appendix C- the COLREG demarcation lines are given but not referenced to figures in section 2.
- Page 4-7 states that "a reduction from 18 to 12 knots would give whales an additional 2.6 seconds to avoid the vessel in this flight process" but no analyses is done to calculate the time for 14 or 10kts.

4. Conflicting or imprecise information.

In section 1.1.1, the DEIS states that "International protection for the right whale began in 1935 when the Convention for the Regulation of Whaling placed a ban on commercial whaling." While it is true that commercial hunting of right whales occurred at that time, a general ban on commercial whaling of other species did not go into effect until 1986.

We acknowledge that the statement referring to the whaling ban was meant to reflect only right whales but, as written, we feel it can be misinterpreted and, therefore, calls into question validity of other statements within the document such as the statement on 3-20 which reads "mysticetes feed on zooplankton at the bottom of the food chain". While some whales, such as right whales are planktivorous, many are not. This is particularly significant considering management for pisciverous species, such as humpback whales, which are also over PBR.

5. Right Whale Habitat underestimated.

The DEIS states that "the habitat for North Atlantic right whales extends from southern Canada to Northern Florida". While this is the area considered for the preferred Alternative (6), we believe that sightings data exist to demonstrate the habitat range exceeds that mentioned. First, the Southeast Critical Habitat (CH) for NA right whales extends through mid-Florida. Second, sightings have occurred south of Critical Habitat and into the Gulf of Mexico (Figure 1) (RWVN 2004). While we acknowledge that these sightings may not occur regularly, they are, none the less, significant. Particularly, considering the January 2006 transit of a mother and calf into the Gulf of Mexico appears to have resulted in the calf being struck by a vessel (RWN 2006). Sightings of mothers and calves in critical habitat as far south as busy Port Canaveral are not uncommon, yet no protective measures are proposed for this area.

6. Compliance and effectiveness of current management practices are not discussed .

Section 1.2.1.2 – Mandatory Ship Reporting System (MSRS)-discusses the requirements of this system but does not include any estimates of the rate compliance. However, section 2.3.6 -Voluntary Measures- mentions "the relatively low compliance rate for the MSRS (sec. 1.2.1.2)". A fact, we believe, is not adequately addressed when section 1.2 states the proposed right whale strategy will be "additive" to the existing strategies, of which the MSRS is a part. This implies the existing strategies have value yet, the DEIS does not include any analyses of compliance or success of the existing strategies. However, while the DEIS does not cite these statistics, the proposed rule cites Moller et al. (2005) stating that "a study of mariner compliance with NOAA-issued speed advisories in the Great South Channel reported that 95% of ships tracked (38 out of 40) did not slow down or route around areas in which right whale sightings occurred". If these strategies are to be additive, and funding is limited, then it is unclear why the DEIS does not at least estimate the effectiveness of existing programs, yet implies they will continue as part of each proposed Alternative. We also question the effectiveness of the other current management efforts and believe the effectiveness of each should have been evaluated as part of the DEIS.

7. Incomplete consideration of foraging data.

According to the DEIS (3-5), "whales obtain most of their food energy (91.1 percent) by feeding during deep dives, and the remainder (9.9 percent) through surface feeding (Goodyear, 1996). While we do not dispute the accuracy of Goodyear (1996) we do question how it is presented within the document. The Goodyear study was conducted in the Bay of Fundy, not in Cape Cod Bay, where surface feeding is known

to occur more regularly (PCCS 2006). Furthermore, results from Baumgartner and Mate (2003), also in the Bay of Fundy, showed contrasting data in comparison to Goodyear (1996). This likely indicates that foraging behavior is not uniform and inter-annual variations may occur. This should be noted in the DEIS, as near surface feeding may result in a higher risk of ship strike. Interestingly, the contrasting results of these studies was considered by NMFS in the document entitled *Improving Right Whale Management and Conservation through Ecological Research* (2004) but not in the DEIS.

7. Stellwagen Bank National Marine Sanctuary Boundaries misrepresented.

Section 3.3.1.2 of the DEIS- Gulf of Maine/George's Bank (NEUS Region)- indicates that Jeffreys Ledge and Stellwagen Bank are both within the Sellwagen Bank National Marine Sanctuary. While we acknowledge that the Sanctuary does include a small portion of the southern end of Jeffreys, it does not encompass all of it. The Sanctuary boundary is marked by the following coordinates, which indicate the northeast, southeast, southwest, west-northwest, and north-northwest points: 42_45'59.83"N x 70_13'01.77"W (NE); 42_05'35.51"N x 70_02'08.14"W (SE); 42_07'44.89"N x 70_28'15.44"W (SW); 42_32'53.52"N x 70_35'52.38"W (WNW); and 42_39'04.08"N x 70_30'11.29"(W) (NNW) (SBNMS 2006).

We are concerned about this inaccuracy as some may perceive that Jeffreys Ledge is afforded additional protection through the National Marine Sanctuary Program. Except for Dynamic Managed Areas (DMAs) (about which we express concerns later in our comments) there are no other mechanisms for protecting most of Jeffrey's Ledge, an apparently important habitat for NA right whales. While some summer sightings of right whales have been documented on Jeffreys Ledge, more consistent fall sightings (October through December) indicate it may be an important feeding area (Weinrich et al. 2000). This area is adjacent to Portsmouth, NH. According to the NH port authority- the Portsmouth port services Liner, bulk carriers, passenger ships, container ships, feeder vessels and barges (Portsmouth 2006) thereby presenting a significant ship-strike risk to whales on Jeffreys Ledge.

Comments Directly Relating to the Proposed Alternatives:

While the following section also questions how data are utilized, or omitted, they pertain directly to the Proposed Alternatives and, therefore, have been included in a separate section.

1. Unspecified variations between the proposed alternatives.

The differences of distance and dates between the proposed Alternatives appear to be arbitrary and no rationale is provided for these variations. For example, in Alternative 3, the proposed speed restriction in the mid-Atlantic region is 25nm from shore and is coast wide from October 1 through April 30. However, in preferred Alternative 6, the mid-Atlantic proposed area covers a greater distance from shore (30nm) but is not coast wide (it is port specific) and restrictions are in effect for less time (November 1-April 30). Similarly, times and coverage are different for the Southeast region. In Alternative 3, the speed restrictions are proposed to be in effect from December 1- March 31 throughout Critical Habitat (CH). However, in Alternative 6 they are proposed to be in effect for a longer period of time (November 15-April 15) but are less inclusive in area and do not cover the entire CH region. While the Off Race Point and Great South Channel areas are afforded year round protection in Alternative 3, they are seasonal in Alternative 6. And in Alternative 4, the proposed timing of the ship routing is two weeks shorter than the measures proposed in Alternative 6. There is no explanation provided for these inconsistencies.

Furthermore, it is not clear whether the Cape Cod Bay restrictions are included in Alternative 3 as they are in Alternative 6. The area chosen for Alternative 3 appears to be the same areas included in the proposed Atlantic Large Whale Take Reduction Plan (ALWTRP) (yet to be published) for Northeast Regional measures (figure 2-13 appears to be a duplication of the map used in the ALWTRP FR notice RIN0648-[AS01]). We point out that Cape Cod Bay is not included in the proposed expanded SAM zones in the ALWTRP, as the Bay is already in compliance regarding fishing practices. However, this would not be the case regarding ship speeds so it is unclear why the Bay would not be included as part of Alternative 3 for the ship strike reduction strategy. If NMFS intends it to be included, then this is not clear in the explanation provided.

2. Proposed speeds considered are not consistent with findings from available research.

The speeds considered in the DEIS are 10, 12 and 14 kts. We question why 14kts was considered as a potential speed when, on page 4-6 of the DEIS, NMFS notes that "the authors concluded that most deaths occurred when vessel was traveling in excess of 13 kts". The DEIS goes on to say that the probability of "death increased from 45 percent to 75 percent as vessel speed increased from 10 to 14kts". Fourteen knots is also inconsistent with a report entitled Vessel Traffic – Management Scenarios Based on Recommended Measures to Reduce Ship Strikes of Northern Right Whales which was submitted to NMFS (Russell et al. 2003). We were unable to find any

information in the DEIS which supported a 14 kt restriction over a 13 kt restriction. NMFS provides no justification for having chosen this speed.

3. Data presented are not qualified.

We do not argue the validity of the data presented indicating the frequency of ship strikes in the NEUS, MAUS and SEUS. However, we are concerned as to how the Alternatives have been modeled using these data. For example, the MAUS risk may be higher if one considers the amount of time right whales spend in the NEUS versus the MAUS or the numbers of right whales in the NA compared with the SEUS. We believe these data must be interpreted in light of effort. While effort is extensive in most of the SEUS, even NMFS acknowledges the difficulty of surveying year round in the NEUS and surveys are extremely limited in the MAUS. Therefore, carcass detection may be biased by surveys, recovery and necropsy.

We also question why the DEIS did not analyze relative risk in the regions based on whale residency and vessel density. One would assume the likelihood of striking a whale moving through an area would be lower than in an area where an animal is utilizing that habitat for extended periods of time. However, 25 percent (2/8) of the ship-strike related mortalities since 2004 (Table 1) occurred in the mid-Atlantic. The DEIS even states that the MAUS "has the heaviest vessel traffic of the three regions on the East Coast".

Furthermore, while we appreciate the consideration of positive impacts afforded to other species as noted in the DEIS ("endangered fin and humpback whales would benefit the most from the implementation of the strategy's operational measures because they are the most commonly struck large whale species that occur in the western NA") we feel it remiss that the DEIS does not attempt to qualify these data. While these species are most frequently documented, other whales, such as minke and sei whales, may be struck further out at sea, or sink immediately after being struck, and strikes of these species may be underrepresented.

4. Analyses are incomplete and may not adequately address risk.

Section 1.3-Operational measures- states that the "smallest vessel involved in a fatal collision with a right whale was an 82' vessel". However, the document does not state that the said vessel was a USCG vessel and would therefore be exempted from the plan. Nor does the DEIS include the March 05, 2005 strike from a 43' vessel that resulted in a serious injury and likely a mortality (NOAA 2005, Cape Cod Today 2005).

Furthermore, in spite of previous comments questioning the level of protection offered by the timing of the Off Race Point restrictions, the proposed measures in the

DEIS (March 1 through April 30) (2-7) still do not provide protection for whales entering into Cape Cod Bay (HSUS 2004) through the waters off Race Point. Furthermore, these times appear to be different than the timing proposed in the ANPR which was April 1-May 15 (FR 2004). Yet, the DEIS offers no analyses to justify the lack of protection for whales entering the Bay, nor explanations regarding the changes in regulatory times for the proposed Off Race Point area.

5. Funding cuts are not considered in the DEIS.

Section 1.2-Proposed North Atlantic Right Whale strategy- says the proposed rule will be additive to existing measures, implying that existing measures will continue at current levels. The DEIS also states that additional measures are needed for NMFS to fulfill its responsibility. However, we did not find any analyses taking into consideration the impact of likely potential funding cuts nor how the pending Right Whale Research EIS may impact these proposals.

The current Administration has proposed a 25% ($2 million) reduction in the right whale budget for FY2007 which will likely result in reduced effort for aerial surveys and necropsy effort (RWN 2006). Both of these critical measures underpin current right whale research and conservation work and are assumed to continue as part of the proposed Alternatives. However, it does not appear that the DEIS addresses how potential cuts in funding will impact existing measures (including ongoing research, conservation, education, etc) which NMFS's acknowledges, are already insufficient as sole protection measures.

6. Dynamic Managed Areas (DMAs) are insufficiently addressed within the DEIS.

We do not believe the DEIS adequately addresses the functioning of DMAs. According to the DEIS a DMA will be triggered by "a single reliable report from a qualified individual" or "a concentration of three or more right whales". However, it is unclear as to whether the single reliable report must be one individual reporting all three whales. Would three separate reports of single unique whale from different individuals be considered as three whales? How would a cow/calf pair be considered, as a single event (as it would be in a stranding) or as two individuals?

We also have questions regarding the DMA trigger for the MAUS. According to the DEIS, a DMA could be triggered by "a whale within a mid-Atlantic 30nm (56km) zone and the whales show no evidence of continued coast-wise transiting (e.g. they appear to be nonmigratory or feeding)". However, it is unclear how one determines whether the animal is non-migratory or migratory. We do not believe that a moving whale necessarily implies it is "migratory" as is evidenced by the movement of whales throughout their feeding range. Additionally, we are not clear as to how the DEIS analyzed the increased risk to a whale that is potentially feeding versus one that

is mobile. This is of particular concern as the DEIS acknowledges that surveys, which are needed to trigger a DMA, occur less frequently in the MAUS region. Given the critical status of this species, we feel the DEIS should have examined these criteria, which may point to greater potential risk to non-feeding whales than is acknowledged in the DEIS.

We were also not able to find, in the DEIS, whether the triggers for DMAs were exclusively visual, or could include acoustical documentation of whales in an area. For example, the DEIS states that a DMA would be terminated if "whales are no longer present in the zone". This technology needs to be considered, as research indicates that whales may be seen, and not heard, in an area or visa versa (Cornell 1995). Passive acoustic recordings of right whales within the Stellwagen Bank National Marine Sanctuary demonstrated that more whales were documented in the area than were reported by the aerial Sightings Advisory System (Dickey et al. 2006).

The DEIS does not appear to discuss the time necessary to implement a DMA and resulting affect on potential risk reduction. For example, it currently takes NMFS an average of almost two weeks to implement a Dynamic Area Management (DAM) restriction under the ALWTRP. The DEIS does not suggest that the procedural requirements will be markedly different for DMA as opposed to a DAM. Assuming this is true, it could take two weeks to implement a DMA. Yet, the DEIS does not analyze the consequences of a two week delay in implementing a risk reduction strategy via a DMA.

Furthermore, the DEIS does not take into account proposed cuts in funding for aerial survey funding when considering the value of DMAs. According to the DEIS, "the probability of whales being sighted is contingent on the available resources at the time, including being available to fly aerial surveys (which are weather limited), funding, and the timing of the publication of the location of the DMA in the Federal Register. Therefore, any limitations in these resources could prevent or slow the sighting of whales that need protection." It goes on to say that "the effectiveness of DMAs in protecting right whales in the NEUS is limited by an inability to locate them by aerial surveys when rough seas and extreme weather conditions prevail" and "aerial surveys are expensive, logistically difficult and cannot assure 100 percent coverage of all areas at all times". These concerns, along with the potential cuts in funding (as mentioned previously) do not appear to be adequately considered in the DEIS. Since DMAs are an important part of the preferred Alternative, we feel strongly that these considerations should have been thoroughly addressed in the DEIS.

7. Sovereign Vessel Exemptions are not justified.

While we do not dispute that, for certain missions of security, or human safety, sovereign vessels should not abide by the proposed actions, it is totally unclear and totally lacking in explanation and justification as to why government funded research vessels are included as exempt under the sovereign vessel exemptions.

Additionally, the DEIS does not clarify why sovereign vessels, under normal operation (non-emergency) simply requested to voluntarily comply and are not mandated to follow the proposed measures when their missions are not compromised. This is of substantial concern given the fact that almost one-quarter (31/134) of reported strikes, where vessel type was known, were attributed to sovereign vessels (Jensen and Silber 2004). We do not dispute that a reporting bias likely exists, as sovereign vessels are obligated to report collisions, but this does not diminish the fact that these vessels are involved in fatal strikes of large whales particularly when apparent mortality, or serious injury, were the result for more than half (18/31) of these reported collisions (ibid).

It is also unclear why the designated measures for military vessels do not coincide with those proposed in the DEIS. For example, in Appendix One, the DEIS states that the Navy annual message occurs prior to calving season (December 1-March 30) but extends an additional day for the USCG (Dec 1-March 31). Yet, neither of these times, coincide with the measures proposed in the preferred Alternative (6) which would be in place from November 15 through April 15. Similarly, the USCG transiting the GSC is alerted from March 1 through May 30 but the preferred Alternative (6) proposes measures for this area from April 1-July 31. And, protective measures regarding military vessels do not match temporally, or spatially, in the MAUS with the preferred Alternative. Appendix One states that precautionary measures for military vessels include only the area between Cape Henry to Cape Hatteras between Jan 1- March 31 out to 20nm. Yet Alternative 6 proposed measures in the MAUS (NY to SC) from November 1 through April 30 out to 30nm.

Lastly, we could find no justification of why NMFS recommends only a 100-yard standoff distance, when in sight of a right whale, for the USCG during normal operation, when the designated regulation is to standoff 500 yards.

8. Ambiguous suggestions within the Alternatives.

- In the DEIS, NMFS states that they intend to send a proposal to the IMO for an Area to be Avoided (ATBA) adjacent to, and east of, the Boston TSS but there is no indication as to when this will happen or how this was considered in the DEIS.

- Section 1.2.1.6 of the DEIS mentions "the possibility that real-time environmental data layers (including right whale advisories) could be incorporated into NOAA's electronic Navigational Charts (ENCs)" but doesn't clarify as to what the "possibility" means to the DEIS and the plan.

- The DEIS mentions that the current measures will supplement existing measures including negotiating "a Right Whale Conservation Agreement with the government of Canada" yet no agreement currently exists or is considered in the DEIS.

No Cogent Explanation as to why Alternative 6 is the Preferred Alternative:

We have further separated out this comment as we believe it is the most significant.

On page 4-1 of the DEIS, NMFS states that "one can assume that each action alternative has some potential to prevent at least one death or serious injury a year, which would have a positive impact on the population" but there is no attempt to quantify that assumption. This is particularly alarming when Alternative one (status quo) is clearly not adequately effective and Alternative 2 (DMAs alone) can not result in positive impact for reasons stated previously. Furthermore, NMFS contradicts itself when it goes on to say "the No Action alternative would have significant, direct, long-term, negative effects on the North Atlantic right whale population."

We believe that the section titled Comments on the Alternatives (1-22) is ambiguous and may be misleading. It says that "there was broad support for Alternative 6" and "broad agreement among environmental and non-governmental organizations that Alternatives 2,3 and 4 would not be sufficient" and "several commenters recommended Alternative 5 as the most effective means for reducing ship strikes but also indicated Alternative 6 was reasonable as the minimum for protective measures". This appears to be self serving. The DEIS does not clarify where the comments originated, or how "broad" the support was or the definition of "several". The conclusion that can be drawn is that only selective evidence is being put forward to support the NMFS preferred Alternative (6).

NMFS appears to use semantics to support its conclusions in Section 4.3.5.4 when it discusses acoustic impacts. The DEIS reads, when discussing noise levels from Alternative 5 (the most protective) "any changes in ocean noise levels resulting from implementing Alternative 5 would be minor". However, for Alternative 6 it states that there would be "minor, direct, long-term positive impacts on ocean noise levels in the affected areas" Since both Alternatives have a speed restriction which is seemingly the source of the reduced noise, the underlying reason for this discrepancy in impacts is unclear.

According to the DEIS, when discussing the significance of costs on the shipping industry, NMFS states "these results indicate that implementation of the proposed operational measures would have an insignificant impact on the revenues and hence the financial performance of the vessel operators calling at East Coast ports." First, these analyses are done only assessing a speed of 12 knots (p. ES-7). Secondly, the conclusion indicates that the impact would be insignificant for any of the proposed alternatives. As such, it is unclear as to how NMFS chose Alternative 6 as a preferred alternative when they themselves admit is it less protective to right whales than Alternative 5 ("it also provides the highest level of protection to the right whale population") [p.2-13].

NMFS states, in the DEIS that "Alternative 5 would provide the highest level of protection to the right whale population and the measures mentioned above cover larger areas for longer periods than the other alternatives. This alternative would significantly reduce the amount and/or severity of ship strikes. If deaths and serious injuries are reduced, a higher probability exists that the population growth rate would increase. An

increase in the population growth rate would increase the number of whales in the population, which would bring them closer to recovery and farther from extinction." And goes on to say "Alternative 6 is not as beneficial to the recovery of the right whale population as Alternative 5". However, it is more beneficial to the recovery goal than adopting Alternatives 2, 3, or 4 as stand-alone measures".

We do not dispute that alternative 5 and 6 are preferable to Alternative 2, 3 or 4. What we do dispute is that it is impossible from the DEIS to come to the conclusion that Alternative 6 should be the preferred Alternative over Alternative 5. The evidence and analysis is absent to lead the reader to this conclusion for all the reasons stated above.

This is particularly perplexing when NMFS undermines its own choice in the DEIS. Section 4.1 Biological Impacts on the North Atlantic Right whale states "the operational measures proposed for the SEUS region, the sole calving ground for right whale mothers and calves, in particular, would play an essential role in reducing the number of female (and juvenile) deaths, a key component to the recovery of the population" and "given the right whale's low fecundity, implementation of the operational measures in the critical habitat for calving is crucial to the survival of the species." Yet, the preferred Alternative (6) does not include all of the CH in the SEUS, while Alternative 5 does include SEUS CH in its entirety.

Conclusion-

As cited in the DEIS, "This [current] increase in mortality rate could actually reduce the population growth rate 10 to 12 percent per year (Kraus et al. 2005)". Because this situation is so dire, we feel that NMFS is obligated to thoroughly consider, and examine, all available data in the DEIS. We do not feel this was done. Most importantly, we feel

the DEIS does not adequately analyze, let alone justify, Alternative 6 as the preferred Alternative when Alternative 5 is more protective of this critically endangered species.

On this basis alone and taking the precautionary principle, Alternative 5 should be adopted immediately as the preferred Alternative to provide the maximum protection for right whales whilst allowing all the areas identified by the NMFS and inadequately addressed within the DEIS to be worked on and resolved.

As stated previously, we appreciate the long overdue efforts by the NMFS to pursue the enhanced protection of critically endangered North Atlantic (NA) right whales. This protection must be implemented immediately, and utilizing the most protective measures.

Sincerely,

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Table 1

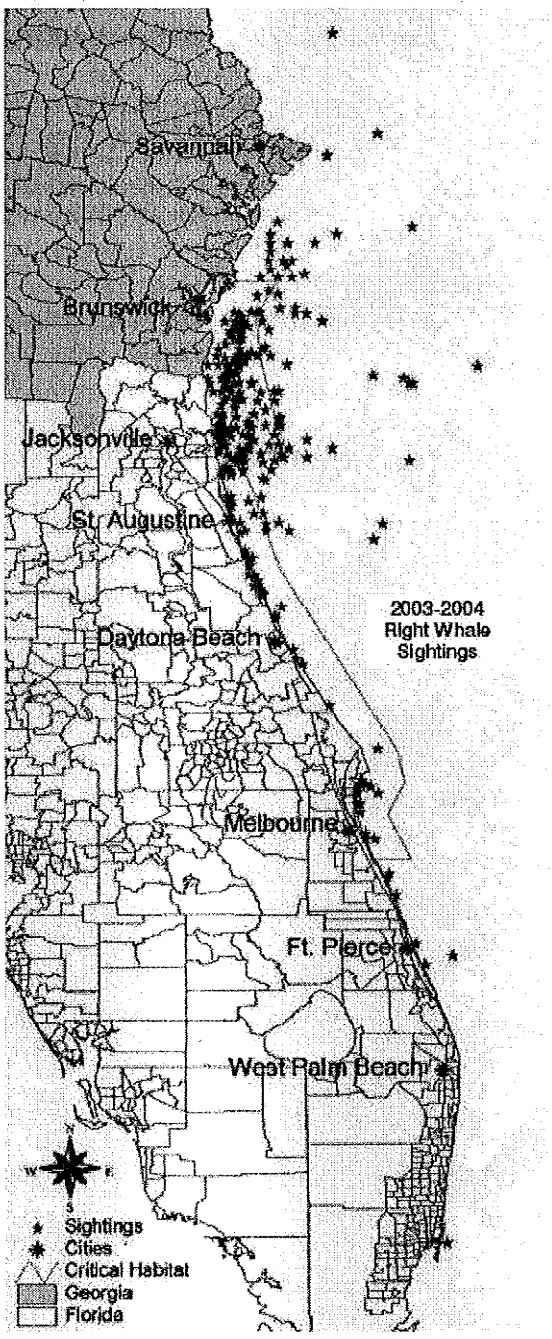
Summary of 2004 and 2006 North Atlantic Right Whale Incidents

Compiled using data obtained from by the National Marine Fisheries Service Office of Protected Resources' Marine Mammal Health and Stranding Response Program, Northeast Regional Office, and Southeast Regional Office with Assistance from the Provincetown Center for Coastal Studies, New England Aquarium and Woods Hole Oceanographic Institution. Information Current as of September 03, 2006.

	Sex	Date	Location	Alive or Dead	Cause of Death
1	Male (calf)	2/3/04	FL	Dead	Unknown
2	Female (adult; pregnant)	2/7/04	NC	Dead	Ship Strike suspected
3	Female (adult; pregnant)	11/24/04	NC	Dead	Ship Strike
4	Unknown	12/9/04	MA	Dead	Carcass not retrieved*
5	Female (adult)	1/9/05	MA	Dead	Carcass not retrieved*
6	Female (adult; pregnant)	1/12/05	GA	Dead	Infection from previous vessel strike
7	Female (adult)	3/3/05	VA	Dead	Entanglement
8	Female (adult)	3/10/05	GA	Injured Likely dead	Ship Strike
9	Female (9yrs old)	4/28/05	MA	Dead	Suspected ship strike
10	Unknown	7/13/05	MA	Alive-Strike	Vessel Strike
11	Unknown	2005	NY	Dead	Carcass found determined genetically to be a right whale. Further testing needed to confirm if this is a new carcass or a documented "floater"
12	Male (calf)	01/10/06	FL	Dead	Ship strike
13	Calf	01/16/06	TX	Alive-Strike	Ship strike
14	Female (Calf)	1/22/06	FL	Dead	Located off of Jacksonville. Gillnet entanglement.
15	Unknown	5/18/06	NY	Dead	40nm West of Moriches, LI. Skin largely missing, head and fluke said to be intact. Sampled for genetics but carcass was not retrieved.*
16	Female (yearling)	7/24/06	NB	Dead	Ship strike. 31.5' dead right whale sloughing skin with 13 prop cuts on right side towed to Galley Beach near Head Harbor Campobello NB.
17	Female	9/03/06	NS	Dead	Ship Strike.

*Carcass not retrieved but ship strike can not be ruled out.

Over 300 Sightings Reported to Ships



The 2003-2004 calving season yielded 311 unconfirmed sightings of right whales. Fifteen mother/calf pairs and 20 individuals were confirmed in the calving grounds. Map created by Lynna Kaucheck.

Fig 1.

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October 5, 2006

Chief, Marine Mammal and Conservation Division
Attn: Right Whale Ship Strike Strategy
NMFS Office of Protected Resources
1315 East-West Highway
Silver Spring, MD 20910

Re: Proposed Rule to Implement Speed Restrictions
Docket No. 040506143-6016-02. I.D. 101205B
and
Right Whale Ship Strike Reduction DEIS
Docket No. 040506143-6016-02. I.D. 101205B

To Whom It May Concern:

I am writing on behalf of the Massachusetts Port Authority (Massport) to provide comments on the *Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales* and the *July 2006 Draft Environmental Impacts Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy (DEIS)*. Specifically, the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) proposed regulations to implement a 10-knot speed restriction on non-military vessels 65 feet or greater in length in certain locations and at certain times of the year along the eastern coast of the U.S. Atlantic seaboard. With respect to Boston, the proposed regulations would restrict vessel speed from January 1 through May 15 throughout all of Cape Cod Bay, from March 1 to April 30, in a 50 nautical mile (nm) by 50 nm box north and east of Cape Cod ("Off Race Point") and from April 1 through July 31 in the Great South Channel. In addition, temporary dynamic management areas (DMAs) would be established based on observed concentrations of whales, with the extent and duration of the DMA varying based on the number of whales observed and the proximity to shipping lanes. The DEIS evaluates a broader range of speed restrictions (i.e., 10, 12 or 14 knots, potentially in a broader area or longer timeframes than in the proposed rule) as well as vessel routing measures.

Massport owns or operates various marine terminals in the Port of Boston, and we actively promote and advocate regarding issues that affect the Port of Boston. Massport has actively participated in various groups and processes focused on protection of the right whale, including representation on the Northeast Implementation Team and the related ship strike subcommittee since their inception. We have consistently advocated for development of measures to minimize ship strikes that: 1) are based on sound science; and 2) minimize the economic impact on the Port of Boston, which generates more than

34,000 jobs and an annual economic impact of $2.4 billion[1]. Based on the data that is available, we do not believe that the proposed speed restrictions will reduce the frequency of vessel strikes of right whales, and in fact some evidence indicates that reducing vessel speeds could increase the likelihood of vessel strikes. Despite the significant degree of uncertainty regarding the potential effectiveness, NMFS has proposed regulations that will have a significant economic impact on the maritime industry in general and the Port of Boston in particular. We believe the economic impacts to the Port of Boston will be far greater than those predicted in the Economic Impact Analysis produced by Nathan Associates, to the point that significant job loss and erosion of the $2.4 billion annual economic impact associated with the Port of Boston could result. The proposed speed limits and vessel routing measures also raise significant safety and environmental concerns that have not been adequately addressed. Additional detail regarding these and our other comments and concerns is provided below.

1. The available scientific data does not support NMFS' contention that reducing vessel speeds will decrease the likelihood or severity of ship strikes of the North Atlantic Right Whale, or that the data supports a 10-knot versus 12- or 14-knot speed restriction. The data set used to support NMFS' recommendation is extremely limited, particularly at 10- to 14-knot and slower speeds, and each of the studies cited in the Proposed Rule to support the speed restriction clearly acknowledges the short comings of the data[2]. We recognize that the Endangered Species Act provides for the use of the "best available data" in making decisions regarding how best to protect endangered species, however it appears that in this case the data is so inconclusive regarding whether or not reducing vessel speed will minimize the likelihood or severity of vessel strikes, and the economic impact of the proposed regulations so great, that the proposed speed restrictions are premature, scientifically unsubstantiated, and could do more harm than good.

Massport and several other maritime industry organizations commissioned a white paper to evaluate the data supporting the proposed speed restrictions entitled *"A Review of the NOAA/NMFS Proposed Rule (PR) to Implement Speed Restrictions, 26 June 2006, and the Corresponding Draft Environmental Impact Statement (DEIS) to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy, July 2006"* (S. Testaverde and J. Hain, 29 September 2006), which has been submitted by

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[1] Based on "Economic Impact of the Port of Boston" study by Martin Associates, February 2006

[2] Pace and Silber (2005) states "the data we examined contained no information about the probability of a ship strike occurring, and this aspect of risk needs further attention" and "the collision data set is relatively small and therefore considerable uncertainty accompanies the empirical distribution function that we provided." Laist et. al. (2001) notes in their conclusions that "anecdotal records provide the only information for evaluating vessel operating factors related to ship strikes. Although such records have significant weaknesses, they merit consideration absent other data." Vanderlaan and Taggart (in press) acknowledge that "the data are admittedly limited and do not incorporate all variables ... relevant to vessel-whale collisions. They are, however, the only published data that include vessel-speed observations. Consequently, the confidence intervals are large, particularly at low vessel speeds (< 10 knots) where there are few observations."

the authors to the official public comment docket in relation to the DEIS and Proposed Rule public comment periods. They found the following:

- The primary publications used to support the proposed speed restrictions are based on data sets that are not statistically significant. The data is based on non-random, "convenience sampling" that is not representative of the actual impact that vessels have on whale populations and is therefore not predictive of future likelihood or severity of whale collisions.

- The data does not support a speed restriction below 14 knots to minimize the likelihood or severity of whale strikes by vessels longer than 65 feet, and there is no evidence to evaluate or discriminate possible effects of speeds between 10 and 13 knots.

- Consideration of vessel speed versus whale collisions involves a complex matrix of inter-related dimensions and probabilities. Although some studies point to possible benefits to whales from vessels traveling at lower speeds, other studies concluded that vessels traveling at higher speeds may: 1) provide an acoustic signature that allows for greater whale response time; 2) push the whale away from the vessel, thus avoiding a possible collision, and 3) reduce the exposure time and associated risk of a vessel/whale interaction. One author (Gerstein et. al., 2005) actually cautioned that reducing vessel speeds without compensating for the acoustical consequences may actually increase the risk of collisions, and may be counter-productive to the protection of whales. Because of the complexity and contradictory nature of the available information, Massport strongly recommends the NNMF conduct additional acoustic and hydrodynamic studies on a wide range of vessels currently in operation prior to enacting regulations to ensure that the regulations will help and not harm the whales.

- The data set only includes three records of vessel strikes of right whales for which vessel speed was known. None of these vessels would be subject to the proposed regulations (one was less than 65 feet long and two were government vessels). In fact, ***more than half of the reported large whale collisions involved vessels that would be exempt from the proposed regulations*** (20.5% by vessels less than 65 feet long, 31% by government vessels and several others in Canadian waters).

Based on the later finding, Massport asks that NMFS explain further its decision to exempt more than 50% of the vessels types that have been involved in historical strikes of large whales from set speed limits. This seems to seriously undermine NMFS' conclusion that a 10 knot speed limit is the best approach to protect the right whale. If this is the case, why not apply the rule to all categories of vessels that have been documented to strike right whales? Federal rules for vessels in routine, non-emergency operations should be identical for commercial and military vessels. There is no federal interest in routine government vessel operations that is greater than a commercial vessel

operator's interest in providing marine transportation services in our free market economy.

Further, NMFS uses the average speed at which vessel strikes occurred to support the proposed speed restrictions. However, it is important to note that the average speed at which vessel strikes occur coincides with the speeds that vessels typically travel. Laist et. al. (2001) states that "most lethal or severe injuries involves ships traveling 14 kn or faster." The Proposed Rule states: "The authors [i.e., Laist et al. (2001)] concluded that most deaths occurred when a vessel was traveling in excess of 13 knots" and that "when the 58 ship strike cases identified by Jensen and Silber (2003) in which vessel speed was known were grouped by speed, the greatest number of vessels were traveling in the ranges of 13-15 knots, followed by 16-18 knots and 22-24 knots." According to Table 4-3 of the Economic Analysis for the Environmental Impact Statement of the North Atlantic Right Whale Ship Strike Reduction Strategy (Nathan Associates, 2006), average vessel operating speeds by vessel types based on various available data sources are as follows:

Bulk carriers	11.6-14.1 knots
Combination carriers	11.6-14.1 knots
Containerships	13-24.6 knots
Freight barges	12-19.2 knots
General cargo vessels	12-18.8 knots
Passenger vessels	16-24 knots
Refrigerated cargo vessels	13-22.7 knots
Ro-Ro cargo vessels	13-24.1 knots
Tank barges	13.2-14.5 knots
Tankers	13.2-15 knots

Based on this data, we would conclude that vessels that struck whales were in fact traveling at typical vessel speeds. There have been few whale strikes at speeds less than 10 knots because vessels do not typically travel at this speed (other than as they enter ports, where whales are typically not present). The data does not provide any indication that vessels moving faster are more likely to strike whales. In fact, the Jensen and Silber data could indicate that ship strikes decreased as vessel speed increased.

We note that the Proposed Rule states, based on Pace and Silber (2005), that "vessels that struck whales were going faster than ships tend to travel in general." However, it is important to note that: 1) Pace and Silber only used the mandatory ship reporting system (MSRS) data, rather than a more extensive data set such as that used by Nathan Associates; and 2) the MSRS data does not include military vessels, recreational vessels or commercial vessels less than 300 gross tons. Since more than half of the vessels involved in ship strikes with known speed were military vessels or vessels <300 gross tons, (including all of the vessels that hit whales in excess of 30 knots, further skewing the average "Collision Speeds" shown on Pace and Silber's Figure 4), one cannot draw any reasonable conclusion by comparing the two data sets.

*2. **Massport supports the Dynamic Management Area (DMA) concept as long as DMAs are triggered and remain in effect based on reliable, real time information on whale locations.*** The recommendation to leave a DMA in place for a minimum of 15 days is too long and could result in vessels routing around an area that the whales have long since left – potentially diverting ships to the area that the whales have moved to! Once a DMA has been designated, NMFS and others should monitor the area closely to track the movement and real time location of the whales. The DMA should expire after 3 days unless subsequent surveys indicate that right whales remain. Lifting of the DMA should be accomplished by marine broadcast and other means of actual notice in addition to or rather than Federal Register publication to ensure prompt communication of changed conditions.

*3. **To the extent that reducing vessel speeds can minimize the impact on right whale mortality, NMFS should propose regulations for non-military vessels consistent with the vessel operating restrictions imposed on U.S. Coast Guard and Navy vessels through the Section 7 consultation process, which are based on the "slow, safe speed standard."*** Massport maintains that any regulations promulgated should require vessels to travel at a slow, safe speed rather than a set speed limit. This allows the vessel operator, who knows the characteristics and limitations of the vessel being operated, to make real time decisions based on weather conditions and other location-specific circumstances as to a safe transit speed. This is also consistent with the U.S. Coast Guard's statement in the May 24, 2006 Port Access Route Study of Potential Routing Measures to Reduce Vessel Strikes of North Atlantic Right Whales (PARS) that:

> "The Coast Guard has found that a key factor in vessel safety is to maintain the ability and responsibility of the ship's master to operate (navigate) a vessel based on surrounding circumstances. Vessel operators must account for a multitude of variables and risks posed by continuously changing elements such as sea state, weather, visibility, vessel condition, and other vessel traffic. Constraining a vessel operator's discretion to act appropriate to circumstances can pose serious risks of collision, grounding, or other casualties with implications for both safety and the greater marine environment."

For over a decade, NMFS has examined the impact of vessel speed on Right Whale mortality with respect to Coast Guard and Navy vessels through the Section 7 consultation process of the Endangered Species Act. Based on information received under the Freedom of Information Act and information provided in Appendix A to the DEIS, vessel operating restrictions for Coast Guard and Navy vessels do not now, nor have they ever, included speed limits or dynamic management area restrictions similar those in the proposed rule. NMFS should utilize its experience in establishing requirements for military vessels in its effort to develop rules for merchant vessels.

The NMFS Biological Opinions issued in 1995, 1996, and 1998 by the Office of Protected Resources examined the potential impacts of Coast Guard vessel operations.

The 1996 Biological Opinion examined speed as a component of Coast Guard vessel operations and specifically declined to establish a speed limit for non-emergency operations. As an alternative to speed limits, the 1996 Biological Opinion provided the Coast Guard with reasonable and prudent alternatives "which if implemented fully and in a timely manner, significantly reduces the Coast Guard's potential to cause injury or mortality to right whale, and therefore, avoid the likelihood of jeopardizing the continued existence of right whales." NMFS required the Coast Guard to use the "slow safe speed" standard.

Existing Coast Guard vessel operating requirements are contained in Law Enforcement Bulletins issued by the Coast Guard. Law Enforcement Bulletin (D1 LEB 05-041) dated April 27, 2005, addresses speed restrictions as follows:

> "Speed Guidance for Non-Emergency Operations: To avoid a collision with a whale, seal or sea turtle during the course of normal operations, Coast Guard units transiting critical habitat, migratory routes, and high use areas as listed above shall use extreme caution, be alert and reduce speeds as appropriate. Appropriate reduced speeds should be based on the factors identified in Rule 6 (safe speed) of reference (c) <the International/Inland Navigation Rules (Commandant Instruction M16672.2d)>. Additional reductions in speed should be considered when a whale is sighted or known to be in the immediate vicinity or within five nautical miles of the vessel. In these situations, vessels shall use those courses and speeds as appropriate, yet navigationally prudent, to avoid a collision with a whale, and if necessary, reduce speed to the minimum at which the vessel can be kept on course or come to a stop."

The requirements for the non-emergency operation of Coast Guard vessels are different than the proposed rule for commercial vessels in that (a) the Coast Guard rules do not address the specific geographic locations addressed in the proposed rule, (b) the Coast Guard rules do not utilize the overly complicated Dynamic Management Area approach, (c) the Coast Guard rules do not impose mandatory speed limits, (d) the Coast Guard rules allow vessel Captains to utilize a speed which is navigationally prudent and considers the safety of the vessel, and (e) the Coast Guard rules contain lookout requirements not contained in the proposed rule. The 1998 Biological Opinion again concluded that Coast Guard vessel activities along the Atlantic Coast are not likely to jeopardize the continued existence of the right whale and other species. It is important to note that these Biological Opinions are not issued in a vacuum of the specific context under consideration, but consider the entirety of activities in the habitat of the right whale. The environmental baseline for the Biological Opinion includes "the past and present impacts of all state, Federal, or private actions and other human activities in the action area..."

The DEIS states that the 1997 Biological Opinion from NMFS concluded that the Navy's operations were not likely to jeopardize the continued existence of any endangered or threatened species under NMFS jurisdiction. The DEIS also discusses a message from Commander, Fleet Forces Command dated December 17, 2004 which provides direction to all fleet units. Navy vessels are required to use extreme caution and operate at a "slow, safe speed that is consistent with mission and safety" within a 20 nautical mile area of designated ports in designated months. These non-emergency restrictions for Navy vessels are far different than the proposed mandatory speed rules for merchant vessels.

On page 36305 of the proposed rule, NMFS explains why federal vessels are exempt from the proposed rule as follows: "NMFS believes that the national security, navigational and human safety missions of some agencies may be compromised by mandatory speed restrictions." No explanation is provided how non-emergency agency operations such as routine transits would be compromised. More importantly, NMFS provides no explanation as to why mandatory speed limits are proposed for merchant vessels when the requirements in place for the non-emergency operation of military vessels have been repeatedly determined by the agency to adequately protect the right whale. The effectiveness of the rules for military vessels should cause the agency to advocate their use for merchant vessels. In regulating commerce, federal agencies should first consider less costly and intrusive measures, particularly when those measures are likely to be equally effective in accomplishing the desired goal.

Neither the preamble to the proposed rule nor the DEIS discuss or analyze the significant differences between the burdensome and costly proposed rules for merchant vessels and the rules which apply to military vessels. Chapter 2 of the DEIS does not address the Navy and Coast Guard vessel operating rules as an alternative. Without an analysis of whether the existing rules for military vessels would be effective for merchant vessels operating in the same waters, the proposed speed restrictions are arbitrary and capricious in that the agency has failed to consider an alternative being used to address a large category of vessels that have historically been involved in whale strikes. There does not appear to be any scientific basis for using a different approach to protect whales from government versus commercial vessels.

4. Vessel safety at speeds of 10, 12 or 14 knots cannot be consistently assured for all vessels and, if imposed, at a minimum must contain a provision for vessel operators to exceed the limit if necessary to ensure safe navigation. In response to Massport's comment on the DEIS scope expressing concern about the safe navigation of vessels at these speeds, NMFS replied: "The USCG has implemented speed restrictions of 10 knots or less; these speeds apparently do not affect maneuverability in most circumstances." If NMFS continues to pursue set speed limits, to which we are opposed, we request that they provide a list in the FEIS (or prior to issuing the proposed regulations through a separate public notice, whichever comes first) of locations where the Coast Guard has proposed 10 knot or less speed restrictions in open ocean areas similar to the areas for which the regulations would apply. We also request that the FEIS provide documentation that the Coast Guard agrees that whatever vessel speed restriction is promulgated will not

affect maneuverability in the areas affected by the proposed speed restrictions even: 1) under various weather conditions (particularly since the SMAs and DMAs are largely in place in the winter and spring months in which high winds and other adverse weather conditions are a common occurrence); and 2) for the range of vessels to which the regulations will apply.

If set speed restrictions are imposed, it is ***imperative*** that they contain a provision that allows the vessel operator to maintain a higher speed if necessary to ensure safe navigation.

5. The earnest pursuit of a technological solution must be a key component of any strategy to reduce ship strikes. The Proposed Rule summarizes NOAA's strategy to reduce the threat of ship strikes. Unfortunately, the pursuit of technological solutions to minimize ship strikes is not even on the list. NOAA continues to dismiss technological solutions on the basis that no proven technology is currently available. Industry representatives have repeatedly indicated that they can avoid a whale if they know its location, yet neither the recommended strategy nor NOAA's and other available resources focus on research and development of potential technological solutions. The foundations of a technological solution are available, and perhaps if funding and research over the past decade had focused on developing technology to reduce the likelihood and severity of ship strikes, we would already see results.

6. We strongly support rerouting of vessels around areas of documented whale concentrations as long as a safe traffic separation scheme (TSS) is proposed. The DEIS and the Proposed Rule discuss the Port Access Route Study (PARS) conducted by the U.S. Coast Guard to analyze various TSSs for Boston. Based on the information provided in the PARS, we strongly support implementation of Option No. 1 because it provides for a significant potential reduction in the likelihood of a vessel/whale interaction while maximizing vessel traffic safety. The PARS recommended Option No. 4, which, according to the PARS report, would provide only a 4.8 percent greater reduction in the likelihood of a vessel/whale interaction compared with Option No. 1, yet it would result in a significant decline in vessel transit safety. In studies of this nature, a 4.8 percent difference is typically within the margin of error of the report findings. Specifically, Option No. 4 reduces the existing TSS by one nautical mile in a highly congested area, which would create a dangerous situation that unacceptably comprises vessel safety and ultimately the environment. Massport and the Boston Pilots raised this concern in a June 5, 2006 comment letter in response to the May 24, 2004 Federal Register notice requesting comments on the PARS. Unfortunately, we later learned that the PARS had been submitted to the International Maritime Organization (IMO) five weeks before it was released for public comment. Neither Massport nor the Boston Pilots have received any response or acknowledgement of the significant public safety and environmental protection concerns that we raised in our June 5, 2006 comment letter and in subsequent correspondence to Coast Guard Headquarters and the IMO, which is inexplicable.

7. The economic impact assessment significantly underestimates the likely impact of the proposed regulations. Although the 2006 Nathan Associates *Economic Analysis for the Environmental Impact Statement of the North Atlantic Right Whale Ship Strike Reduction Strategy* provides a detailed analysis, it has many shortcomings that result in underestimation of the true economic impact of the proposed regulations as well as being difficult for commentors to comprehend the likely impact. For example:

- p. 6 of the Nathan Associates report indicates that "the Area to be Avoided (ATBA) for the Great South Channel and Boston TSS are no longer included in this alternative" (i.e., Alternative 6, the preferred alternative). At the time the Proposed Rule and DEIS were published, the federal government had already submitted the Boston TSS to the IMO for implementation. Accordingly, this is clearly part of the alternative being pursued and the impacts of the ATBA and Boston TSS should be included in the economic impact analysis for the Preferred Alternative.

- The proposed seasonal speed restrictions shown on Figure 4-12 of the Nathan Associates report (Figure 4-8 of the DEIS) and used in the economic impact analysis are far less extensive than those proposed in the Proposed Rule, which was issued prior to the DEIS and should have been consistent. Specifically, the Great South Channel restrictions from April 1st through July 31st appear to be omitted from the analysis, resulting in severe underestimation of the economic impacts.

- Despite the fact that the proposed 10-knot speed restriction regulations were released prior to the DEIS, the economic analysis in the DEIS focuses on a 12-knot speed restriction, which is associated with significantly less economic impact than the 10-knot limit. We note that Exhibit F focuses on Alternative 6 with the 10-knot limit, but in far less detail than the analysis for the 12-knot limit.

- We appreciate the attempt to quantify likely indirect economic impacts, but in many cases believe that the true impacts are still not quantified, in part due to faulty underlying assumptions that are applied equally to all ports. For example, the indirect economic impact analysis considers diversion of traffic to other ports. This analysis is based on the assumption that "a good portion of a port's traffic is often considered captive to that port." This may be true for certain types of port traffic in certain ports, especially for larger ports such as New York, but it certainly is not true for container and cruise traffic in the Port of Boston. If the economics do not work, these vessels will not call on Boston. The proposed speed restrictions will likely tip the economic scale making it less viable for at least some of the container and cruise lines to call Boston, causing them to divert to other ports. The Nathan study estimates that 15 percent of vessels may divert from Northeast ports during the period that the speed restrictions are in place. However, a container shipping line will not divert from Boston for the 4 to 5 months that a speed restriction is in place; rather they would drop Boston from

their call rotation altogether, as lines would not receive market support for partial-year services. The Port of Boston currently receives two trans-Atlantic services from the Mediterranean Shipping Company (MSC). Boston is the first port inbound from North Europe on one service and the last port outbound on the Mediterranean service. Both vessels call New York, Baltimore and Norfolk and if the regulation is enacted will have to slow down as they approach and depart each port during the periods that seasonal speed restrictions and DMAs are in place. This will result in significant vessel delays, coupled with any tidal, labor or weather delays that these large vessels already encounter, such that MSC may decide to permanently drop Boston from its port rotation for at least one of these services. The situation may be worst for the Asian services that use the Panama Canal to reach east coast ports. These services are far more prevalent as importers and exporters try to diversify their supply chain to reach their east coast customer base and regional distribution centers. These vessels will encounter multiple delays as they transit along the east coast, potentially causing them to miss their scheduled Panama Canal slot. This puts Boston at a significant competitive disadvantage in relation to the southern ports and could result in the loss of the Cosco service that currently serves the Port of Boston. Based on the April 2005 study by Hauke Kite-Powell entitled "Economic Implications of Possible Reductions in Boston Port Calls due to Ship Strike Management Measures," the loss of the Cosco service and just one of the two MSC services currently in Boston would result in a $49 million loss in gross state product and approximately 1,000 jobs from the region.

- The environmental impact analysis needs to quantify and evaluate the additional truck traffic and air emissions associated with cargo diversions that may result from the proposed regulations. For example, loss of one of the MSC services and the Cosco service from the Port of Boston, which as described above is a possible ramification of the proposed regulations, would result in an additional tens of thousands of truck trips and resultant emissions along the highly congested I-95 corridor between Boston and New York. This impact, and similar impacts at other east coast ports from which cargo is diverted, needs to be addressed in the FEIS.

The economic and environmental impact analyses should be revised and reissued for public comment to address all of these comments.

The existing analysis indicates that the economic impact on the vessels using the Port of Boston will be 410 percent greater for a 10-knot speed restriction as compared with a 14-knot speed restriction. For this reason, coupled with the fact that the scientific evidence simply does not support a 10-knot limit, if NMFS moves forward with a set speed limit at all we urge the use of a speed limit not less than 14 knots.

tens of thousands of truck trips and resultant emissions along the highly congested I-95 corridor between Boston and New York. This impact, and similar impacts at other east

coast ports from which cargo is diverted, needs to be addressed in the FEIS. In conclusion, Massport's position is as follows:

1. Based on the available data, it is premature for NMFS to impose vessel speed restrictions in an attempt to minimize the likelihood and severity of vessel strikes of the North Atlantic Right Whale. The data is inconclusive, and the proposed regulations could well do more harm than good. NMFS should withdraw from consideration the proposed regulations and immediately, and in close coordination with representatives from the maritime industry, pursue the hydrodynamic, acoustic, technological and other studies necessary to develop and implement solutions that will truly help to minimize the likelihood and severity of ship strikes. Once this is accomplished, a revised proposed rule should be issued.

2. If NMFS decides to proceed with vessel speed restrictions, over industry objections, we advocate for a "slow, safe speed" standard, consistent with the approach NMFS took in its Section 7 consultations with the Coast Guard and Navy vessels, rather than a set speed limit.

3. If NMFS does proceed with a set speed limit, we advocate for no less than the 14-knot speed limit as this is better supported by the scientific data and addresses industry concerns about economic impacts and vessel safety at slow speeds.

4. Massport supports the Dynamic Management Area (DMA) concept as long as DMAs are triggered and remain in effect based on reliable, real time information on whale locations. We recommend that each DMA expire after 3 days unless subsequent surveys indicate that right whales remain in the area to minimize the likelihood that vessels divert around the DMA into an area that the whale(s) moved to.

5. Any proposed regulations should apply to all vessels, including government vessels and vessels less than 65 feet long which together represent more than 50 percent of documented large whale ship strikes.

6. If any set speed limit is imposed, the rule must contain a provision for the vessel operator to exceed the limit if necessary to ensure safe operation of the vessel.

7. TSS Option No. 1, which provides for a significant reduction in the likelihood of whale/vessel interactions while maximizing vessel traffic safety, should be implemented through the International Maritime Organization rather than Option No. 4.

8. The environmental and economic impact analyses should be revised and reissued for public comment to address the deficiencies identified herein and in other comment letters from the maritime industry.

We appreciate this opportunity to comment. Please feel free to contact me or Deb Hadden at (617) 946-4413 if you would like to discuss any of our comments further.

Sincerely,

Michael A. Leone
Port Director

cc: Greg Silber, NOAA Office of Protected Resources
Rodney Weiher, NOAA Office of Program Planning and Integration

The Humane Society of the United States • The Ocean Conservancy • Defenders of Wildlife

October 5, 2006

VIA ELECTRONIC MAIL / FIRST CLASS MAIL

Dr. David Cottingham, Chief
Marine Mammal and Sea Turtle Conservation Division
National Marine Fisheries Service
Office of Protected Resources
1315 East West Highway
Silver Spring, Md. 20910

RE: Draft Environmental Impact Statement to Implement Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy (71 FR 38641)

Dear Dr. Cottingham,

On behalf of the more than 9 million members and constituents of The Humane Society of the United States, Defenders of Wildlife and The Ocean Conservancy, we respectfully submit these comments on the Draft Environmental Impact Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy (DEIS). We are pleased that the National Marine Fisheries Service (NMFS) has published long-overdue proposed rules and this accompanying DEIS. However, we have questions and concerns relating to some of the information provided in various sections of the DEIS, and consequently the adequacy of the risk reduction analysis.

The measures in the NMFS ship strike strategy, including limits on vessel speed, were originally proposed in 2001 in a report by Bruce Russell, co-chair of the NMFS Ship Strike Committee. Since the publication of this report, right whales have continued to die in unsustainable numbers. Since 2001, at least 17 right whales have died or been seriously injured; 8 of them as a result of known or suspected collisions with vessels in U.S. waters and 2 additional deaths from collisions in Canadian waters. There is an urgent need to provide adequate protection for the 300 or fewer right whales against this threat.

Indeed, it is this urgent need for protection that caused our organizations to petition the agency for emergency speed restrictions for right whale protection in May 2005 after NMFS had failed to move forward with its 2004 Advance Notice of Proposed Rulemaking. When the agency denied our request on the grounds that final regulations were under development, we filed suit in federal court, challenging the petition denial as

arbitrary and capricious agency decision-making that did not comport with the overwhelming evidence that protections against this critical threat were needed immediately. Defenders of Wildlife v. Gutierrez, Case No. 05-2191 (D.D.C., filed Nov. 9, 2005). The status of the species has not improved since that time – indeed, three additional whales have been killed by ship strikes since the agency denied our petition -- demonstrating that emergency measures are still needed. Therefore, while we are submitting comments on the substance of the agency's Proposed Rule and accompanying DEIS, we also reiterate our call for emergency regulations to be put in place immediately and remain in effect until NMFS finalizes this rulemaking process.

General Comments

While we generally support the NMFS' approach to risk reduction, we are concerned that some of the proposed risk reduction measures may be inadequately protective. Further, information provided in the DEIS should be supplemented with a clear justification for the choice of the preferred alternative and the reasons underlying the dismissal of data that indicate why more protective measures should be used. The DEIS does a credible job of painting the grave risk facing right whales from collisions with vessels and, as such provides ample justification for choosing the most protective measures available.

As an initial matter, we appreciate several of the changes NMFS has made since the scoping stage to address the concerns of the environmental community. First, we strongly support applying 10 knot speed restrictions to all vessels greater than 65 feet in length, with narrowly drawn exceptions for national security and human safety. As the DEIS makes clear, "[t]he proposed speed restriction of 10 knots is based on historical and recent research that indicates that 10 knots is the optimal speed limit in the range considered for right whale recovery." DEIS at ES-9. Second, we are also happy to see that the proposed operational measures would be applied to all vessels greater than 65 feet in length, yet we have concerns about the exemption for sovereign vessels discussed below.

NMFS proposes to exempt from these measures vessels owned by, or under contract to, federal agencies. This sweeping exemption encompasses a class of vessels known to be one of the largest contributors to mortality in right whales (Jensen and Silber 2003). NMFS justifies the proposed exemption on the basis that "the national security, navigational, and human safety missions of some agencies may be compromised by mandatory vessel speed restrictions." 71 Fed. Reg. at 36305. However, the exemption is overly broad to meet this need. As just one example, the exemption appears to extend to government owned research vessels and privately owned vessels operated by those with a government research contract. These research vessels, and other vessels with no tie to national defense or lifesaving, should be subject to appropriate speed restrictions.

The agency has also claimed that any exempt federal vessels will be subject to the Section 7 Consultation Process. As the agency well knows, the Section 7 process can be considerably more time and resource intensive than the type of overarching regulations proposed here for non-sovereign vessels. The agency also knows that it does not have

time or resources to spare in this context. Furthermore, many required Section 7 consultations for federal vessels are currently out of date, or have never been undertaken in the first place. As just one example, our lawsuit against NMFS for its denial of our petition for emergency rulemaking also challenges the Coast Guard's failure to undertake this required process for the shipping lanes it has designated on the East Coast in right whale habitat.

In terms of where the measures will be applicable at what times, we discuss later in greater detail that available data indicate that the seasons or areas for some measures in the Northeastern U.S. (NEUS) are too limited (e.g., off Race Point). Further, risk reduction in the Great South Channel relies on vessels traversing slowly in an established traffic separation scheme (TSS) which is bounded by an area to be avoided (ATBA). However, the ATBA will not be proposed to the International Maritime Organization until 2007 at the earliest, leaving the risk unchanged for right whales in this crucial area for at least 2 more years. This is not acceptable. The DEIS does not discuss the differential risk posed by staggered implementation of various measures.

The DEIS also does not, but should, discuss inclusion of a "disaster clause" under which emergency measures would be put in place in the event of right whale being killed by a ship in an area in which protective measures were already in place. This discussion should also specifically discuss measures that can be taken if an exempted vessel kills or seriously injures a whale.

The DEIS provides alternatives, as is required of all EIS reports, but the construction of the alternatives appears arbitrary. While we agree that NMFS appropriately chose alternatives that are stand-alone components of its preferred strategy (e.g., speed alone or routing alone), it then hampers these stand-alones by arbitrarily choosing different areas or dates for implementation of each of the stand-alone measures and provides no justification for so doing. It then dismisses the alternatives (and a fifth alternative that is a combination of the previous four stand-alones) by arguing circularly that they are inadequate because they use times and areas not supported by research which NMFS instead chose to use only for its preferred alternative. Alternatives to the preferred measure should be chosen because there is some prima facie reason to believe that they are reasonable choices. In this instance they are not, because NMFS has defined them in a way to insure that they are not. Furthermore, NMFS does not adequately justify the choice of Alternative 6 as the preferred alternative. The NMFS states that Alternative 5 is the most protective and, while it is stated to have a greater economic impact on small entities, NMFS does not explain why this more protective alternative is not a preferred alternative.

As we detail in these comments, as well as our comments on the agency's Proposed Rule, the best available science should be used to develop and implement an alternative that provides adequate and appropriate protections for this highly imperiled species. Given the dire status of the North Atlantic right whale, takes must be kept to zero to avoid jeopardy to the species. The agency's Preferred Alternative 6 is a much needed first step, but does not seem to meet this demanding standard. Alternative 5 is the most protective,

but also suffers from defects inherent in not being based on the best available science. We offer the following detailed comments in hopes of the agency using Alternatives 5 and 6 as a basis for developing a Final Rule that will provide the protections the species requires.

Comments on Specific Sections

Executive Summary

We will provide additional specific comments on later sections of the DEIS that describe the alternatives in greater detail, but wish to point to some specific concerns with this summary.

There is some confusion in terminology. For example, the Alternatives chart (DEIS at ES-3) states that there are no Seasonal Management Areas (SMA) proposed for Alternative 3 and 5, yet the speed restrictions that are proposed are indeed seasonal. Perhaps NMFS can use terminology that allows readers to better discern the differences it intends between SMA and seasonally imposed measures.

Also, as we will discuss in greater depth below, the statement that Alternative 5 offers "the highest level of protection to the population" is true only in relation to the other five alternatives (DEIS at ES-6). For example, it uses a narrower band of protection along the mid-Atlantic coast (25 miles) than is used for seasonal measures in Alternative 6 (30 miles) or suggested by the literature that NMFS uses to buttress its argument for a 30 mile radius in Alternative 6. Thus, it could, but does not, offer the degree of protection that it might, based on NMFS' own data which are used to justify other alternatives. The DEIS should explain the rationale for artificially limiting protective measures in non-preferred alternatives.

Chapter 1--Purpose and Need

1.2.1.1. Surveys

Systematic surveys are the underpinning of the current Early Warning and Sightings Advisory Systems in the Southeast (SEUS) and Northeast (NEUS) and are required for proposed Dynamic Management (DEIS at 1-6 and 1-8). Yet these critical surveys are imperiled by proposed budget cuts to the NMFS (NCSE 2006). The clouded future of the NMFS budget situation gives one pause when considering the value of measures that will rely on surveys to be effective. The DEIS should provide information on recent trends in funding for surveys and the relative contribution of systematic surveys versus opportunistic ("reliable") reports for determining when to trigger Dynamic Management.

1.2.1.4 Regional Recovery Plan Implementation Teams

This section states that two recovery plan implementation teams exist (DEIS at 1.7). This is not true. Indeed the Northeast Implementation Team was reorganized in 2004, but has

since been virtually disbanded. In its final meeting in early 2005, the audience was told that its role was simply to "support education" on the Ship Strike Strategy" and that NMFS would only entertain recommendations at its discretion (NEIT 2005). It has not met since. Neither the NEIS nor the SEIT have functioned in the role of a meaningful recovery team. The lack of a true recovery team for this most endangered of large whales in the U.S. is disgraceful. The DEIS is misleading in its implication that recovery teams exist for right whales or any endangered whales on the U.S. east coast.

1.2.1.6 Ship Speed Advisories
This section should discuss the lack of compliance with advisories. The NMFS itself acknowledged that 38 of 40 vessels notified of right whales in the vicinity did not alter speed or course, as substantiated by Moeller (2005) This information is contained in the proposed rule [71 FR 36301], and should be clearly stated in the DEIS.

We also note that the NMFS has not received full cooperation from the U.S. Coast Guard in advising ships of appropriate speed. The NMFS advisories recommend slowing to 12 knots or less but the U.S. Coast Guard broadcasts have intentionally refrained from mentioning a specific speed. This situation should also be addressed in the DEIS. The proposed rule states that when NMFS contacted "all relevant federal agencies" asking them to operate at 12 knots or less and "most have voluntarily complied." (71 FR 36301) The DEIS might discuss which agencies have not complied, or the extent to which they have not, as this helps in understanding the impact of exempting federal vessels from otherwise mandatory risk reduction measures.

1.4 Operational measures

The NMFS proposes Seasonal Management Areas (SMA) in the SEUS (November 15-April 15), the MAUS (November 1- April 30) and the NEUS. In the NEUS, measures for Cape Cod Bay Critical Habitat extend from January 1- May 15; for Off Race Point, they are from March 1-April 30 and for the Great South Channel from April 1-July 31. While we do not generally disagree with the timing of measures for the SEUS, MAUS and Cape Cod Bay, we strenuously disagree with the timing of the measures for Off Race Point and the Great South Channel. As we will discuss in greater depth below in our comments on the alternatives (Chapter 2), available scientific literature supports timing of protective measures that would coincide with the start of the restrictions in Cape Cod Bay rather than a later time. Further, common sense dictates that animals must not only leave Cape Cod Bay, but they must enter it as well, and research document the fact that whales continually enter and leave Cape Cod Bay throughout the season. Thus risk reduction measures must protect them as they both enter and leave.

While we agree that the concept of Dynamic Management Areas (DMA) could be a useful component of a risk reduction program, we question the mechanism for triggering it, and will discuss this in greater depth below in our comments on Chapter 2.

We support the establishment of routes in the SEUS and are concerned that, while routing is considered an integral part of the NMFS preferred alternative (alternative 6) and the

most protective alternative (alternative 5), establishment of routes is not part of the current rulemaking. The DEIS should discuss the risk to whales if recommended routes are not designated or/and when protective measures are implemented on a staggered basis.

Chapter 2--Alternatives

General Comment
While there is a figure showing right whale sightings superimposed on the proposed shift of the TSS for Boston that crosses Stellwagen Bank National Marine Sanctuary, no similar graphic is provided showing whale sightings relative to any other proposed protective measures for any of the alternatives. This would be helpful to illustrate the appropriateness of the spatial arrangement of risk reduction measures, and it should be included in the final EIS.

Specific Comments

2.1 Proposed Operational Measures

As previously stated, we object to exempting all vessels owned and operated, or under contract with, the U.S. government. We understand the NMFS desire to provide special consideration for national defense and lifesaving missions, but there is no need for such a broad exemption that would extend even to research vessels owned or under contract to the government. This exemption could result in exempting literally hundreds of vessels owned and operated by university or non-profit organizations for use by their researchers studying a variety of marine species (e.g., fish, benthic animals, other marine mammals) and study of bottom sediments and benthic contours if they have even a small government "contract" for their work. This is clearly inappropriate. Any exemption from compliance with the operational measures should be limited to those involved in activities related to national defense or life saving. As previously stated, the DEIS should contain an estimate of the number of vessels that would be exempted from compliance so that the impact of this exemption on risk reduction can be appropriately gauged. In particular, female right whales in the MAUS have been killed as a result of collisions with military vessels that could be exempt from these measures.

2.1.1 *Southeastern U.S.*

Clearly it is critical to have meaningful risk reduction in place in this sensitive area, the species only know calving grounds. As recently as January 2006, a right whale calf died off the coast of Florida as a result of a ship strike. While we generally agree with the time and area chosen for imposition of speed restrictions and routing measures, we are concerned that the measures do not apply throughout the Southeast Critical Habitat, and in particular, that there are no specific risk reduction measures proposed for the Port Canaveral area in the preferred alternative. Right whale mothers and calves have been sighted in the Port Canaveral area and the risk to them from this busy cruise ship port is not insignificant. The Port itself claims that the number of vessels calling it a home port

continues to increase and further that, by itself, it is responsible for 36% of the growth in the Florida cruise industry. (PCN 2003) We believe that the NMFS should extend limits on speed throughout right whale critical habitat in the SEUS and should clearly explain via the DEIS analysis why it did not deem this necessary in its preferred alternative.

In terms of timing for operational measures, we agree that studies have shown that November 15 to April 15 is the time "during which most right whales are in the SEUS calving and nursery areas." (DEIS at 2.3) NMFS provides this statement in the context of asserting that "operational measures would apply" during that time period. However, although this is the time period used for Alternative 6 (the preferred alternative) it is not the time period suggested for Alternatives 3 and 5 (December 1-March 31). If the NMFS means that this time period is suggested for its preferred alternative *only*, then it should say so, and explain the rationale behind proposing a different time period for other Alternatives. This unexplained difference in time periods appears to be simply an arbitrary deviation from NMFS' own criteria for selecting time periods for risk reduction measures. The truncated time period for Alternatives 3 and 5 should be corrected to coincide with NMFS own stipulation of the time of greatest risk to right whales in the SEUS.

2.1.1.2. Operational Measures

The NMFS states that the risk reduction measures for this region are mandatory seasonal speed restrictions and recommended shipping routes for the approaches to Jacksonville, Fernandina Beach and Brunswick during the SMA. As mentioned above, the time period for the SMA is different for Alternatives 3 and 6. The text further states (DEIS at 2-3) that proposed lanes are "shown graphically (relative to ship strike risk reduction)" in the figures that follow. In fact, the lanes are depicted, but no whale sightings are provided to gauge the "relative" risk reduction that they provide. Instead, figures 2-1 and 2-2 simply assert that there *is* relative risk reduction with no data provided to support the assumption. We do not necessarily disagree with the conclusion regarding areas of greatest risk, we simply believe that it would be helpful for the DEIS to provide the data and basis underlying the conclusions in textual or graphic form.

2.1.2 *Mid-Atlantic Region of the United States*

Data in Jensen and Silber (2003) and Laist (2001) indicate that this area has the highest incidence of mortality from ship strikes. Indeed, the pattern of mortalities that have occurred since the reports were written supports this conclusion. Some, but not all, of these mortalities are included in the DEIS discussion. In 2004 alone, two pregnant right whales and their near-term calves were found dead off North Carolina from ship strikes and another female was seriously injured (with a likely fatal outcome) off Georgia in 2005. This high risk area will also require careful monitoring of the risk reduction measures to assure that they are properly placed.

2.1.2.1. Area and Time

The operational measures for the MAUS consist of SMAs around nine ports, with a radius of 30 nm which NMFS states is "sufficient to cover approximately 90% of right whale sightings records." (DEIS at 2-4). Again, the language in the DEIS does not make it clear that this distance is proposed only in the preferred alternative (alternative 6) and is not the distance from shore proposed in Alternatives 3 and 5. Instead, for these alternatives, NMFS proposes a "band" of seasonal restrictions that runs along the coast from the SEUS to New England but extends only 25 nm from shore. The text should be clear that the 30 nm radius pertains *only* to the preferred alternative and NMFS has used some other, unexplained, rationale for the narrower band of protection suggested in other alternatives. The rationale for this narrower band is not provided, nor has the DEIS analyzed the differential risk posed by omitting this 5 nm swath and instead choosing restrictions solely in nine port areas.

Because NMFS is proposing to use nine individual areas spaced out up the East Coast, rather than a long continuous swath of protection extending from Florida through New England, it is important that NMFS evaluate an emergency response planned in the event that a death or serious injury occurs in an unprotected area.

We also wish to raise a concern regarding the rectangular box that defines the area of risk reduction south and east of Block Island Sound (Figure 2-3). As proposed, the northern boundary of this box extends from the tip of Long Island, just south of Block Island eastward to the western edge of Martha's Vineyard Island. Thus, despite data indicating that right whales often migrate within 30 miles of shore, the entire area of the Sound north of this boundary remains unprotected. It is likely that right whales are using this unprotected area, as surveys for the Sightings Advisory System have spotted whales in and around this area and right whale have been known to pass through the Cape Cod Canal, which is accessed by Buzzards Bay, to the north of the boundary. (NOAA/NMFS 1997-2006) We suggest extending risk reduction measures northward to the COLREGS line in this area.

2.1.*3 Northeastern United States*

Because this area contains two of the three critical habitats for North Atlantic right whales in the U.S., it is clearly important that management measures are timed to assure broad protection for whales feeding in this area. While there are some advantages inherent in Alternatives 5 and 6, we are concerned that none of the NMFS proposed alternatives are adequate.

2.1.3.1 Cape Cod Bay

We generally agree with the timing of annual restrictions for this area (January 1-May 15) and agree that they generally correspond with the time of greatest right whale occurrence. However neither this section nor the section that focuses on the Affected Environment (3.0) discuss the basis for drawing this conclusion (e.g. NMFS SAS

surveys, annual reports of surveys by the Center for Coastal studies and Mass. Division of Marine Fisheries). Many of the available sources show right whales in Cape Cod Bay as early as December and intermittently throughout the year. The DEIS should provide a summary of the data that underlie the choice of this time period as the most appropriate, rather than simply assert that it is so.

2.1.3.2 Off Race Point

The timing of measures for this area is not specified in the text, although it can be inferred from other sections (e.g. the Executive Summary). Instead the text in this section simply states that right whales transit this area as food resources diminish in Cape Cod bay "toward the end of April." The text should clearly state under "Area and Time" that the protective measures are proposed for March 1-April 30. Having said that, we must point out that this time period is insufficient to provide appropriate protection for right whales in this area.

There is obvious risk in this area because of its heavy use by shipping traffic (DEIS at 2-7). However, the text provides no justification for choosing the very limited time period for protective measures. Available data indicate that the protective measures should be in place at least by January 1st, when right whale restrictive measures begin in Cape Cod Bay. Without transiting the Cape Cod Canal there is no way for right whales to enter Cape Cod Bay unless they transit the Off Race Point area. As such, logic would dictate that they require protective measures when they enter the area, not simply when the last of them leave. The rationale underlying the proposed timing of protective measures appears to be predicated on the assumption that they enter Cape Cod Bay through some unknown route, remain for several months, and leave via the Off Race Point area only as their prey resources are diminished in the spring. The DEIS provides no information to support this assumption. If fact, there are ample data to indicate that this is not at all what happens.

Sightings data from aerial surveys in Massachusetts indicate that right whales are often in Cape Cod Bay as early as December, and they may not leave until May (Mayo et al 2001-2004). Even the NMFS' own sightings advisory system has documented right whales entering and leaving Cape Cod Bay as early as December (e.g., NEFSC 2005). They are sometimes still being sighted at the end of May as well (e.g., NEFSC 2006). A review of several years of data reveals that these are not anomalous reports (NOAA/NMFS 1997-2006, Nichols and Kite-Powell 2005). We know from mark-recapture data and satellite telemetry that once a whale is in the Bay, it often wanders in and out, and not all whales enter or leave at the same time. As early as 1986, Scheville et al (1986) reported that individual right whales reside in Cape Cod waters for no more than a few days and noted that a seven week residency was the longest time documented for observations between 1955 and 1981. These facts are noted by NMFS in the revision to the right whale recovery plan See Recovery Plan for the North Atlantic Right Whale (Updated May 26, 2005) at IC-2. Clearly right whales, which range widely and unpredictably in the northeast, require protection that is broader rather than narrower in scope. If the NMFS does not choose to provide protective measures during the time that data indicate they are

warranted, the DEIS should discuss the reasons and provide substantiation for choosing a considerably less protective measure.

The southern portion of the Stellwagen Bank National Marine Sanctuary is contained in the Off Race Point Area. Data from recent years indicate that right whales are seen in the vicinity of Stellwagen Bank (off Race Point) through summer and early fall (Weinrich et al 2005). A more recent study by the Sanctuary found that right whales are present in the southern part of the Sanctuary during the late winter and early spring when right whales enter and leave Cape Cod Bay but when NMFS proposes to have no protective measures in place. Their study, which used passive acoustic technology, detected over 1,600 right whale calls in southwestern Stellwagen Bank (in the Off Race Point area) on 55 days between January and March of 2006 even though only 4 right whales sightings were reported in the area from Sightings Advisory System-related surveys. (Dickey, et al. 2006) It is clear that the DEIS must evaluate the risk to whales in this area and provide a justification for not extending protective measures into the early winter when whales are traversing the Off Race Point area as they enter and leave Cape Cod Bay.

We believe that the DEIS analysis should consider the need to restrict ship traffic in the Off Race Point area from December 1 through May 30th and discuss the relative risk of instead choosing the shorter period of time than the NMFS proposes.

2.1.3.3 Great South Channel

Protective measures for the Great South Channel, which includes right whale critical habitat, are proposed for the period from April 1-July 31. This is not sufficient. As mentioned above, without transiting the Cape Cod Canal it is likely that right whales transit the Great South Channel when heading toward Cape Cod Bay to feed in the late winter and spring. As such, and for the reasons outlined in our comments on the Off Race Point area, we believe that the timing of protective measures in the Great South Channel must also begin January 1 of each year to protect the northward migration of right whales. The DEIS should consider the benefits of extended protection. The risk reduction for the Great South Channel also depends, in part, on imposition of an Area to Be Avoided (ATBA). This measure has yet to be proposed to the International Maritime Organization and will lag substantially behind other measures. The risk inherent in this lag time should be analyzed.

2.1.4 All Areas

The primary protective measure outside of recommended lanes and seasonal restrictions is the use of Dynamic Management Areas (DMA). The DEIS proposes criteria for triggering DMA based loosely on criteria developed by the Northeast Fishery Science Center for fishing gear restrictions. While we conceptually support DMA, we offer some cautions.

As noted above in our comments on the Executive Summary, we are concerned that the aerial surveys that may be necessary to establish the need for DMA maybe curtailed by

budget constraints. If this is the case, then the government will be forced to rely on "qualified individuals" (DEIS at 2-9) who are not government personnel, and that is a very limited pool that does not exist in all areas and may also require overflights to confirm the sighting. It would be helpful if the DEIS discussed the relative contribution of dedicated surveys versus "qualified individuals" in triggering dynamic management (e.g., for fisheries closures) and thus speculate on impacts to DMA if surveys are dramatically curtailed for budgetary reasons. We also note that footnote 6 on this page incorrectly refers to the DMA as a DAM.

The dynamic management of fisheries to protect right whales has left whales unprotected for substantial periods of time between the sighting that triggered the need for dynamic management and imposition of restrictions. The average lag time between sightings and imposition of restrictions has been approximately ten days (NMFS 2002-2006). This delay is even less justified when considering risk from ships. It is clear that the NMFS and the U.S. Coast Guard should work together to develop a mechanism for triggering real-time DMA action. For example, it appears that the U.S. Coast Guard may have authority to take rapid, emergency action under its Limited Access Areas authorization in 33 CFR Part 165. The DEIS should speculate on the regulatory mechanism likely to be employed to trigger real-time imposition of restrictions.

We would also like to request that the final DEIS clarify what is meant by a "concentration of three or more right whales," which is an added criteria in 1 (DEIS at 2-9), and, how it differs from the existing criteria developed by Clapham and Pace (i.e. three or more right whales within 75 square nautical miles).

2.2 *Alternatives Considered in the EIS*

2.2.1 Alternative 1—No Action Alternative

Clearly this alternative is not a viable option. As the DEIS documents, the current measures have been insufficient to prevent unsustainable levels of death and serious injury to right whales.

2.2.2. Alternative 2—Dynamic Management

As stated above, we generally support this measure as a component of a multi-faceted risk reduction plan. However, we do not believe that this measure is sufficient in and of itself. The DEIS notes (DEIS at 2-11) that successful implementation of this alternative depends on maintaining at least the current levels of survey efforts and expanding coverage in the MAUS as well. Given the current funding level, and projections that the NMFS budget may be further reduced, relying solely on this alternative is unlikely to result in adequate protection for whales. See our comments above in 2.1.4 regarding additional analysis that should be considered for DMA.

2.2.3 Alternative 3—Speed Restrictions in Designated Areas

Speed restrictions should be part of a more comprehensive plan that will include establishments of shipping lanes and are not in and of themselves, sufficiently protective.

The NMFS has proposed a speed limit of 10 knots in designated areas, but requests comments on higher speeds of 12 and 14 knots. Available literature indicates that increasing vessel speeds pose increasing risk (Jensen and Silber, 2003). The highest number of serious or fatal injuries occurs at speeds of 14-15 knots (ibid). A speed restriction of 14 knots would thus offer little if any risk reduction. As the NMFS notes in Chapter 4 of the DEIS (DEIS at 4-6 to 4-8) the risk of lethal injury rises from 20 percent probability at 9 knots to 80 percent probability at 15 knots, and the probability of serious injury and death increases from 45 percent to 75 percent as vessel speed increases from 10-14 knots.

The timing and extent of speed restrictions has not been fully explained and justified. Speed restrictions are too limited in scope. That the proposed speed restrictions in the NEUS will be year round under this alternative is particularly helpful to avert risk in the Great South Channel, an area with right whale sightings in virtually all seasons of the year. We are, however, concerned that the NMFS final rule to amend the Atlantic Large Whale Take Reduction Plan (and expand the boundaries of Seasonal Area Management) remains unpublished and thus the boundaries remain uncertain. The DEIS should analyze relative risk reduction if boundaries for the fisheries-related seasonal management areas remain unchanged.

The fact that restrictions in the MAUS extend only to 25 nm from shore, rather than the 30 nm proposed in the preferred alternative is inappropriately narrow in light of the justification that NMFS provides for the 30 nm radius of Alternative 6. As noted in our comments above, the DEIS should, but does not, discuss the rationale behind choosing a distance from shore (25 nm) that does not comport with NMFS data on right whale distribution which extends at least an additional 5 nm seaward.

The time periods proposed for the MAUS and the SEUS are significantly shorter than those proposed for Alternative 6 (the preferred alternative) and are thus inadequately risk averse with no justification for choosing a different time period. The DEIS should provide an analysis of the differential risk and a rationale for choosing a different time period.

2.2.4 Alternative 4—Recommended Shipping Routes

We support establishment of shipping routes as one component of a risk reduction plan, but do not believe that recommending shipping lanes alone is sufficient. A critical component of risk reduction is speed restrictions in the recommended lanes and throughout the MAUS, for which no recommended shipping routes are proposed. As stated earlier in our comments, the MAUS is an area of significant risk to right whales and, as such, demands risk reduction measures that are not contained in this Alternative.

The DEIS should discuss why speed restrictions have not been considered as a requirement within the lanes it proposes and should analyze the relative risk of establishing lanes that concentrate traffic without imposing reduced speed in the lanes.

We are also concerned that, although the shift of the Traffic Separation Scheme (TSS) into Boston has been presented to the International Maritime Organization (IMO) and could be in effect as early as 2007; the Area to be Avoided (ATBA) for the Great South Channel has not yet been proposed to IMO and could not go into effect any earlier than 2008. This leaves right whales with little protection in the Great South Channel, where the route is simply recommended and shipping traffic routinely bisects the Great South Channel when not heading into the Port of Boston or other coastal ports.

2.2.5 Alternative 5—Combination of Measures

We generally support this alternative and agree that it is likely the most protective of the alternatives. It would be comprised of the elements of all the previous 4 alternatives. However, as noted above in our comments on each of these alternatives, NMFS has arbitrarily and inappropriately chosen shorter time periods and narrower boundaries of protection than those chosen for Alternative 6. The FEIS should explain rationale behind the choice of different seasonal dates and smaller areas for restriction and should provide an analysis of the measures in appropriate and scientifically supported seasonal dates and areas.

2.2.6. Alternative 6—Right Whale Ship Strike Reduction Strategy.

As we have stated above, the times and areas in which risk reduction measures will be required are inappropriately narrow in scope even in this preferred alternative. See our comments above on speed restriction, as an example.

2.2.7 Summary of Alternatives

The summary table (2-5) appears inaccurate. It states that there are no SMAs in Alternatives 3 and 5, yet Alternative 3 states that the MAUS will have restrictions from October 1 to April 30 and the SEUS would have restrictions from December 1-March 31 (DEIS at 2-12). These are indeed seasonal restrictions and thus the chart seems inaccurate. If NMFS means something different in its use of the terms SMA, then it should be made clear in the text and chart.

2.3 Alternatives Considered and Dismissed from Further Analysis

We agree that the alternatives presented do not warrant consideration as risk reduction measures at this time, with one exception. As previously stated, we believe that vessels not engaged in lifesaving or national defense-related missions should be required to observe all risk reduction measures. In particular, we see no reason to exempt federal vessels and/or contracted vessels engaged in scientific research from the mandatory risk reduction measures.

Chapter 3--Affected Environment

3.1 North Atlantic Right Whale Biology

Figure 3-1 very generally depicts migratory route of right whales and their critical habitats and the seasons during which most of the population is in various areas along the east coast. It does not depict, nor does this chapter provide, concrete information on the seasonal distribution such that reviewers can readily see sightings mapped in the context of the various areas in which risk reduction measures are proposed. These sorts of sightings data are routinely provided to the Take Reduction Team and should be part of this EIS as well. It is baffling that the DEIS includes more maps and information on distribution of various sediment types than it has on right whale distribution.

3.1.2.2 Habitat

There is discussion of feeding in the NEUS and sightings in Cape Cod Bay. This section does not discuss the residence time in the Bay. We suggest incorporating references such as Mayo et al 2001-2004 and Scheville et al 1986 which discuss the ephemeral nature of sightings of individual right whales feeding in Cape Cod Bay.

3.1.2.3 Feeding Behavior

This section discusses competition for prey with other with other species and cites a 2003 stock assessment report. Payne et al (1990) discuss the distribution of right whales and humpbacks in relation to abundance of sand lance, a preferred prey for humpback whales and potential competitor with right whales. This source should be considered as well.

Chapter 4--Environmental Impacts

4.1 Biological Impacts on the North Atlantic Right Whale

4.1.1 No Action Alternative

We agree that this alternative is not sufficient to meet the NMFS' burden of reducing jeopardy to the species, as it will allow a continuation of the unsustainable level of mortality from ship strikes and the possible extinction of the species within 200 years.

4.1.2 Dynamic Management Areas

As stated in our comments on Chapter 3, we do not believe that this alternative provides sufficient risk reduction in and of itself. As previously noted, the success of this alternative depends on increased survey effort, which is unlikely in the current budget climate. Thus it is an unreliable stand-alone risk reduction measure.

4.1.3 Speed Restrictions in Designated Areas

We agree that as a stand-alone measure, speed restrictions are not sufficiently protective, and are most effective as part of a more comprehensive plan that includes other measures. This section (DEIS at 4-7) discusses the fact that a reduction in speed from 18 knots to 12 knots would give whales an additional 2.6 seconds to avoid a vessel within 50 meters, citing unpublished data from Laist. It would be helpful to reviewers to extend this information to provide an estimate of escape time if speed were reduced to 10 knots as NMFS is proposing. It would also seem more appropriate to provide the escape time given various vessel speeds when the vessel was at 91 meters from the whale rather than the 50 meters used in this analysis, since NMFS states that last-second flight response may occur when a vessel is within 100 yards (approximately 91 meters).

4.1.3.1 NEUS speed restrictions are, as stated earlier, insufficient to protect right whales during the time they are entering and leaving Cape Cod Bay between January and March when the restrictions in the Off Race Point area begin. The environmental analysis should discuss the number of whales that would be unprotected during this truncated period of protection in light of studies indicating their distribution and movements through this area in January through March. It should also compare the relative risk they face from this shorter period of protection against the reduction in risk from more appropriately extending restrictions into the months of January and February.

4.1.3.2 MAUS speed restrictions extend only out to 25 nautical miles and, as previously stated, NMFS does not explain why this narrower band was chosen rather than the 30 nm suggested by data on whale distribution and used to justify Alternative 6. Instead the NMFS merely points out that this alternative is insufficient because right whales "often occur within 30 nm of the coast and Alternative 3 only extends out to 25 nm." It was within the power of NMFS to choose the more appropriate width of the band for the speed restrictions in the MAUS. It did not do so. Instead, it deliberately (and arbitrarily) chose for this alternative an area with a boundary that is inadequately protective and then, in classic circular logic, dismisses the alternative because it is inadequately protective.

4.1.3.3 SEUS speed restrictions, and their relative impact, are difficult to understand from the text in this and Chapter 3. For example, this section (DEIS at 4-9) discusses the MSRS WHALESSOUTH reporting area but states that Alternative 6 covers only the Southeast SMA to just south of the MSRS area. It would be helpful to have a map clearly showing the differences between the alternatives. The only map depicting the areas is in figure 2-14, and it is a very small map with 4 point font size and poor captioning. We must also point out that, NMFS has deliberately, and without justification chosen a shorter time period for restrictions under this alternative than was used in alternative 6. Then, with the same circular logic demonstrated in the MAUS above, the DEIS then dismisses the inadequate time period that NMFS itself selected as inadequately protective.

4.1.4 Recommended Shipping Routes

We agree with NMFS' conclusions that this is not sufficiently protective as a stand-alone risk reduction measure, but should be incorporated as part of a more comprehensive plan. Further, without speed restrictions in the lanes, which NMFS states are not a part of this Alternative, risk reduction is compromised.

4.1.4.1 NEUS routes include a shift of the Boston TSS and an ATBA in the Great South Channel. Although it should, NMFS does not discuss in this section that these measures will not be simultaneously adopted. Instead, the TSS shift has been proposed to IMO and could take effect in 2007, whereas the ATBA has not yet been proposed and thus cannot provide any benefit to right whales until 2008 at the earliest. The DEIS should discuss this fact, of which NMFS was aware when the DEIS was written, and it should evaluate the risk reduction if the ATBA does not go into effect along with other measures proposed in this alternative and Alternatives 5 and 6, of which recommended routing is a part.

4.1.5 Combination of Alternatives.
The NMFS states that this alternative would provide "the highest level of protection." This appears true in comparison to other alternatives. However, as noted above in our comments on each of the individual components that make up Alternative 5, the NMFS has arbitrarily, and without providing justification, truncated areas and times for some of the speed and routing measures. In particular the Off Race Point area and the Great South Channel have inappropriately abbreviated time periods in all alternatives. We also reiterate our concern, above, that NMFS' decision to impose speed restrictions only within 25 nm of the coast in the MAUS, rather than the 30 nm that it acknowledges is necessary to capture 95 percent of right whale sightings (see pg. 4-17) is arbitrary and inappropriate. Given the NMFS acknowledgement that Alternative 5 is the most protective of the alternatives, we would expect to see some rationale for this not having been chosen as the preferred alternative, yet we see none.

4.1.6 Right Whale Ship Strike Reduction Strategy (Preferred Alternative)
We note that NMFS has not explained why this is the preferred alternative. It merely repeatedly asserts that it would have "major, direct, long-term, positive impacts" on right whales. The NMFS should explain the benefit to whales of this alternative over Alternative 5 such that this is the preferred alternative.

4.1.6.1 NEUS
There is a typographical error in the next-to-last sentence of the paragraph discussing Cape Cod Bay. The word should be "strikes" and not "striks." We reiterate our concern, expressed in greater detail above, that the timing of measures proposed for both the Great South Channel and Off Race Point are insufficient to adequately protect right whales, which are moving in and out of Cape Cod Bay starting in January and crossing through the waters of the Great South Channel and Off Race Point to do so. The DEIS should discuss the relative risk of inappropriately truncating these seasonal measures.

4.4 Impacts on the Socioeconomic Environment

Given the potential economic impacts these regulations will have on various aspects of the U.S. economy, NMFS properly conducted an Economic Analysis.[1] Generally this analysis provides an accurate, upper-end picture of the potential economic impact of these regulations.[2] NMFS, through its consultant, has examined the direct and indirect economic impacts these regulations will have on the various, potentially-affected segments of the maritime community. This analysis is sufficiently detailed to provide the decision-maker with an appropriate accounting of the potential economic impacts of the various alternatives to reach a reasoned decision on which alternative is most appropriate.[3]

With that said, however, we note that the analysis significantly overestimates the costs that may result from the implementation of these regulations, as it wholly fails to quantify the economic benefits that will be realized. See 40 C.F.R. § 1508.8 ("Effects may also include those resulting from actions which may have both beneficial and detrimental effects"). Under NEPA a full, technical economic cost-benefit analysis is certainly not required,[4] but in this instance, because NMFS has quantified the economic cost the regulations, it must at the same time, take the appropriate steps to determine the potential economic benefit that will be realized. See Sierra Club v. Sigler, 695 F.2d 957, 979 (5th

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[1] Under the Council on Environmental Quality Regulations for Implementing NEPA, "if a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed action, it shall be incorporated by reference or appended to the statement as an aid in evaluating the environmental consequences." 40 C.F.R. § 1502.23.

[2] We note that the Economic Analysis consistently uses conservative estimates and assumptions which result in the presentation of an upper-end estimate of the costs. For example, in the generation of estimated vessel speeds and estimates of speed reductions Nathan Associates develops their own speed estimates by vessel type and size class, based on information provided by ships to the Mandatory Ship Reporting System (MSRS). See Table 4-1. These speeds are generally slightly lower than the Coast Guard estimates. See Table 4-2. The report proceeds to use the higher Coast Guard estimates for the analysis of economic impacts. This data choice is conservative in the sense that it will tend to lead to higher impact estimates than would be the case if the actual, reported MSRS data were used.

[3] As we have noted previously, the ESA mandates that the needs of listed species, and the protection of critical habitat, must take precedent over other factors normally considered by agencies when adopting regulations. See TVA v. Hill, 437 U.S. 153, 174 (1978) (concluding that it is "beyond doubt that Congress intended endangered species to be afforded the highest of priorities."). While the economic costs and benefits of these regulations must be addressed through this NEPA process, these, and other similar considerations, must give way so that the right whale may receive the necessary protections to "halt and reverse the trend toward species extinction, whatever the cost." Id. 437 U.S. at 184 (emphasis added).

[4] Indeed, the regulations state: "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." While this regulation directs against an attempt to reduce all environmental impacts into purely economic terms, it does not relieve NMFS of the duty to provide a full accounting of the economic impacts of the regulations, including the benefits.

Cir. 1983) ("Simple logic, fairness, and the premises of cost-benefit analysis, let alone NEPA, demand that a cost-benefit analysis be carried out objectively. There can be no 'hard look' at costs and benefits unless all costs are disclosed."). To discuss only economic costs of these regulations while failing to provide a similar accounting of the economic benefits in this manner, would reduce the EIS to a "sham: such a 'cost-benefit analysis' would always be tipped in favor of [costs]." Id. As a result of this significant omission, the Economic Analysis presents a very un-balanced picture of the impact these regulations will have on the economic landscape.

Generally, a comprehensive economic impact or cost benefit analysis of a regulation must consider all of the impacts of the policy to society's welfare. See generally Kroeger, Timm. and P. Manalo. A Review of the Economic Benefits of Species and Habitat Conservation (2006)[5] (Attached). These impacts can take various forms and can occur in the market and non-market realms, ranging from direct financial costs and benefits to gains or losses in individuals' utility. Of particular importance in this respect has been the realization in the economics profession that nature provides real contributions to human welfare that go beyond its use as a mere supplier of immediate physical inputs for the production of goods in the human economy and is now recognized to include option and passive use values. Over the past several years a large and rapidly growing number of environmental valuation studies have been conducted. These studies have documented the benefits individuals obtain from the protection of particular habitats or endangered species.

Here, the economic analysis fails to even address, much less consider, the potential economic benefits that will flow from the implementation of regulations designed specifically to conserve the right whale.[6] The right whale is a charismatic species, and several studies have shown that whales elicit substantial passive use values. See, e.g., Bulte, Erwin, and G. C. Van Kooten. 2000. Economic science, endangered species, and biodiversity loss. C*onservation Biology* 14(1):113-19; Bulte, E.H. and G.C. Van Kooten. 1999. Marginal valuations of charismatic species: Implications for conservation. *Environmental and Resource Economics* 14:119-130; Samples, Karl C., John A. Dixon and Marcia M. Gowen. 1986. Information Disclosure and Endangered Species Valuation. *Land Economics* 62(3):306-312. Thus, to the extent that the regulations implemented

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[5] Also available at www.biodiversitypartners.org/econ/reports.shtml

[6] Pursuant to NEPA's implementing regulations, when producing an EIS NMFS is required not only to use the best information available, but must actively seek out information concerning the environmental consequences of the proposed action. Specifically 40 C.F.R. § 1502.22(a) provides: "If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement." Here, not only the available information is sufficient to provide a basic accounting of the economic benefits of the alternatives being considered, but the cost of generating more right whale specific information would not be "exorbitant" in comparison to the resources devoted to detailing the costs.

will prevent the further dwindling of the species' population or perhaps reverse the trend, this would generate economic benefits, both in the form of avoided loss of market benefits - such as, for example, in the form of receipts for the whale watching industry, see, e.g., Hoyt, Erich. 2001. Whale Watching 2001: Worldwide tourism numbers, expenditures, and expanding socioeconomic benefits. International Fund for Animal Welfare, Yarmouth Port, MA, USA, pp. i-vi; 1-158 (Attached) – and avoided loss of passive use values (quantified on the basis of willingness-to-pay approaches). None of these potential positive impacts are discussed in the analysis.

In sum, the Economic Analysis provides a reasonable upper-bound assessment of the relative economic impacts of the various alternatives. While the analysis may present an un-balanced picture of the true net cost of these regulations, because it fails to assess the economic benefits, the agency may appropriately use this data after weighing the conservation benefit provided by each alternative. Thus, the information provided here is sufficient to allow NMFS to choose the most cost-effective alternative from among the options that will meet the objective of providing the measures necessary to ensure for the survival and recovery of the right whale. Indeed, the results of this analysis demonstrate that the overall economic impact of the implementation of the measures required to ensure for the recovery of the species, will be insignificant to maritime commerce on the whole.

Generally, the Economic Analysis demonstrates that the implementation of the proposed measures – which are required to ensure the recovery of the species -- will have an insignificant economic impact on the maritime community as a whole. The DEIS separates the economic analysis by components of the maritime community and addresses the impact on each segment. In each case the analysis demonstrates that there will be economic impacts from Alternative 5, the most protective alternative, but these impacts are not sufficient to support a decision not to implement these measures.

4.4.1 Direct Impact on Port Areas and Vessel Operations

The DEIS states that Alternative 5 would result in an estimated total economic impact of $260.4 million at 10 knots, $155.2 million at 12 knots, and $88.7 at 14 knots. Putting these figures in proper perspective, NMFS notes that Alternatives 5 represents merely 0.020 percent of traded goods via East Coast ports. Moreover, the DEIS notes that "[o]cean freight costs are considered a conservative proxy for shipping industry revenues" and the total impact of Alternative 5 represents 0.383 percent of costs. From this NMFS concludes: "These results indicate that implementation of the proposed operational measures would have an insignificant impact on the financial revenues and hence the financial performance of the vessel operators calling at East Coast ports." Id.

4.4.2 Additional Direct Economic Impacts on the Shipping Industry

The analysis further assesses the impact the regulation will have on vessels that will make multiple port calls within the areas subject to the regulations. The analysis concludes that the additional impact under alternative 5 at 12 knots will be approximately

$6 million a year. Based on the previous conclusion that the direct impact will not significantly affect the industry, this additional cost is also insignificant. Furthermore, NMFS suggests that this impact may be offset by the revision of itineraries to accommodate these regulations.

4.4.3 Indirect Economic Impacts

NMFS also accounts for potential indirect impacts. Here, the assessment predicts that these impacts could include: the diversion of traffic to other ports, increased intermodal costs due missed rail and truck connections, and impact to local economies due to decreased income from jobs lost due to traffic diversions. EA at 136. On the question of traffic diversions, the analysis specifically addresses the possibility of vessels bypassing Boston. This analysis is based on several unsupported or unexplained assumptions. For example, the analysis does not provide a source for its assumption that a 3.3 hour delay as a result of these regulations, would result in shippers diverting to Canada ports. Next the analysis states that cargo destined for non-captive areas, such as western New York, western Pennsylvania, Ohio, Indiana, Illinois and Michigan "may be served via Canadian ports ... without delays caused by the right whale ship strike reduction measures." EA at 137. While this statement may be accurate, the analysis fails to address the increased time and transportation costs a shipper would incur in choosing this option. Finally, the analysis assumes, without stated basis, the regulations would divert 20% of container and ro-ro shipping volume of goods destined for the U.S. coastal hinterland in the Northeast to Halifax and Montreal. These unsupported assumptions undermine the reliability of the conclusion that Alternative 5 would result in indirect impacts of over $159 million at 10 knots.

4.4.4 - 4.4.7 Impacts on Commercial, Fishing, Passenger Vessels, Whale Watching Vessels, and Charter Vessel Operations

The DEIS also looks at several independent smaller segments of the maritime economic community that maybe effected by the regulations. First, assessing the impacts of the regulations on commercial fishing operations, the DEIS notes that "[m]any commercial fishing vessels steam at 10 knots or below," EA at 143, yet the agency assumes that the average stemming speed for the fleet is 12 knots. Even under this very conservative assumption, the analysis demonstrates that Alternative 5 would have an estimated impact of $0.9 million at 10 knots. From this, NMFS concludes that as the "largest potential economic impact of $1.0 million is approximately two-tenths of one percent of the East Coast commercial fishery landings in 2003, implementation of the proposed operational measures would not have significant adverse impacts on the commercial fishing industry." DEIS, at ES-7.

Next, NMFS states that there may be impacts to the passenger ferry industry. At the outset NMFS concedes that the majority of ferries travel over inland waters that will not be affected by these measures. EA at 144. The DEIS states that the impact on those vessels that will fall under the regulations will depend on the type of service, either "fast ferry services (24-39 knots) or regular ferry service (12-16 knots)." Id. at 145. In sum,

Alternative 5 will "result in direct, long-term, adverse economic impacts in the amount of $6.5 million at 10 knots." Id. at 146.

NMFS also determined that Alternative 5 will have "minor, direct, long-term, adverse impacts on charter vessels." DEIS, at ES-8. In this instance, the economic analysis demonstrates that implementation of the regulations would result in an estimated at $1.1 million in costs at 10 knots, resulting from an increase in roundtrip steaming time. This impact is slightly smaller than the impact realized by the preferred alternative which would result in an adverse economic impact of $1.2 million at 10 knots. Notably, the DEIS suggests that these figures represent an upper-bound estimate as the impacts could be reduced "if a charter company has multiple boats, and utilizes a vessel under 65 feet or if the captain changes course to fish at an alternate site that may not have speed restrictions." Id.

Finally, the DEIS notes that while the majority of whale watching vessels are large enough to fall within the reach of these regulations, the impact will vary according to the operation, as some employ high-speed vessels (ranging for 25-38 knots), and other operate at regular speeds (16-20 knots). NMFS concludes that Alternative 5 will have a "large[] direct, long-term, adverse economic impact with an estimated $2.8 million at 10 knots . . .." Arguably, however, these impacts represent a significant overestimate of the impacts on the industry, as a reversion back to previously employed industry practices, and universal compliance with established industry guidelines may offset some of these costs. Within the discussion of the impact of the various alternatives on the whale watching industry, Data Chart 4-41 illustrates a number of prominent companies and the typical vessel speeds. The industry has moved increasingly toward the use of higher speed vessels and its competitive advertisements generally stress speed of the vessels more than the educational nature of the excursion. This is a dramatic change from the 1980's when whale watching was expanding dramatically in New England. At that time, one of the authors of these comments (sby) was working aboard whale watch vessels. Standard speeds were generally below 14 knots and the emphasis in advertising was on affiliations with researchers and on the scientific and educational value of one company over another. Some companies (e.g. Hyannis Whale Watcher Cruises) regularly trade in vessels for ever faster craft, despite whale watching guidelines that have been in effect for more than a decade that request increasingly slower speeds as whales are sighted and approached. Because many companies stress speed over education as a competitive advantage, they may feel disproportionately and adversely affected by speed restrictions, as indeed they have asserted in public hearings. However, because the entire industry grew and prospered with slower craft, it can do so again in order to save from extinction the species it purports to wish to help via on-board educational efforts. As it is our experience that passengers generally choose whale watch venues based on proximity of the vessel's home port to the passenger and on recommendations as to which will give them the "best trip" (i.e., greatest likelihood of seeing whales, most knowledgeable naturalists), there will be no competitive disadvantage to any company listed in Chart 4-41, since all venture to the same general locale to see whales and thus would be bound by the same restrictions. Whale watch vessels bear a greater burden than most for

responsible conduct. Their industry prospered with slower boats and more highly qualified naturalists and it can still do so.

Appendix A--Sovereign Vessels

The introduction to this appendix states that it "does not go into detail on the current and future impacts of sovereign vessels on right whales, nor any current or future Section 7 consultations" as these are not considered operational measures. The DEIS must, in some place, discuss the number of sovereign vessels and vessels under contract to the government, since it proposes to exempt them. There must be some way for the public to understand and comment on the magnitude of the effect of exempting these vessels from mandatory risk reduction measures.

Having said that, we must point out that the sub-sections of this Appendix, briefly summarizing Section 7 consultations, indicate significant discrepancies in timing and nature of protective measures from those proposed in this rule. For example, under mitigation measures for the U.S. Navy, it states that fleet messages are issued prior to the calving season in the SEUS from December 1-March 30. Yet the protective measures under the preferred alternative are for the period from November 15 to March 31. Similarly, the timing of measures in the MAUS does not correspond to the timing of protections in the proposed rule.

The U.S. Coast Guard mitigation measures are said to include requirements for lookouts and "safe speed" in Florida and Georgia and from Cape Henry and Cape Hatteras between January 1 and March 31. These dates do not coincide with proposed measures. More alarmingly, the measures for the NEUS are considerably lax. The text states that between March 1 and May 30 "when right whales are concentrated in the Great South Channel and Cape Cod Bay" lookouts should be posted and vessel speed "reduced." As the DEIS points out, right whales are in Cape Cod Bay from December through April. Thus these dates are based on incorrect assumptions that do not come close to reality and leave right whales substantially unprotected.

Mitigation measures for the U.S. Army Corps of Engineers are confined to the SEUS, when they are confined to the period from December 1 to March 31. Again these dates do not comport with available data on risk nor with the timing of proposed risk reduction measures.

It is clear that the NMFS needs to re-engage in ESA Section 7 consultations for a wide variety of federal vessels (those discussed above, as well as NOAA, Minerals Management Service, etc). The risk reduction measures in the final rule should be part of the reasonable and prudent alternatives to jeopardy in any new biological opinions. Additional agencies operating vessels along the U.S. east coast (e.g., NOAA, Minerals Management Service, etc) also require formal consultations.

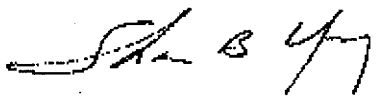
Conclusion

In sum the Final EIS should use the best available scientific information to analyze and revise the alternatives considered in the DEIS. We believe a fair and comprehensive analysis would yield significantly different results than contained in the DEIS, and hopefully cause the agency to develop a modified version of Alternatives 5 and 6 that provides sufficient protection for highly imperiled right whales. In doing this, the Final EIS should include an additional evaluation of the choice of Alternative 6 as the agency's Preferred Alternative and should rectify NMFS' errors in choosing times and areas for risk reduction measures that are temporally and spatially smaller than available data indicate would be appropriate. In particular, we are concerned that portions of the NEUS and SEUS that have been omitted from the times and areas designated for risk reduction measures will result in unnecessary risk to right whales. NMFS' claim that quantifying the number of vessels that would be exempted from these measures is outside the scope of the DEIS is erroneous. We believe that the value of the risk reduction measures cannot be understood without an understanding of the impact of exempting large numbers of vessels from complying. The DEIS also has not analyzed the risk that right whales will face from the delay in implementing all portions of the NMFS preferred alternative (i.e. shifting the TSS, establishing an ATBA, designating recommended routes into key ports). Finally, the EIS should include a discussion of the economic benefits of conservation measures for right whales rather than simply analyzing their cost to the industry.

Right whales are imperiled by entirely preventable anthropogenic mortality. While we are pleased that the NMFS is taking long overdue steps toward protecting the species, as we state in our comments on the proposed rule, we are concerned that the proposed measures are still not adequate.

Thank you for your attention to our comments. Please be assured of our commitment eliminating preventable causes of mortality, such as collisions with vessels, and to assuring that right whales receive the protection to which the law entitles them.

Sincerely,



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Noel Holcomb, Commissioner
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October 5, 2006

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David Cunningham
Acting Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Reduction EIS
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Dear Mr. Cunningham:

The Georgia Department of Natural Resources Wildlife Resources Division (DNR-WRD) appreciates the opportunity to comment on the National Marine Fisheries Service's (NMFS) Right Whale Ship Strike Reduction Plan Draft Environmental Impact Statement (DEIS). Georgia's coastal waters lie at the heart of the North Atlantic right whale calving ground and DNR-WRD has been actively involved in right whale conservation for over two decades. We applaud NMFS' efforts to employ scientifically and economically supportable measures to reduce ship strikes, a major cause of right whale mortality. We offer the following comments on the DEIS:

Vessel Speed Restrictions
Independent analyses of previously recorded whale/ship collisions by Pace and Silber (2005) and Vanderlaan and Taggart (2006) have predicted that probability of serious injury and mortality increases as ship speed increases: a whale hit by a ship traveling 10kts or slower may have approximately 50% of surviving unharmed, whereas probability of mortality approaches 100% as vessel speed exceeds 20kts. Given the precarious state of the right whale population, a 50% reduction in ship strike mortalities is biologically significant. Moreover, given the greater chance of whale injury and mortality at speeds greater than 10kts, we urge NMFS to reject the 12kt and 14kt options in favor of the 10kt option.

Safety Exemption
Given the precision required to safely navigate large vessels through narrow port entrances, especially during periods of inclement weather or heavy vessel traffic, we urge NMFS to consider an exemption to proposed speed measures for all vessels and at all ports when: 1) vessels are landward of the sea buoy, 2) vessels are under the control of a licensed pilot and 3) the pilot determines that increased speed is necessary for safe vessel passage. In such cases, pilots should be encouraged to proceed at the minimum speed required for safe vessel passage.

Management Area Boundaries
Right whales are routinely sighted throughout the winter months off the northern Georgia and southern South Carolina coast. As such, the boundaries of the Southeast U.S. (SEUS) Seasonal Management Area (SMA) should be expanded northward and seaward 30nm to include the ports of Savannah and Charleston in addition to Jacksonville, Fernandina and Brunswick. Moreover, the currently proposed November 15-April 15 regulatory window should apply to all five ports. An expanded SEUS SMA from Fernandina to Charleston would benefit right whales by: 1) protecting whales as they shift north and south throughout the calving grounds and throughout the calving season, 2) encouraging vessels to exit/enter SEUS ports along the shortest practical routes and 3) encouraging coastwise-transiting vessels (e.g. vessels making multiple stops at numerous ports) to transit further offshore, thereby limiting their exposure to right whales. Expanding the SEUS SMA would also reduce or eliminate the need to implement DMA's in the SEUS (see *Dynamic Management Areas* below).

The landward boundaries of the SEUS and Northeast U.S. (NEUS) SMA's are not defined in the DEIS. Given that right whales seldom enter inshore waters, we propose that the landward boundary of the SEUS and NEUS management areas be delineated by the COLREG lines (i.e. ship speeds should not be regulated in inshore waters).

NMFS should implement a contiguous Mid-Atlantic U.S. (MAUS) SMA similar to that outlined in Alternative 3 of the Draft Environmental Impact Statement, effective October 1 to April 30 and located along the Atlantic coast between the SEUS and NEUS SMA's, seaward out to 30nm, and landward to the COLREG lines. The currently proposed system of eight disconnected MAUS SMA's around all major MAUS port entrances would provide protection for right whales in the immediate vicinity of ports, but would do little to protect right whales in near-shore waters between those ports. Given the heavy volume of coastwise traffic at many MAUS ports (e.g. Norfolk, VA) and the high rates of right whale mortalities in these areas (eight ship-related mortalities from NC to DE in the past 15 years), a contiguous MAUS SMA is justified.

Routing Measures
We support NMFS' intention to implement recommended, voluntary routing measures through non-regulatory means provided that NMFS: 1) implements voluntary routes in a timely manner, 2) implements routes for MAUS ports where routing would reduce risk of collisions, and 3) reconsiders mandatory routing measures if compliance rates are low.

Dynamic Management Areas
We have numerous concerns regarding NMFS' proposed use of DMA's to regulate ship speeds. Although such a system may be valuable in areas where whales congregate offshore for extended periods of time (e.g. Gulf of Maine), it will likely be ineffective, cumbersome and costly to implement in the SEUS and MAUS. Given the small area encompassed by a DMA and the propensity for whales to move great distances in short periods of time, we suspect that whales will have exited DMA areas in many cases before DMA notifications are published in the Federal Register. DMA's will also require considerable staff time and money to implement, they will be difficult to enforce and comply with, and they will encourage additional aerial survey effort, which is expensive and inherently dangerous. Furthermore, we suggest that DMA's would be largely

unnecessary if contiguous SMA's were implemented coast wide. For example, DNR-WRD and Wildlife Trust aerial surveys documented 55 right whale sightings off Georgia and South Carolina since 2000 that were: 1) north of NMFS' proposed SEUS SMA and 2) outside of the proposed Savannah and Charleston SMA's. Under NMFS' proposed DMA system, NMFS staff would have been required to examine each sighting in order to determine whether those sightings met the conditions necessary to trigger a DMA. Conversely, each of these sightings would have fallen within the boundaries of expanded SEUS and MAUS SMA's as discussed above, thereby requiring no additional staff time and money to implement.

Enforcement

The DEIS fails to explain how it intends to enforce speed restrictions and what penalties will be levied for noncompliance. Joint Enforcement Agreements between NMFS and state law enforcement agencies will likely be insufficient mechanisms with which to enforce such measures. Rather, NMFS should coordinate with the U.S. Coast Guard (USCG) to obtain access to the USCG's coast-wide, shore-based vessel Automatic Identification System (AIS) network once it is operational. Such an arrangement would allow NMFS and/or USCG to monitor vessel compliance from shore. Ultimately, however, we suspect that compliance will likely be poor unless repeat violators are penalized in some manner.

Technological Solutions

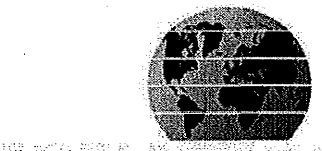
Lastly, we encourage NMFS to redouble its support for technological solutions to this problem. We recognize that no practical technological solutions exist at the current time, and as such, speed restrictions and routing measures are the only viable short-term options. Conversely, speed limits and routing measures alone are not a long-term panacea: right whales will likely continue to be killed by ships, even at slower speeds (albeit hopefully in fewer numbers). Likewise, routing measures will have limited effectiveness in areas where whales are randomly and/or evenly distributed (e.g. seaward of the Brunswick, GA sea buoy). Additional funding, interagency collaboration and access to scientific research permits are sorely needed in order to develop practical, long-term, whale detection/avoidance technologies.

We appreciate the opportunity to comment on the DEIS and look forward to continued collaboration with NMFS on this and other issues.

Sincerely,

Dan Forster
Director

cc: Mike Harris



Comments of the

World Shipping Council

Before the

National Marine Fisheries Service

In the matter of

Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales

RIN 0648-AS36

October 5, 2006

I. Introduction

The World Shipping Council ("the Council", "WSC" or "we") submits these comments in response to the Notice of Proposed Rulemaking (NPRM) published by the National Marine Fisheries Service (NMFS) in the Federal Register on June 26, 2006 and the Draft Environmental Impact Statement (DEIS) made available by the Environmental Protection Agency on July 7, 2006.

The Council appreciates the opportunity to provide comments to NMFS on the proposed measures to implement seasonal speed restrictions on vessels in certain areas along the East Coast of the United States. The stated purpose of these measures is to reduce the likelihood of death and serious injury to endangered North Atlantic right whales from collisions with ships. The Council, a non-profit association of more than thirty international ocean carriers, was established to address public policy issues of importance to the international ocean liner shipping industry. The Council's members are primarily operators of containerships and roll-on/roll-off vessels that serve America's international commerce. (A list of WSC member companies is attached.) They provide regular, scheduled services connecting U.S. importers and exporters with virtually every country in the world. They serve all of the East Coast ports covered by the Proposed Rule and the nature of their services makes them, as acknowledged in the DEIS, subject to the most severe economic impact from the Rule.

II. General Comments

WSC supports NMFS's efforts to enhance right whale recovery. We and our member lines have participated in a number of the non-regulatory programs described in the NPRM as well as in the Mandatory Ship Reporting System (MSRS). We do not, however, believe that the science and statistics cited as the basis for the speed reduction measures detailed in the Proposed Rule reasonably support a conclusion that these measures will be effective in achieving the agency's objective and the proposal might, in fact, expose right whales to additional risk of ship strikes. The measures

will have a direct negative economic impact on the shipping industry and its customers and may do nothing to protect the species.

As WSC stated in its comments on the 2004 Advance Notice of Proposed Rulemaking (ANPR), we have supported the Port Access Route Studies (PARS) conducted in the northeast and southeast regions where right whales are known to congregate at certain times of the year. We supported, and continue to support, the designation of Areas to be Avoided (ATBAs) in areas where research has shown that right whales are likely to congregate during certain months. And we support the implementation of Dynamic Management Areas (DMAs) which set up precautionary areas around sighted right whales so that mariners can navigate around them. In short, we support measures which science and common sense tell us will be effective in reducing ship strikes on right whales.

We, however, see no scientific basis in the record of this rulemaking for imposing a 10-knot speed restriction within 30 nautical miles (nm) of East Coast ports in the mid-Atlantic range (New York to Savanah, GA). This is the coastal range where the science is the weakest and the economic impact is the greatest. It is the range through which the right whales migrate and in which considerably more research and scientific analysis needs to be done before such costly and disruptive measures are imposed.

The liner shipping industry understands the need to take steps to protect right whales from ship strikes. Regulations, however, must be reasonably supported and expected to have the desired effect of protecting the whales. The backdrop against which the NPRM emerged suggests at least the possibility, despite the good faith of all involved, that the proposed regulations may be more effective in showing action than in reducing whale injury and mortality. Unfortunately, the treatment of the scientific studies offered in support of the rulemaking reinforces that perception. The perception is further enhanced by the complete exclusion from coverage of the regulatory restrictions of government vessels – the category of vessels documented as being the single most destructive to right whales. If the species is indeed at a tipping point, where the death of a single animal is significant and the regulatory restriction would in fact achieve the desired results, then political distinctions should have no place in the equation. Such distinctions would plainly be lost on the whales. If the objective is a serious and necessary one, which we believe it is, then the scientific analysis and the effectiveness of the management actions selected to achieve that objective

must reflect the same seriousness. The Council respectfully submits that more work is necessary before the scientific rigor will match the importance of the results sought.

For reasons set forth in detail below, we urge NMFS to change its approach and adopt an Interim Final Rule implementing measures which help mariners avoid areas where right whales are, or are likely to be, at certain times. We ask NMFS to include sovereign vessels and vessels under 65 feet in these regulations, as together they account for more than 50 percent of large whale strikes when vessel speed is known. And we ask NMFS to undertake serious scientific research during the effective period of the Interim Final Rule to better understand the migration of right whales in the mid-Atlantic region and to better assess the potential effect of vessel speed on the frequency and severity of ship strikes. It is essential that this research be carried out before costly, disruptive and potentially ineffective measures are imposed.

III. The Speed Issue

Although the Proposed Rule is not specific on this point, there are two speed-related issues in the documents referred to in the NPRM. The first is the relationship between speed and the likelihood of a ship/whale collision. The second involves the relationship between speed and the severity of injury to the whale when a strike occurs.

Speed as it relates to the likelihood of ship strikes: In reviewing the various lengthy and complex documents and studies cited by NMFS in the Proposed Rule, we find no compelling evidence that speed is a determining factor in the incidence of ship strikes to large whales. In fact, we find no evidence that the speed of liner ships (container and roll-on/roll-off vessels) has ever been a causal factor in a ship strike mortality of a North Atlantic right whale. Further, we cannot find a single, confirmed incident in all of the cited studies where a liner vessel (in excess of 180m in length) has been involved in a confirmed fatal right whale ship strike along the U.S. East Coast.

Ships do, on occasion, hit large whales. Based on the most frequently cited study, *Jensen and Silber (2003*), 58 cases of ship strikes to large whales were reported worldwide from 1975 – 2002 where vessel speed was known. The study reports that "the greatest numbers of vessels were

traveling in the range of 13-15 knots, followed by speed ranges of 16-18 knots and 22-24 knots respectively." The study goes on to report that the average speed of the 39 strikes that resulted in serious injury or death was 18.6 knots and that 20 of those strikes resulted in death.

We submit that the speed ranges presented in *Jensen and Silber* closely track the speed ranges of large vessels at sea and that these records indicate that ship strikes, in fact, decreased as vessel speed increased. We submit that this is so because there are more ships traveling in the slower speed ranges. Simply put, if all ships traveled at 16-18 knots, all whale strikes would take place in that range. The data here describes how fast ships usually travel but indicates nothing about whether there is a causal connection between ship speed and ship strikes.

In a more recent study, *Vanderlaan and Taggert (2006)*, the authors, using the same databases as the NMFS, looked at the issues of probability of lethal injury based on vessel speed and the consequence of increased whale exposure to vessels navigating at slow speed. We will look at the first issue later in these comments. As for the second, the study concluded that "...the encounter probability [between ship and whale] increases slowly as speed decreases from 24 knots or greater and then begins to increase more rapidly as vessel speed continues to decrease toward zero." (at page 5)

Vanderlaan and Taggert also arrive at the following conclusions:

- "Slow-moving vessels may provide opportunity for whales to avoid a collision or for vessel operators to avoid whales. However, we are unaware of any compelling evidence for either." (at page 5)

- "Large vessels navigating at low speed may not be able to maneuver successfully where success is partially dependent on the operator's ability to predict the movement of the whale once detected." (at page 6)

- "We can suggest that the paucity of low-speed collision reports is related to a paucity of vessels operating at slow speed." (at page 6)

These observations indicate that the proposed speed reduction measures are, at best, arbitrary and might actually increase the likelihood of ship strikes because the ship is in the whale habitat for a longer time. This is

in direct contradiction to the NMFS objective of reducing these strikes. Again, this study is based on the same worldwide large whale ship strike database used by NMFS in defending its Proposed Rule. These alternative results have not been addressed by NMFS in the formulation of its proposed measures.

Additionally, NMFS concedes in the NPRM that "there are only two definitive strikes to right whales where associated vessel speed is known with absolute certainty." The NMFS states that one was in 1991 when a right whale calf was killed by a ship traveling at 22 knots and the second, a right whale juvenile, killed by a vessel operating at 15 knots. What NMFS fails to include in their description of these ship strikes is that, according to *Jensen and Silber(2003)*, both were U.S. Coast Guard vessels which are exempted from this Proposed Rule.

NMFS candidly admits that the scientific data available is essentially anecdotal, and we believe that such data therefore has little predictive value under any recognized system of statistical analysis. Because this is the best data available, however, and because the agency feels compelled to take some action, NMFS has assumed, for the purposes of the Proposed Rule, that this anecdotal data in fact does have some predictive value. Any other assumption would necessarily require abandonment of speed restrictions as a management measure until statistically meaningful data has been obtained.

WSC respectfully submits that this lack of statistically significant data in fact requires NMFS to modify its approach, and we set forth below the form we believe that approach should take. For the purposes of the present discussion, however, we note simply that if NMFS is going to assume that anecdotal data has predictive value, that assumption must be applied consistently across all available data.

In order to explore what predictions would result if the data set relied upon by NMFS in support of the Proposed Rule was analyzed with respect to vessel size and speed, *Testaverde and Hain (2006)* graphically plotted the same 58 large whale interactions in which vessel speed and size are known as were used in *Jensen and Silber* (2003). That graph is included as Figure 3. With respect to vessels of a size comparable to the containerships that regularly call the United States East Coast (i.e., vessels in excess of 180 meters), Figure 3 indicates that only five interactions occurred with respect to vessels of that size. One of those vessels was a naval vessel, two were

cruise ships, one was a tanker, and one was a containership. The containership incident occurred in 1972, and the vessel was therefore necessarily of a hull configuration not employed today. In addition to the fact that less than 9% of the plotted incidents involved vessels within the size range and type that would be most impacted by the proposed rule, all of those interactions occurred at speeds in excess of 15 knots, with four of the five falling between 19 and 22 knots. Under the logic employed in support of the Proposed Rule – i.e., that anecdotal observations have predictive value – this data, which forms the backbone of NMFS's analysis, indicates that the lowest speed limit that should be under consideration for large vessels is 15 knots.

The data also shows that if maximum conservation impact is the goal of the rule, then vessels less than 20 meters in length are of far greater concern than are large containerships. There are 13 of these vessels in the data set, more than twice as many as fall within the range that would be primarily affected by the proposed rule. WSC respectfully -- but specifically and emphatically -- requests that NMFS explain in any final rule that it may issue, whether and how it differentiated between the predictive conclusions that it chose to acknowledge, discuss and include in the rule, and those predictive outcomes – based on applying the same methods to the same science – that it chose to ignore.

Taken together, the data relied upon by the Proposed Rule does not demonstrate any causal relationship between increased speed and increased frequency of collisions. If anything, studies indicate an inverse relationship. That is, the chance of collision may <u>increase</u> as speed <u>decreases</u>.

<u>Speed as it relates to mortality or severity of injury</u>: Given that the data relied upon in the NPRM essentially shows no predictive correlation between vessel speed and the likelihood of a collision, the only remaining basis on which speed restrictions could be justified would be if there were a demonstrable correlation between increased speed and increased mortality. The NPRM provides virtually no discussion of the extent to which the proposed speed restrictions may be based on an attempt to lessen the severity (as opposed to the frequency, addressed above) of whale/vessel collisions. Accordingly, it is impossible to comment meaningfully on the validity of any scientific analysis that might have been employed in formulating the proposed rule. Therefore, to the extent that any final rule

attempts to rely on a correlation between speed and mortality, such a rule would be unsupported by adequate data or explanation, and for that reason would be invalid.

That said, the NPRM does make reference to *Vanderlaan and Taggart (2006)*, which we understand has been accepted for publication after the date of the NPRM. According to the NPRM, that study states a range of probable mortality at three different speeds: 9 knots, 15 knots, and 21 knots. None of those speeds, however, is a speed that has been proposed as a maximum speed for covered areas. Moreover, that study ends with the observation that: "In summary, and acknowledging the uncertainties, our analyses provide compelling evidence that as vessel speed falls below 15 knots there is a substantial decrease in the probability that a vessel striking a large whale will prove lethal." *Vanderlaan and Taggart* (at page 6). Accordingly, to the extent that NMFS decides to adopt a speed restriction, this report would seem to indicate that 15 knots would be a more defensible figure.

A figure at the upper end of the range of proposed speeds is also indicated by *Laist (2001)*, upon which the NPRM principally relies. That study states that: "Most severe and lethal injuries caused by ship strikes appear to be caused by vessels traveling at 14kn or faster."(at page 56) After having analyzed various factors that could affect the observation regarding the very low numbers of fatal collisions at speeds below 14 knots, the author concludes that those factors do not undermine the legitimacy of the conclusion: "The scarcity of collision accounts below 14 knots could be an artifact of the small sample size of collision records found in this study; however, the absence of accounts involving severe or lethal whale injuries at speeds below 10 knots, and the low number of such collisions below 14 knots, seems significant." The DEIS adopts this finding, stating (at page1-5) that *Laist* "reported that of 28 recorded collisions causing lethal or severe injuries, 89 percent involved vessels traveling at 14 knots or faster and the remaining 11 percent involved vessels traveling at 10-14 knots." In addition, as noted above (see *Testaverde and Hain* at Figure 3), all five vessel strikes for which vessel size and speed are known for the class of vessels in excess of 180 meters are at 15 knots or above, and only one of those was a containership, in 1972.

This record provides no justification for imposing a 10-knot speed restriction on liner vessels – the class of vessels most severely impacted by the Proposed Rule.

In addition to the fact that the studies relied upon by NMFS indicate that, if any conclusions can be drawn about speed, 14 or 15 knots may be an inflection point at which possible speed-related benefits might be realized, there are additional reasons to use the 14-15 knot figure.

First, the Council would urge NMFS to guard against the unsupportable assumption that if some speed reduction is good, a greater speed reduction must be better. As discussed above, the data does not support that.

Second, as the admitted need for additional hydrodynamic testing indicates, it is entirely possible that the optimum speed for avoiding whale injury is not necessarily the slowest navigationally feasible speed. Just as vessels passing one another in opposite directions in close quarters rely on and compensate for bow waves that push the vessels apart, so it may be that whales within a certain quadrant in front of an oncoming vessel could be pushed away from a vessel at one speed, but drawn toward it at a lower speed.

The point is simply that we do not have these answers yet, and it must be recognized that when one guesses, one is as likely to guess wrong as to guess right. Guessing low is not the same as being more conservative or providing more protection to whales. The more draconian choice is not necessarily the better choice. Instead, implementing measures where we have a reasonable expectation that such measures are appropriate, and waiting to adopt other measures when there is significant support for them would give effect both to the underlying statutory mandates and to the tenets of sound science and conservation management.

Finally, it is worth noting that moving from no controls to the most severe controls precludes any possibility of collecting additional data at speeds between today's 18-22 knot average and the most severe proposed restriction of 10 knots. Particularly in light of the evidence that most if not all of any available benefit in terms of reduced mortality would be obtained at 14 or 15 knots, there is no justification in the currently available data for going below that number.

IV. The Distance Issue

The NPRM has proposed a 10-knot speed restriction inside a 30 nautical mile zone around the entrance of all major East Coast ports (from New York to Savannah, GA) from November 1 until April 30 of each year. This 30 nm zone is arbitrary with no adequate scientific evidence that the measure will provide added protection for right whales.

NMFS points out that the mid-Atlantic region is used by right whales for migration between the calving area in the southeast and the feeding grounds in the northeast U.S. and Canada. The NPRM states: "Satellite tagging data, opportunistic sighting data and historical records of right whale takes in the commercial whaling industry indicate that right whales often occur within 30nm of the coast and in waters less than 25 fathoms."

The only NMFS study we find dealing with this issue is "Right Whale Sightings and Survey Effort in the Mid Atlantic Region: Migratory Corridor, Time Frame and Proximity to Port Entrances" (*Knowlton, Ring and Russell, 2002*). This study provides some revealing facts about the rarity of right whale strikes in the mid-Atlantic, and observations about the lack of scientific knowledge regarding right whale migration through the mid-Atlantic region.

The study notes that there have been only five right whale mortalities in mid-Atlantic waters recorded in the 32-year period between 1970 and 2002. However, in checking *Knowlton and Kraus (2001)*, we found only three strikes in what is now defined as the mid-Atlantic in the NPRM – one in 1979, one in 1983 and one in 1993 (listed as a probable ship strike). No vessel type or speed was known for any of these. Of these three, two were discovered on the beach and one at the mouth of Chesapeake Bay. In checking the NOAA database through 2003 (*Waring, et.al., 2005*), we discovered three additional recorded strikes in the mid-Atlantic since 1999. Again, vessel type and speed were unknown or unpublished. All three of these whales were also found well inshore and two had propeller cuts which we believe to be inconsistent with a large vessel strike. A generous conclusion is that there were six right whale ship strike mortalities in 33 years or one every 5.5 years in the mid-Atlantic migration path. (There was one additional reported mid-Atlantic strike in 2005 by a naval vessel). A more realistic assessment is that of these six, none was attributed to a large

ship and all were likely killed near the coastline. There is absolutely no basis here for regulating large commercial vessels within 30 nm of the mid-Atlantic coast.

The *Knowlton 2002* study calls the recorded mid-Atlantic right whale sightings on which it bases its analysis to be "sparse" and goes on to say that "unlike the feeding grounds in the Gulf of Maine and the calving ground off the southeast U.S., survey effort in the mid-Atlantic has not been extensive."

Nevertheless, the study does attempt to analyze the exiting sighting and tagged-animal data and arrives at the following conclusion in Table 1:

63.8% of sightings occurred from 0-10 nm of shore
76.9% of sightings occurred from 0-15 nm of shore
87.1% of sightings occurred from 0-20 nm of shore
92.2% of sightings occurred from 0-25 nm of shore
94.1% of sightings occurred from 0-30 nm of shore

The NMFS 2004 Advance Notice of Proposed Rulemaking considered speed restrictions on vessels in a range of 20-30 nm from port areas. Based on the "sparse" sighting data, NMFS has decided on 30 nm in the Proposed Rule even though the extra 10 nm picks up only an additional 7 percent of right whale sightings, while increasing the distance burden on ships by 50 percent. Even using the cost methodology for carriers from the DEIS (cost per hour of sea time lost), the extra cost burden on liner shipping would be reduced by half if NMFS imposes a speed restriction within 20 nm instead of 30 nm. Given the evidence that most, if not all, strikes in the mid-Atlantic occur near shore by smaller vessels, such an action would likely pose little, if any, additional risk to the whales. Even using the low cost data provided in the DEIS, to be discussed later, a 20-mile zone would reduce the cost burden of the Proposed Rule on the liner shipping industry by tens of millions of dollars.

The *Knowlton 2002* study also concludes that the sighting data "suggests that the majority of sightings at distances greater than 30nm from the coast occur at the northern end of the range" (not included on the NPRM mid-Atlantic range). "For the remainder of the range," [NPRM mid-Atlantic range] "the overwhelming majority of the sightings are within 15-20 nm of shore." This conclusion reinforces the point that the 30 nm zone proposed

for mid-Atlantic ports is arbitrary at best. It is also costly to the industry, and there is no basis to conclude that it provides increased security for the whales.

If any Seasonal Management Area speed restrictions are adopted, the range should reflect the likely location of the whales. What little science there is indicates that 20 nm is a far more logical limit. NMFS must address this data and its impact on the analysis underlying the Proposed Rule. It cannot ignore information that is directly counter to one of the central bases of the NPRM.

To the extent that the agency has based its analysis regarding an appropriate speed zone on Table 3 in *Knowlton 2002*, entitled "Total number of sightings within 40 miles of port and % within each buffer," that table likewise does not support the proposed 30 nm buffer. Although the Table 3 data varies by port, it could be argued that the data in that table demonstrates that there is a higher percentage of sightings in the 20-30 nm band in the vicinity of ports than in a range of 20-30 nm of the shoreline as a whole. It is impossible to evaluate that possibility, however, because Table 1 and Table 3 use different methods for measuring distance. Table 1 measures a zone that is parallel to the shoreline. Table 3, in contrast, measures concentric bands with a fixed center point at the port. That means, for example, with respect to Table 3 data, that a sighting could be 30 miles from the port but only one mile from shore. Especially since the data in Table 3 appears to be a subset of the data in Table 1, it seems more likely that the Table 3 data reflects near-shore sightings that are at considerable distance from the port than that it reflects port-vicinity sightings that are further offshore. If the agency were in fact to issue a final rule with a 30 nm speed restriction zone around each mid-Atlantic port, it would need to explain the relationship of the data presented in Tables 1 and 3 of *Knowlton (2002)* and affirmatively demonstrate that whales are found further offshore around port areas than in other areas. WSC does not believe that the underlying data would support such a conclusion.

Finally with respect to the 30 nm proposal, the consultation between NMFS and the United States Navy under Section 7 of the Endangered Species Act has resulted in a finding that speed restrictions for Navy vessels (in non-emergency operations), which are exempt from the NPRM, are appropriate within a 20 nm – not a 30 nm – radius of a port. An unclassified Navy advisory from December 2004 entitled "Right Whale Protective

Measures for Mid-Atlantic Fleet," which was obtained from NOAA through a Freedom of Information Act request, states as follows:

> "National Marine Fisheries Service (NMFS) has proposed specific mid-Atlantic ports where vessel transit during right whale migration is of highest concern. During the months indicated below and within a 20nm arc of the specified reference points for each of these ports (except as noted), Navy vessels shall use extreme caution and operate at a slow, safe speed that is consistent with mission and safety."

Inasmuch as Section 7 of the Endangered Species Act requires either a finding that the actions of a federal agency will not jeopardize the continued existence of an endangered species or that a waiver of such requirement be issued, and we are not aware of any such waiver, the only legally permissible conclusion available is that NOAA has made a determination that speed restrictions for Navy vessels (which have the highest ship strike rate of any class of vessels) are necessary only within 20 nm of ports. In light of that determination, if NMFS were to issue a final rule with a 30 nm geographic scope, it would have to explain why 20 nm is adequate for Navy vessels, but 30 nm is necessary for commercial vessels. Failure to provide a reasoned explanation for these inconsistent positions would render any rule incorporating a 30 nm limit arbitrary and capricious

V. The Safety Issue

Reduced vessel speed for large ships results in reduced maneuverability. This is particularly true for high-profile vessels such as containerships and roll-on/roll-off vessels. Ten knots is at the borderline of safe, maneuverable speed and, in certain conditions, is unsafe. Many East Coast ports have narrow traffic separation schemes (TSS) in their approaches and some have narrow breakwaters at their entrances. Often strong currents and winds make port entry and departure hazardous, particularly during winter months which are included in the NPRM seasonal management areas. Slow speed adds to those hazards. Safe navigation of a vessel will always remain the responsibility of the master. Any speed measure imposed by NMFS under the Rule must contain a safety exception that permits a captain to conform his vessel's speed to the conditions he faces, i.e., weather, tides, or vessel traffic at any time. Not to include such

an exception would be reckless and increase the likelihood of vessel collisions, groundings or serious environmental incidents.

VI. Economic Impact of the NPRM on the Liner Shipping Industry

The NPRM and DEIS make an attempt to estimate the cost to the liner shipping industry (container and roll-on/roll-off ships) of the 10 knot/30 nm Proposed Rule. We believe that:

1. The per hour cost estimate for a vessel at sea used in the estimate is 2.5-4 times too low;
2. The estimate of hours lost per port call is 2.5-3 times too low;
3. There is no estimate of the cost of extra fuel required to make up lost time on a multi-port string – a major added cost;
4. The cost to the shipping and port industries and its customers if vessels are forced to bypass a port to maintain schedule is high but difficult to calculate or predict; and
5. There are a number of other costs and operational considerations associated with speed restrictions that are not dealt with in the DEIS.

We will discuss each of these issues below.

The shipping industry has never attempted to put an acceptable or unacceptable price on the life of a right whale. We have said from the beginning of the rulemaking process that we share NMFS's objective of implementing measures that will reduce ship strikes. However, it is critical that all affected parties have confidence that the cost and service disruption caused by a regulation is contributing to the safety of the whales and the recovery of the species.

The imposition of Dynamic Management Areas, for example, would help keep ships and whales apart, and we support the program – even though they may be more costly and disruptive to liner shipping services than seasonal management. The DEIS estimates the annual cost of DMAs to the shipping industry, with a 10-knot restriction, at $17 million. Because of our cost calculations below, we believe that figure will be considerably higher. The NPRM gives carriers the choice of slowing down through a DMA or

avoiding it. We anticipate, because of our view on the ineffectiveness of speed measures, that liner ships will choose to avoid the whales rather than proceed more slowly through areas where they are known to be. This is a measure that we believe will be meaningful and effective.

As to the issues raised above:

1. The DEIS estimates, based on Army Corps of Engineers confidential data, that the cost of operating a containership at sea is approximately $1100 per hour (including capital costs, crew, fuel and other operating costs). The actual estimates received from our member lines vary from $2400 to $4000 per hour depending on the size and speed of the vessel. For our calculations, therefore, we are using $3200, which we believe to represent the average liner vessel serving the East Coast at average speed.

2. The DEIS estimate for hours lost per port call by speed reduction in the mid-Atlantic is approximately one hour. Based on the distance from port at which 20-22 knot ships must begin to slow to comply with the Proposed Rule (estimated at 45 nautical miles) and the time required to resume sea speed outbound, we conservatively estimate 2.5 – 3 hours of lost time per port call.

3. A major cost for carriers will be extra fuel burned at higher than service speed to make up lost time to maintain schedules. This will far exceed any minimal fuel savings at reduced speed in the 30-mile zone. One member line with four East Coast port calls per week estimated an increased fuel cost of $20,000 per week or $520,000 for the 26 week seasonal management period in the mid-Atlantic.

4. The cost to ports and the shipping industry when vessels are forced to bypass a port on its itinerary in order to maintain schedule are difficult to calculate, but substantial. The DEIS makes an attempt to quantify this by estimating the positive economic impact of a vessel call at two northeast ports with the implication that there is a direct correlation to potential loss if a scheduled vessel bypasses those ports. This ignores the potential costs to the shipping line, which will be faced with increased labor and berthing costs at the next port-of-call, and increased intermodal transportation costs to move cargo over land which was due to be off-loaded at the bypassed port.

Importers and exporters will be faced with longer transit times, increased transportation costs, and delays to delivery of their cargo. Again, the impact of this is vastly underestimated in the DEIS.

5. There are a number of other operational implications not associated with the issues discussed above. These include:

   - The DEIS recognizes the added cost to coastwise shipping in the cabotage trades based on additional miles traveled southbound along the coast to stay outside of the 30 nm zone. We would point out that liner vessels in international trade would face the same situation and added cost.

   - Ships' engines will require additional maintenance as a result of continuous variation of speed and poor combustion and engine fouling from slow steaming. Blower motors will be required to operate for longer periods and will require more frequent maintenance.

   - The NPRM restrictions are primarily during the winter months when speed and schedules are already adversely affected by the weather.

   - Modern containership engines are designed to operate at high RPM and are shown to have an increased production of NOx emissions when operated at lower RPM for a longer time.

As a result of the issues stated above and the shortcomings of the DEIS, it is difficult to provide a meaningful picture of the economic impact of this Proposed Rule on the liner shipping industry. The DEIS calculates the overall impact on the entire shipping industry of the Proposed Rule, if it had been in force in 2004, at $49.4 million dollars. This includes containerships, roll-on/roll-off ships, tankers, bulk carriers, combination vessels, general cargo ships, passenger ships, barges, etc. Containerships and roll-on/roll-off ships (liner vessels) account for just over $21 million of that estimate. Some simple calculations based on the operating costs and hours-lost-per-port figures in 1 and 2 above for liner ships will show how low that estimate really is.

According to the U.S. Maritime Administration, in 2004 liner vessels made 12,263 calls at east coast ports. If we subtract calls at ports south of Jacksonville (not included in the NPRM) we arrive at approximately 10,500 port calls for the year and approximately 5,000 calls for the seasonal management periods (more than 90 percent of these calls are in the mid-Atlantic region). If we very conservatively say that vessel calls have not increased since 2004 (which they have by about 5 percent) and we use the average current liner vessel hourly operating cost ($3200) and the average lost time per port call (2.75 hours), we arrive at an estimated cost to the liner sector of $44 million dollars ($40 million in the mid-Atlantic) for lost hours alone. While it is impossible to calculate all of the additional costs discussed above, we can safely say that the DEIS is low in its cost estimates by at least a factor of two and more likely three. It is not unreasonable then to put the range of economic impact on the shipping industry at $100 - $150 million rather than the $49.4 million estimate in the DEIS.

The DEIS concedes that the $49.4 million (more likely $100+ million) cost burden for the shipping industry at the 10-knot limit would be reduced to $18.35 million if that speed were set at 14 knots. This would be a 63 percent decrease in the cost burden to the shipping industry. The DEIS further concedes that the total estimated impact of the 10 knot limit on all entities of $107.4 million would be reduced to $30.2 million if the speed were set at 14 knots – a 72 percent reduction.

Clearly, everyone would realize a substantial reduction in cost burden with a 14-knot limit – with no discernable increased risk of a fatal right whale ship strike and possible reduced risk of any ship strike as discussed above. As noted above, reduction of the 30 nm zone in the mid-Atlantic to 20 nm would provide further substantial relief without increased risk.

VII. Further Study Is Needed

WSC believes that there is little, if any, sound science to justify the speed and distance restrictions in the NPRM, particularly for liner vessels which are the most severely impacted economically. It is also clear that the science is weakest in the region which imposes the most severe economic burden – the mid-Atlantic. We submit that before these measures are implemented in the mid-Atlantic, more research is required. Having reviewed the various supplementary documents to the Proposed Rule, we believe that further work is needed in three primary areas – hydrodynamics, acoustics and survey data.

Hydrodynamics – WSC is aware of two documents dealing with related hydrodynamic studies performed under contract with NMFS. These are "The Hydrodynamic Effects of Large Vessels on Right Whales" (*Knowlton et.al. 1995 and 1998*). Both are based on computer models which factor the forces created as water moves around a vessel's hull. The 1998 study claims to have introduced new, more sophisticated factors into its modeling by including additional forces, vessel types and speeds and whale behavior scenarios. Nevertheless, the results are inconclusive. In some scenarios, whales are pushed away from ships and in others they collide. This study, however, suffers from shortcomings that render any conclusions meaningless as they relate to liner vessels. Three hull types are studied – a VLCC tanker, a navy destroyer and an SL-7 containership built in 1972. None of these hull types resembles, in any way, modern liner vessels serving the U.S. East Coast. The SL-7 had a long, tapered hull, with narrow beam and twin propellers which was built for speed (33 knots) and has no relationship to today's wider, deeper, slower, single-propeller containerships. Additionally, the water depth used in the simulations was 20 meters – an extremely shallow depth which dramatically alters the hydrodynamic forces exerted and in no way reflects water depth where real ship/whale encounters might occur.

WSC has offered to provide more realistic hull characteristics to NMFS for further computer simulation research but, to our knowledge, no further work has been done. Additionally, we have asked that more realistic hydrodynamic tank testing be conducted, but again we do not believe that any such tests have been conducted to date.

WSC urges NMFS to undertake additional computer simulation testing and initiate a tank testing program which includes the hull characteristics of today's liner vessels before imposing any speed restrictions on the shipping industry. Existing studies, even with incorrect input, suggest that vessel speed is not a factor in vessel/whale collisions in many scenarios and that ships moving at higher speeds may, in fact, repel whales. Further work must be done in this area.

Acoustics – Two acoustics issues should be considered regarding avoiding right whale ship strikes – the effect of ship noise on whale behavior and the potential of passive acoustic technology in locating migrating whales along the mid-Atlantic coastline.

In *Gerstein et al. (2005)*, as discussed in *Testeverde and Hain*, the authors studied the effect of acoustics on whale behavior and concluded that whales can detect faster vessels at greater distances and thus have considerably more time to react and avoid a collision. They argue that slowing ships will actually increase the risk of a ship strike. This requires further study before speed restriction are implemented.

Additionally, the Office of Naval Research (ONR) is developing both active and passive acoustic technology for locating and identifying whales. They have developed Passive Aquatic Listeners (PALs) which could be used locate migrating whales around port areas in the mid-Atlantic and provide a warning system for mariners when whales are in their path. This technology could well provide a more effective alternative to the costly and disruptive seasonal management measures in the Proposed Rule.

Survey Data – As acknowledged in *Knowlton et. al. (2002)*, the data on right whale migration through the mid-Atlantic region is "sparse". NMFS should fund additional survey flights in this region during the upcoming migration season and attempt to better understand the migration pattern of the right whales before implementing burdensome regulations in the region which may make no positive contribution toward protecting the whales.

VIII. Conclusion

The Council supports the purpose of the proposed rule – prevention of ship strikes to right whales and reduction of the severity of strikes that do occur. The science presented in support of those rules, however, provides no basis to conclude that the proposed speed restrictions will help to prevent ship/whale collisions or lessen their severity.

Accordingly, the Council urges NMFS to modify its approach and instead to implement, through an Interim Final Rule, Areas to be Avoided and Dynamic Management Area controls while it continues research on possible additional protective measures. To do otherwise would be to impose substantial costs to the shipping industry, and operational disruptions to U.S. commerce, without any reasonable expectation of increased

protection for the whales. Such an outcome is not consistent with good science, good conservation, or the law.

Finally, although we do not believe that there is adequate science to support speed restrictions, we recognize that NMFS might consider that course in any case. In the event that NMFS were to adopt speed restrictions, the Council urges, in the alternative, that the outer boundary of the restricted areas in the mid-Atlantic extend 20 nm, not 30 nm, from each port, and that the maximum speed be set at 14 or 15 knots, not 10 knots, in restricted areas. To the extent that there is any scientific basis for speed restrictions, indications in the cited studies are that virtually all speed-related benefits that there may be would be realized by a 20 nautical mile/14-15 knot rule.

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Yangming Marine Transport Corporation
Zim Integrated Shipping Services, Ltd

Georgia Ports Authority

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Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
shipstrike.comments@noaa.gov
shipstrike.eis@noaa.gov

Subject: Docket No. 040506143 – 6016 – 02, I.D. 101205B

The Georgia Ports Authority (GPA) appreciates the opportunity to comment on the Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales (Federal Register / Vol. 71, No. 122 / Monday, June 26, 2006) and for the EIS No. 20020278, Draft DIS, NOA, 00, Draft Environmental Impact Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy (Federal Register / Vol. 71, No. 130, Friday, July 7, 2006 / Notices). Our organization operates deepwater terminals in the ports of Savannah and Brunswick, both which are included in the Proposed Rulemaking and Draft EIS.

The GPA believes that the endangered North Atlantic right whale must be protected and understands the difficulty facing the National Marine Fisheries Services (NMFS) and the National Oceanic and Atmospheric Administration (NOAA) in balancing the economic interests of the maritime industry with the agency's responsibility to protect the species. The GPA commends the decision of the NMFS to prepare an EIS to analyze the potential impacts of implementing the operational measures in NOAA's Right Whale Ship Strike Reduction Strategy. However, the GPA is opposed to the proposed rule that a speed restriction of 10 knots should be mandated for vessels transiting ports on the U.S. East Coast. **How can the NMFS and NOAA responsibly justify putting the entire economic burden for compliance with speed restrictions on 100% of the ocean going commercial fleet when, at best, it may be responsible for less than 50% of the collisions?** The GPA would also like to raise concerns regarding the Draft EIS, particularly with the economics and science used to make the determination for the speed restriction, and the lack of study associated with vessel safety under the proposed speed restriction.

The safety and steerage of ocean vessels should be considered a primary concern within the Draft EIS and a determining factor in setting the proposed speed restriction. While the EIS studies the impact of vessel strikes and the economic impact of limiting speeds to 10, 12 and 14 knots, it does not study the implication to vessel handling and operation at each of the proposed restrictions. Vessel speed has an effect on the maneuverability of large ships. Deep draft vessels often require more than 10 knots of speed to maintain their position due to the currents and high winds in the open waters of the Atlantic Ocean. The proposed restriction of 10 knots will impact the safety of vessels, and thereby, threaten not only human life, but the marine environment as well due to the increased potential of groundings and resulting oil spills from vessels. Weather is also an important factor in vessel maneuverability. The time of year for which these speed restrictions are proposed is when the prevailing weather conditions usually require additional speed to maintain steerage of the vessel in the narrow entrance channels at Savannah and Brunswick. High wind conditions and a 10 knot speed restriction will ultimately result in port closings which is a factor that was not considered within the economics evaluation of the EIS. **Has NOAA**

considered a study of the maneuverability of vessels at each management area (each port) for each of the speed restrictions evaluated as part of the EIS (10, 12, and 14 knots)?

The GPA does not agree that speed restrictions should be mandated without having substantially more scientific data on which to base such a decision. The GPA requests that additional scientific studies be conducted to determine the risks to human and vessel safety at each of the considered speed restrictions. **Will NOAA study the impacts to vessel maneuverability with hydrodynamic models of each of the ports included within the proposed SMAs?** Considering the vessel handling characteristics vary depending on such variables as the vessel design, weather, tides and configuration of the channel, the GPA would suggest "minimum safe speed" as language to be used in the proposed rule instead of a predetermined speed. **Has NOAA considered minimum safe speed as an alternative to naming a specific vessel speed restriction?**

Another issue with the speed restriction is enforcement. The Draft EIS does not propose which federal agency will be charged with the responsibility of enforcing the proposed speed restriction. Additionally, the EIS does not set forth provisions of how such enforcement will be funded or what penalties should be assigned for violations of the restriction. In consideration of the current federal budget climate, additional staff to enforce such restrictions would be unlikely. **If the U.S. Coast Guard is tasked with enforcement, how will this additional responsibility impact its other critical duties, such as homeland security? Will these issues be addressed in the EIS and will these issues be included in the economic impact study?**

If the speed restriction is imposed, the GPA also believes the proposed rule should include a provision by which to terminate the restrictions when a sustainable population level or annual population increase percentage is reached. No such provision is included in the EIS or proposed rule at this time. **Did NOAA consider a provision by which to terminate the speed restrictions?**

The GPA also questions the scientific data included in the Draft EIS and used for the determination of the 10 knot speed restriction. Based on the records of whale collisions where vessel speed was reported, mortality and injury to right whales by vessels 65 feet and larger at speeds of less than 14 knots is not indicated. Data in the cited studies is based on whale species other than the right whale. The cited studies include too much emphasis on the large whale speed database which contains only five percent right whale references, one citation that is highly suspicious, as it was a retroactive right whale categorization made 25 years after the collision incident. **Will NOAA consider additional research on the right whale prior to setting speed restrictions? Can NMFS support the claim that there are only 300 right whales surviving today?**

Consideration of vessel speed vs. whale collisions is not simple, but rather, involves a matrix of inter-related dimensions and probabilities. Not all factors from the cited studies point in the same direction, and indeed to some degree, may be offsetting. The research sets forth that vessels traveling at higher speeds may provide a lesser response time for whales exhibiting avoidance behavior; draw a whale into the vessel in the case of an appearing whale or at speeds of 20 knots or greater; and increase the extent of injury to the whale. On the other hand, research also provides that vessels traveling at higher speeds may provide an acoustic signature that allows for greater whale response time; push the whale away from the vessel, thus avoiding a possible collision; and reduce the exposure and risk of a vessel/whale interaction

because the two are not in the same area for as long a period as when the vessel is traveling at slower speeds. **Won't slower speeds keep vessels and whales in restricted areas for longer periods of time; thus increasing the potential for collisions?** In several of the hydrodynamic simulations, whether a collision did or did not occur was independent of vessel speed or at least over a wide range of vessel speeds. **Can the NMFS and NOAA guarantee that slower vessel speeds will reduce collisions between whales and ships?**

The GPA believes that the economic analysis did not take into account several important factors and greatly undervalued the overall impact to the industry and to the nation. As stated above, the speed restriction and weather conditions may result in port closure due to the loss of steerage of the vessel at lower speeds. An evaluation of the weather patterns at each of the impacted ports should be conducted and an estimation of the economic impacts due to port closure should be included. Also mentioned above is the need for enforcement of the speed restriction. Costs should be assigned to the variables associated with managing the proposed rule including the additional staffing required for enforcement. If an economic analysis is to be included, the analysis should be complete.

Although an estimation was made of the monetary impact to the ports of Savannah and Brunswick, the GPA believes these are underestimated. The analysis states that Brunswick would be one of the ports that is most impacted by the restriction, and the GPA thinks the impact will be even greater than estimated in the study. According to a recent economic impact study of the deepwater ports in the state of Georgia conducted by the University of Georgia Terry College of Business, the statewide economic impact of Georgia's deepwater ports of Savannah and Brunswick in fiscal year 2003 includes:

- $35.4 billion in sales (7% of Georgia's total sales);
- $17.1 billion in gross state product (6% of Georgia's total GSP);
- $10.8 billion in income (4% of Georgia's total personal income);
- 275,968 full and part time jobs (7% of Georgia's total employment);
- $3.2 billion in federal taxes; and
- $1.4 billion in state and local taxes.

Based on these significant economic contributions of the ports of Savannah and Brunswick, the GPA believes the impacts stated within the economic analysis for the draft EIS are understated.

Additional research is needed to understand the behavior of the right whales. The GPA firmly believes the industry and researchers can work together to avoid collisions. The GPA is working with the Florida Fish and Wildlife Conservation Commission to provide access to the AIS vessel tracking system to monitor vessel positions as the ships approach the ports. This information, combined with right whale position information determined from aerial whale surveys, can be used to hopefully avoid future collisions.

Our organization also believes that the Early Warning System that was instituted to alert vessels to the presence of a whale in an area has been a successful program, and the GPA contributes funding to support the paging network that is part of the early warning system. Since 1991, only three whales in the Southeast are known to have been hit by ships, the last in 1996. During that time period, more than 50,000 vessel transits have taken place in the Savannah area alone. Those numbers seem to indicate that

the system is working. Your background papers state that we cannot be certain that whales were not killed by ships. We also cannot be certain that whales were killed by ships. The fact of the matter is that we don't have enough data to know. And until we have better science on whether or not a reduction in speed will help save the population, we do not agree that the proposed strategy is justified.

In conclusion, the GPA sees no proof that the proposed strategy will result in better protection or reduce collisions with ships, and until such a time that reduced speeds can be proved to reduce ship strikes, we do not support the strategy. We believe that the early warning system, the aerial surveys and the outreach and educational efforts by NMFS are working. GPA also supports additional research of technology to enable tracking of the right whales, as well as ongoing study to better understand the habits and numbers of the existing whales.

The GPA appreciates the efforts of NOAA and NMFS to educate and collaborate with the maritime and shipping industries and will continue cooperative efforts to better protect this endangered species.

Thank you for the opportunity to comment.

Respectfully submitted,

On behalf of the Georgia Ports Authority

Hope Moorer

Hope Moorer
Program Manager, Navigation Improvement Projects

cc: Governor Sonny Perdue
U.S. Senator Saxby Chambliss
U.S. Senator Johnny Isakson
U.S. Representative Jack Kingston
U.S. Representative John Barrow
David Rostker, OMB
Admiral Conrad C. Lautenbacher
Secretary Carlos M. Gutierrez, U.S. Department of Commerce
Gregory Silber, PhD, Fishery Biologist, NMFS

October 5, 2006

Chief, Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Protected Resources, NMFS
1315 East-West Highway
Silver Springs, MD 20910

Dear Sirs/Madams

Capt. John Boats, Inc. of Plymouth, MA is a small family owned business which operates five passenger vessels between eighty and one hundred ten feet. All operations are seasonal in nature with one passenger ferry operating between Plymouth and Provincetown, two passenger fishing vessels and two whale watch vessels. All vessels operate in the waters of Cape Cod Bay and Massachusetts Bay with a substantial number of excursions operating in and around the waters of Stellwagen Bank National Marine Sanctuary.

In reviewing the proposed rules set forth, I am greatly concerned with the potential impact that these restrictions will have on individual whale watch, ferry and charter boat companies, the local and state economies, the safety of right whales, and navigational safety.

The proposed alternative for operational routes and speed restrictions for whale watching vessels within Cape Cod Bay and on Stellwagen Bank is overly restrictive and unnecessary in order to help to insure the protection of the right whale. An average whale watch from Plymouth consists of twenty five minutes transiting the harbor, a one hour transit, 20nm at 20kts, in search of whales and approximately sixty to seventy five minutes watching whales. Often times the entire trip will be completed within the boundaries of Cape Cod Bay. Assuming that a ten knot speed restriction is in place, an average four hour trip will become a six hour trip with two and one half hours travel time before even sighting a whale. It is clear to me that this scenario would prove unacceptable to approximately ninety percent of our passengers and devastating to the viability of our company. I would be pleased with the opportunity to take NMFS personnel on a whale watch not to exceed ten knots in order to illustrate my concerns. In addition, the size and structure of the proposed DMA accompanied with the problematic delays of implementing the restricted area after a sighting are impractical. Frequent real time position updates and smaller more manageable areas are a more sensible approach to DMAs.

I am greatly concerned that the DEIS fails to put forth an analysis on both the value of education and outreach provided by whale watch operators which is clearly an existing component of the current strategy and the value of out of season and out of habitat sightings of right whales provided to NMFS by whale watch operators. The education and outreach that the whale watching industry has undertaken on behalf of the right whale and all other whale species is immeasurable. I suspect that few other stakeholders

can say the same. In the months of April through October, from 2001 to 2004, no less than seventy-eight reports of right whale sightings were called into the Sighting Advisory System by whale watch vessels. Many of these opportunistic sightings would have gone unrecorded by NMFS if not for the presence of whale watch vessels and their concern for the protection of the right whale. Throughout this 2006 season, I personally am responsible for a total of twenty five right whale sighting reports submitted to NOAA via the Right Whale Sightings Network. It is clear that commercial whale watch vessels identify the majority of out of season and out of habitat sightings of right whales. Furthermore, it is unreasonable to suggest that, in the future, a company or individual should supply sightings information that will in turn significantly restrict their ability to achieve successful whale sightings of any species and potentially prevent a vessel from leaving the dock.

Within the DEIS, it is stated that whale watch vessels could re-route around an effected area in order to look at whales in a different area. Given the size of the proposed management areas, it is impossible for a vessel departing from Plymouth to re-route around Cape Cod Bay and Race Point. In addition, it is stated that vessels could potentially watch other whales within the management area since the vessel would be operating at less than ten knots while doing so. It is a rare occasion that right whales and other large whale species are feeding or aggregating in the same area as they target entirely different food sources. In the few recent circumstances were this has been the case, the presence of right whales actually prohibited the watching of humpbacks due to the five hundred yard regulation for right whale approach. In these cases, whale watch vessels are required to leave the area in search of other whales which may or may not be found. In light of the proposals being set forth, it would be appropriate and sensible to reduce the five hundred yard restriction for right whale approaches for whale watch vessels to a safe distance that would be acceptable for observation and data collection. This would serve both to allow for the collection of valuable photo ID, behavior and general condition data as well as accurate real time position data while still providing whale watch operators the ability to complete a successful trip. Clearly, there is an existing precedent for making an exception to speed restrictions and operational measures for sovereign vessels and therefore one could be made for whale watch vessels.

With regard to the Impacts on Whale Watching Vessels in the DEIS, the omission of whale watch companies outside of Massachusetts as part of the analysis is also of great concern. In Data Charts 4-41 and 4-42, only Massachusetts whale watch companies are analyzed and in Data Chart 4-42, no analysis of Alternatives 4 or 5 is included. Also, within the economic impact analysis connected with the whale watching industry, the impacts to cottage industries of surrounding communities does not appear to be addressed. As a result, impacts on the whale watching and related industries are grossly underestimated.

It must also be stated that the designation of twenty-meter vessels is arbitrary at best. All significant data identifies vessels of eighty meters and longer as being the category of

concern with regard to right whale collisions and fatalities. In fact, an existing precedent for a speed restriction to protect large whales is set in Glacier Bay, Alaska with the vessels regulated being two hundred sixty two feet and greater and the speed restriction being thirteen knots. Yet because of one data point, a Coast Guard vessel of twenty-five meters that struck a young right whale off the coast of Florida on January 5, 1993,it is suggested that all vessels greater than twenty meters must be regulated. Interestingly, it is my understanding that this same coast guard vessel would be exempt from such regulations falling into the category of sovereign and immune. Conversely, another single data point involving a forty three foot vessel that struck and seriously injured a female right whale off the coast of Georgia in March of 2005 is not highlighted.

Clearly, no other stakeholder industry has a comparable history of working towards the protection of right whales as the whale watch industry does. It is hard to imagine other industries being similarly held to the same standards of one hundred percent reporting and having equal expertise in identifying troubled and entangled animals. It is hard to imagine other industries consistently standing by and observing entangled whales until disentanglement teams can arrive on scene. The DEIS has also failed to factor in the value of entanglement reports and support by whale watch vessels.

For these reasons, it is our recommendation that speed restrictions are limited to sixteen knots and the diameter of DMAs is limited to four nautical miles with frequent monitoring and updating of whale positions. Closer monitoring of whales with more targeted restrictions, in our opinion, has a far greater chance of success than severe widespread restrictions.

Captain John Boats, Inc. believes that what is best for the whales is best for whale watching and commends NMFS for its efforts directed at the protection of such an endangered and important species as the right whale. We, in addition to the entire whale watch industry, wish to continue to assist with the protection and enjoyment of all whale species. However, we wish also not to be forced into overly aggressive restrictions and regulations that have the potential to put many of us out of business.

Sincerely,

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DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
(INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

October 5, 2006

Chief, Marine Mammal and Sea Turtle
Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Dear Sir or Madam:

This responds to your agency's Notice of Availability of a Draft Environmental Impact Statement (DEIS)to implement the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy.

As previously stated in our comments to your notice of intent to prepare this DEIS, the Department of the Navy remains supportive of the National Marine Fisheries Service's efforts to develop a workable strategy that provides protection to the North Atlantic right whale while preserving the Navy's ability to train and maintain force readiness. We are pleased to see that much of the input we provided during the scoping process was incorporated into the DEIS. Additionally, we have worked with you through the interagency process regarding the specific information contained in the rulemaking to implement this strategy. We are providing comments on the proposed rulemaking that appeared in the Federal Register on June 26, 2006 under separate cover.

The attached provides our general comments on the designation of specific speed limits, as well as specific comments regarding how Navy activity is characterized within the DEIS. We appreciate the opportunity to comment on the DEIS, and look forward to continuing our relationship regarding the conservation of this highly endangered species.

Sincerely,

FOR

Donald R. Schregardus
Deputy Assistant Secretary of the Navy
(Environment)

Enclosure

NAVY COMMENTS ON THE NATIONAL MARINE FISHERIES SERVICE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) TO IMPLEMENT THE OPERATIONAL MEASURES OF THE NORTH ATLANTIC RIGHT WHALE SHIP STRIKE REDUCTION STRATEGY

General comments

The overriding comment involves the requirement to proceed at no greater than 10kts, 12kts or 14kts when transiting in designated shipping lanes. For a number of reasons that have been discussed at length during Northeast Implementation Team (NEI-T) meetings, Southeast Implementation Team meetings, Ship Strike Committee meetings, and various conferences with the maritime industry, the designation of a specific safe speed limit is problematic. The following provides a synopsis of the variables precluding the designation of specific speed.

1. The discussion in the DEIS allowing for discretion on the part of the master if safety is an issue is not readily apparent. The numbers of variables that contribute to the definition of minimum safe speed for a specific vessel in a given situation are so numerous as to confound the establishment of a single value that could apply in all cases. That is why the International Regulations for the Prevention of Collisions at Sea (COLREGS) only refers to "safe speed" rather than provide a numerical definition. Although in most cases 10 knots is probably safe for most ships under typical conditions, vessels that are difficult to maneuver (large sail area, single screw) may require greater speed "rung up" in order to maintain course or effectively maneuver to avoid collision under certain combinations of wind and current. Although the comment matrix states this concern was addressed, it is not clearly discussed and should precede any discussion of speed.

2. Once again, the rationale for the proposed speeds is not well-supported. As noted in previous comments, of 292 strikes reported in Jensen and Silber 2003, vessel speed was only known for 39 resulting in probable injury and / or mortality. Of the 53 right whale (north Atlantic and southern) strikes involving 35 mortalities, speed was reported for three. Whether the assertion that most fatal collisions occur at 14 knots or faster actually applies to right whales isn't clear. The behaviors of different whale species during encounters with ships are highly variable. Fin whales are involved in the largest number of ship strikes. They have been reported to reach speeds of 20 knots (Aguilar, 2002) and have been observed on numerous occasions passing and crossing the bows of ships. Right whales may have been involved in a greater proportion of collisions before the era of steam ships, but records are generally few. One of the earliest accounts of a fatal ship strike was reported by Frobisher during his 1578 voyage to Newfoundland (True, 1983). The animal was likely either a right whale or a bowhead. Right whales frequently show little or no reaction to approaching ships, even when they should be able to detect them. While Gerstein suggests right whales might not hear the acoustic signature of an

approaching ship, studies by Nowacek (Nowacek et al., 2004) indicate that in the majority of cases they do, but do not react to avoid collision. In a reconstruction of the 1993 collision of a right whale calf and the USCG Cutter Point Francis, it was determined that the animal actually swam into the stern quarter of the ship as the vessel was steaming at 14.2 knots, subsequently receiving fatal injuries from the propeller.

3. As discussed in our previous comments, the DEIS makes an assumption that at speed in excess of 10 knots, hydrodynamic forces "may" draw the whale back toward the ship and into the propeller. The report "Hydrodynamic Effects of Large Vessels on Right Whales" by Knowlton, Korsmeyer and Hynes notes that how the hydrodynamics of different hull types at varying speeds increase collision risk depend on several factors including depth of the animal, depth of the water, where the animal appears in relation to the ship's hull as it passes, and whether the whale attempts to avoid the vessel. It concludes that the only time reducing speed decreases collision risk is if the whale is trying to escape. Although there are additional hydrodynamic studies proposed, it appears that at the present state of knowledge, the whale would have to be attempting to avoid the ship in order to have a decrease in speed reduce the risk of being hit. Given the sparse nature of data concerning ship speed and right whale collisions, and the lack of reaction generally displayed when approached by a ship the assumption that 10 knots will be protective and reduce hydrodynamic forces that draw the whale into the ship or propeller does not seem warranted.

DEIS Specific comments

1. Page ES-9
Comment: The assumption that a vessel traveling at 10 knots is not as likely to collide with a whale may not be valid, particularly in the case of right whales. In addition, providing a maximum allowable speed without considering potential ship safety issues potentially endangers both mariners' lives and possibly the coastal environment due to groundings, oil spills, etc.

Recommendation: Consider the example set by Navy and COLREGS allowing for discretion on the part of the master if safety is an issue.

2. Page 1-11, Section 1.4
Comment: Although the Navy's protective measures are covered in Appendix A, it would be useful to provide a synopsis in the main document. During public meetings held as part of the Ship Strike Committee, for the Proposed Rule, and for the DEIS there were many comments made complaining about the exemption of sovereign vessels. Making it clear early on that the Navy is already implementing comprehensive protective measures throughout the range of right whales would likely improve the understanding of most readers of the DEIS without their having to go to the Appendix (which could be referenced for more detailed information).

Recommendation: Provide a synopsis of Navy protective measures and results of the 1997 BO early in the DEIS, when mentioning the exemption of sovereign vessels. At minimum, references to Appendix A should be given whenever there is specific mention of the sovereign vessel exemption.

3. Page 2-12, Section 2.2.4
Comment: There are discussions of an Area To Be Avoided (ATBA) in the Great South Channel in Section 2.2.4, but no chart of the proposed ATBA provided. The Navy does operate occasionally in this region under the provisions of a Section 7 Consultation held with NOAA in 1997. Without knowing where this ATBA is, the Navy cannot understand how it might affect the current agreement it has regarding testing here.

Recommendation: Provide a chart clearly depicting the ATBA.

4. Page 2-16, Section 2.3.8
Comment: NMFS states that they will be reviewing Federal actions involving vessel operations to determine where ESA Section 7 consultations would be appropriate. The decision to initiate Section 7 consultation under the ESA is a decision made by the action agency. The Navy is fully committed to compliance with the ESA and to Section 7 consultations, as appropriate, to ensure continued protection of the northern right whale. Since 1995, Navy has completed 23 ESA informal consultations, 4 ESA formal consultations, and is currently engaged in ESA consultations on training activities. Additional consultations in support of Navy weapon system and platform testing, acquisition and research and development also have been completed. Naval Air Systems Command completed at least six informal consultations with NMFS concurrence that proposed activities were not likely to adversely affect listed species. Naval Sea Systems Command has completed 2 formal consultations and 14 informal consultations since 1995.

Overall, during the conduct of ESA Section 7 consultations with NMFS for various Navy actions on the East Coast, Navy routinely presents and analyzes the potential for vessel collisions as a component of the consultation. NMFS has analyzed the issue of potential Navy vessel strikes in a series of consultations, in most cases including mitigation measures, such as shipboard observers (lookouts) to support the reduction of ship strike risk to listed species. Vessel collision is routinely considered by NMFS in issuance of informal consultation concurrence letters and Biological Opinions for Navy activities along the U.S. Atlantic Coast. Typical language from a January 2004 consultation concurrence reads: "On occasion, underway vessels may collide with marine mammals or sea turtles. While whales are highly maneuverable and generally detectable (in daylight) at long range by onboard watchstanders, collisions do occur with surfacing animals, resting animals, or those swimming just below the surface. Given the low density of listed species and the harm avoidance measures proposed to be included as part

of the proposed action, NOAA Fisheries believes that collision with a listed species during these operations is highly unlikely." Additional mitigation procedures, such as slow speed requirements and additional lookouts, are issued as mitigation measures by NMFS for Navy activities where NMFS believes there is a higher risk of ship strike, such as the procedures identified in the 1997 Southeast BO.

Recommendation: All language with regards to NMFS reviewing Federal actions involving vessel operations to determine where ESA Section 7 consultations would be appropriate should be deleted.

5. Page 4-127, Shipping Vessel Noise
Comment: Although details regarding Navy vessel traffic are covered in Appendix A, it would be useful to provide a synopsis in the main document. Explaining the small percentage of overall ship traffic that the Navy represents would likely improve the understanding of the DEIS by most readers without their having to go to the Appendix (which could be referenced for more detailed information).

Recommendation: Provide a synopsis of Navy vessel traffic in the appropriate DEIS section, noting that Navy ships account for about 3 percent of total ship presence out to 200 nm (Filadelfo, 2001).

6. Page 4-128, Noise from Military Activities
Comment: Although the 1996 incident of six right whale deaths in waters adjacent to the SEUS right whale critical habitat area was discussed, no detail was given with regards to how the Navy took steps to work with NMFS to ensure the continued protection of the northern right whale. Although there was no indication that naval operations were responsible for any of the right whale mortalities, Navy determined that additional review of Atlantic Fleet operations via a formal ESA consultation process was prudent to determine the potential effect on listed species. In addition, NMFS indicated that the recent mortalities could change the biological baseline upon which prior impacts had been evaluated, warranting enhanced protective measures and the requirement to reinitiate consultations. Navy and NMFS held several meetings, and, in March 1996, Navy implemented additional northern right whale protective measures and initiated formal ESA consultation.

Recommendation: Provide a more detailed synopsis of how the Navy took steps to ensure the continued protection of the northern right whale with regards to this incident.

References

Aguilar, A. (2002), "Fin Whale (*Balaenoptera physalus*)," in Encyclopedia of Marine Mammals, W. F. Perrin, B. Würsig, and H. G. M. Thewissen (eds.), Academic Press, San Diego, CA, pp. 435-438.

Filadelfo, R. J. (2001), "Memorandum for the Director, Environmental Protection, and Occupational Health Division (N45)", CME D0003655.A1, Center for Naval Analysis, Alexandria, VA, p. 16.

Nowacek, D. P., M. P. Johnson, and P. L. Tyack (2004), "North Atlantic Right Whales (*Eubalaena glacialis*) Ignore Ships But Respond to Alerting Stimuli," Proceedings of the Royal Society of London, Series B, Biological Sciences, vol. 271, pp. 227-231.

True, F. W. (1983), The Whalebone Whales of the Western North Atlantic Compared with those Occurring in European Waters with some Observations on the Species of the North Pacific, Smithsonian Institution Press, Washington, DC.

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5 October 2006

Chief
Marine Mammal Conservation Division
Attn: Right Whale Ship Strike Strategy
Office of Protected Resources, NMFS
1315 East-West Highway
Silver Spring, MD 20910
Fax: 301-713-0376

Dear Chief, Marine Mammal Conservation Division:

Thank you for the opportunity for Cetacean Society International (CSI) to comment on the "Draft Environmental Impact Statement to Implement the Operational Measures of the North Atlantic Right Whale Ship Strike Reduction Strategy." CSI supports the concept of improved restrictive management strategies presented in the DEIS, but urges more focus on improving right whale detection and tracking, and fundamental improvements in mariner notifications.

Based on the data presented CSI supports Alternative 5, but with caveats because of inadequate discussion and data in the DEIS. For example, CSI was unable to find a clear explanation why Alternate 6 was NMFS's Preferred Alternative, while the DEIS also states that Alternative 5 offers "the highest level of protection to the population," unless NMFS chose 6 because of a lower economic impact. For an example of the explanations we had difficulty with, the DEIS did not clarify why the time period during which "operational measures would apply" in the Southeast US calving area are not the same in Alternative 5 as in Alternative 6. For another example, clarification would help explain why, in Alternate 6, nine ports in the Mid-Atlantic Region of the United States (MAUS) would be assigned 30 nm radius SMA's, while Alternate 5 would have a seasonal 25nm wide band outward from the shore. The lack of discussion tends to make such choices appear arbitrary.

CSI supports the 10 knot limit because, of the restrictions offered, this speed is most likely to reduce unsustainable losses from ship strikes, the goal we assume everyone wants. In terms of substantiating data, CSI agrees with NMFS that pooled studies of large whale ship strikes should be accepted as applicable to right whales. Those studies concluded that, for vessels of sufficient mass, the probability of serious injury or death increased dramatically with each knot gained, from 20% at 9 knots to 100% at 21 knots. Empirical evidence demonstrates that the whales cannot be expected to evade vessels, and will continue to surface unpredictably in the path of vessels, so ship strikes can never be completely prevented unless the whale's position is known and can be avoided. It is senseless to allow vessels to operate in high threat areas (as defined by the DEIS) at speeds that increase the probability of fatal injury, because the DEIS accepts the unequivocal relationship between potentially fatal impacts and vessel speed. Vessel speed is the final factor that will determine if a strike is seriously injurious or fatal. The purpose of the DEIS and Rule will be compromised by accepting any speed above 10 knots. However, we found it difficult to review the economic loss at this speed, as the analysis summarized data only for 12 knots.

CSI specifically urges that the Rule and DEIS use a 1 January start date for the Race Point Seasonal Management Area (SMA) to and through the Great South Channel, as right whales are in Cape Cod Bay in January, and transit these areas to get there. We do not understand why the DEIS' proposed dates are designed to protect whales seasonally leaving Cape Cod Bay, but not entering it.

A fundamental flaw in the DEIS and current strategy is notification delays, the weak link that jeopardizes the entire system. Mariners are expected to commit time and money to avoid areas or to slow, based on information that may be useless because of bureaucratic delays. What good is a notification if the whales have moved on? From mariners' experience with the current situation, why should they have faith in the system? What reasons do they have to believe that their compliance with strategies imposed by the eventual Rule will actually save whales?

Why can't the current notification system work in a timely, believable manner? In too many cases bureaucratic delays have been unconscionable. There is no excuse for not finding an immediate solution to this problem, which not only jeopardizes the species' survival but is the primary reason for mariners to be reluctant to comply. We don't believe that any boat's master wants to strike a whale, but instead is most likely to maneuver voluntarily to avoid a collision. Give them reliable and timely information and compliance will increase dramatically. As an added and extremely significant benefit, even vessels exempted from restrictions are much more likely to implement avoidance tracks and maneuvers on a voluntary basis, if they believed notifications were reliable and timely. Before any value can be achieved from current strategies, as well as this costly EIS and rulemaking process, the notification system must be fixed.

It is false for the DEIS to say that two recovery plan implementation teams exist. As far as we know, the Northeast Implementation Team was reduced to supporting education on the Ship Strike Strategy, was later told that their recommendations would be considered only at NMFS's discretion, and has since been disbanded. The Southeast Implementation Team, although apparently still alive on paper, has been no more functional. It is difficult to believe that NMFS is serious about saving right whales after assembling and then wasting such a talented cadre of experts.

It is understandable that vessel managers, led by the World Shipping Council, would oppose any significant economic burden to mitigate right whale ship strikes, because that is the way business is focused today. But the true cost to Society is the loss of an entire species to a slow but steady attrition caused by preventable human actions. It is illogical for mariners to expect that pressures will decrease if they just keep delaying responses. Instead it is much more likely for pressures against non-compliance to increase with every whale killed. If a shipping company, vessel operator or mariner is unwilling to help this society save the right whale, and instead helps cause its extinction, the society has the right and obligation to impose order and penalties.

CSI respects and understands the business adage that time is money, but avoiding ship strikes must be seen as a justifiable "cost of doing business". Society has a right and duty to impose this cost on mariner enterprises, if only because this is a safety issue of significance to the Society. We have lost enough whales to ship strikes to justify safety measures on their behalf.

Regarding these proposed restrictions to mariners, the industry already accepts a wide spectrum of restrictions, and their collective expense is factored into their operation and generally passed to end users. Collectively these broad restrictions account for a significant economic burden, accepted as the cost of doing business. Compliance with ship strike strategies appear economically significant when isolated, but far less so when blended into overall costs from all restrictions. These data are already available from industry reports, and the DEIS economic analysis and summary should have presented them for perspective.

Besides compliance costs being passed on to consumers in most cases, there will be no competitive disadvantage because all operators transiting a whale alert area will be under similar restrictions. In a few cases, such as long distance ferries, the cost of slower speeds and track changes are unlikely to be recovered, as round trip schedules and crew duty periods will be affected.

The DEIS is flawed, however, by placing the economic burden almost entirely on mariners. NMFS must do more, and a failure to fund NMFS adequately will lead to the failure of the eventual strategies, in part because of the reluctance of mariners to bear the economic burden. In our view both the ship strikes and the burden to mariners can be reduced significantly by increased research and survey effort, as discussed below.

The most efficient and cost-effective way to deal with ship strikes is to improve detection, predictions, and timely notification to mariners. The DEIS instead relies on inadequate aerial surveys and static approaches for locating and predicting right whales. There are several improved concepts that deserve attention, and the general strategy of the FEIS should be to invite and adapt to new data, and support new techniques. Instead the DEIS strategies appear to have been planned to maintain if not lessen the economic burden on NMFS.

For example, it has been verified that, in season, the whales can be found by finding prey aggregations. Right whales have been proven to come together, disperse and move about in relation to their prey. A model to predict prey concentrations and thereby whales has been developed by the Provincetown Center for Coastal Studies (PCCS). This past spring the writer of this letter witnessed a patrol boat of the Division of Marine Fisheries (DMF) of the Commonwealth of Massachusetts, funded by NOAA under Section 7, on station in dense fog, having been directed to the coordinates given by the Center's model. I was on a whale watch vessel that had stopped because a whale had surfaced close by. Our vessel moved away very carefully as soon as the whale surfaced again and was identified as a right whale. At that moment the DMF boat first came out of the fog, perhaps 100m from the whale. I do not know if they had seen the whale, or were checking on us as a vessel their radar had shown as stopped near their station coordinates. No one on the whale watch vessel, including me, knew of the model, or the Center's coordination with DMF. I was very impressed when I later heard from Dr. Mayo why the DMF was able to be so close to a right whale in dense fog, and assumed they were trying to station their boat so as to be a radar reflection other vessels would avoid, avoiding the whale as well.

The DMF / PCCS collaboration was for the Cape Cod Bay Critical Habitat only, as part of the Bay's dynamic management of shipping and fishing. Why can't the model and coordinated response be expanded to other known feeding areas with the potential for ship strikes?

Although currently unrealistic, right whale ship strike prevention would be close to 100% probable if the position of each whale was known, and that dynamic position was received and acted upon by all mariners passing that whale. The economic loss to mariners would be minimized to very small track deviations triggered by real-time threat of actual conflict. If vessels could reliable avoid the positions of whales few speed restrictions would have to be imposed. With their faith in the system restored mariners would be more likely to comply, and no doubt save some whales. An economic analysis should be accomplished to summarize how the economic burden on mariners would be lowered, and compared to the increased costs to NMFS to finance research and monitoring.

CSI suspects that the overall economic burden would be substantially less, and requests that the FEIS have a clear summary of total cost savings from this approach.

The point is that any measure that increases the accuracy of dynamic positions and predictions would benefit the species, balance the economic burden, and increase the willing compliance of <u>all</u> mariners, not just vessels governed within the scope of the Rule. CSI notes that predictions and models of right whales' locations and movements within and between habitat resources have improved dramatically each year. This is because of the personally-committed focus of the professional scientific community and the

through the Right Whale Consortium. There are more scientists working on practical solutions to right whale issues than there are right whales.

NMFS has a responsibility to Society to meet their mandate to reduce ship strikes significantly, and select the most cost effective strategies. Therefore CSI urges NMFS to focus the FEIS and eventual Rule less on blind and generic restrictions and more on supporting and adapting scientific and monitoring resources.

Thank you for accepting these comments by CSI.

Sincerely,

William W. Rossiter
President