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Mary Colligan, Assistant Regional Administrator for Protected Resources
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930

September 12, 2011

Dear Ms. Colligan:

The Maine Lobstermen's Association (MLA) submits these comments in response to the National Marine Fisheries Service (NMFS) request for public comment on the June 2011 scoping document to assist in the development of conservation measures aimed at reducing the risk of serious injury and mortality of large whales due to entanglement in vertical lines.

MLA has participated in the Atlantic Large Whale Take Reduction Team (TRT) process since its inception and remains committed to reducing the risk of serious injury and mortality to large whales, particularly the highly endangered North Atlantic right whale. In addition to our ongoing efforts in the regulatory arena, MLA has been a leader in industry-based research through our collaboration with the Consortium for Wildlife Bycatch Reduction to spearhead research and dialogue between fishermen and scientists in search of solutions. MLA has also consistently reached out to the conservation community to keep an open dialogue on this difficult issue.

MLA is partnering with Woods Hole Oceanographic Institute (WHOI), New England Aquarium and Keene State University to develop a model to assess the risk of right whales encountering gear off the coast of Maine. This project incorporates fishing effort data collected by MLA to establish average baseline gear configurations by fishing territory, Maine Department of Marine Resources (DMR) gear density data, right whale sightings data from the North American Right Whale Consortium (NARWC) database, satellite tracking data and depth, bathymetry and whale life history data. These data will be modeled by Hauke Kite-Powell of WHOI to assess the risk, through probability estimates, of a right whale encountering a line. Preliminary results are expected in early fall, and we intend to discuss the results with NMFS and TRT as an input into the consideration and formation of management alternatives.

MLA Recommends a Holistic Management Approach

MLA urges NMFS to focus on development of a comprehensive, holistic approach to management. The goal should be to achieve effective protection for whales without inflicting unnecessary economic harm to individual businesses and communities. To achieve this goal, MLA proposes several guiding objectives:

- Develop a strategy focused on addressing risks arising from the spatial and temporal correspondence between right whales and lobster gear along the Maine coast and elsewhere;
- Design flexible management measures based on evidence of risks associated with co-occurrence of whales and fishing activity, taking into account whale behavior, topography, presence of nutrients, and other factors affecting the risk of entanglement with fishing gear;
- Assess the effectiveness of existing management measures (such as the sinking line rule) in combination with any proposed measures to address vertical line risks; and
- Conduct a robust evaluation of the costs and benefits of existing and proposed management measures taking into account the experience of fishermen in waters along the Maine coast.

MLA commends NMFS for developing the co-occurrence model to provide guidance in developing new management measures to reduce the risk of entanglement with vertical lines. This is an important building block to achieve the objectives identified above. However, it will be important for NMFS to put in place the tools necessary to achieve all four objectives. MLA urges NMFS to learn from past experience, including taking steps to avoid the significant negative economic, operational and safety consequences that our fishermen have experienced with implementation of the sinking line rule without any demonstration that the rule has been effective in achieving its intended purpose.

At a minimum, NMFS must make a preliminary assessment of the efficacy of the sinking line rule and other existing management rules in order to inform how to best approach vertical line risk management. Among other things, it is critical to understand whether the sinking line rule, or the recently implemented ship strike rule, have had any effect on potential biological removal (PBR), the level of serious injury and mortality (SI & M), or on the scarification rates of whales. Given the hardship experienced by the lobster industry under the sinking line rule, it is important to demonstrate that their efforts have actually contributed to protecting whales.

Current data regarding whale interactions and entanglements with Maine lobster gear

The 2011 draft marine mammal stock assessment determined a PBR of 0.5 for North Atlantic right whales, and the SI & M from fishing is 1.0. However, the SI & M from the US portion of

fishing is 0.4, down from 0.6 in 2010, which is below PBR. US ship strikes have shown improvement at 1.2, down from 1.6 in 2010, but still represent the majority (60%) of SI & M.

2011 Draft Marine Mammal Stock Assessment					
Species	PBR	Interaction	USA	CN	TOTAL
Right whale Population est: 396 (thru 2007)	0.5	Fishing	0.4	0.6	1.0
		Ship strikes	1.2	0.4	2.0
		Total SI & M			2.6

Though still highly endangered, the North Atlantic right whale population is increasing. The NARWC 2010 Right Whale Report Card estimated the right whale population to be 473 whales in 2009, an increase of more than 50% from 1999 when the population was estimated to be approximately 300 whales. The marine mammal stock assessments lag a few years behind in estimating population.

It is important that any new management measure should be realistic in its goals. The co-occurrence model provides necessary insight into areas where it is most likely for whales and fishing gear to co-occur. The 2011 draft marine mammal stock assessment estimates that annually between 14 to 50 % of right whales are involved in entanglement, a rate that could increase as whale populations continue to increase. The MLA advocates that the plan seek to minimize the risk of SI & M of right whales in fishing gear.

In order to minimize SI & M, three related risks must be addressed: the risk of a whale encountering a rope, the risk of that whale becoming entangled in the rope, and the risk of the entanglement resulting in serious injury or mortality.

The scoping document notes 13 new right whale entanglements in 2010-2011, with 2 mortalities and as many as 8 non-threatening entanglements. There is no evidence to date, however, that lobster trap gear or gear set in Maine was implicated in any of these recent entanglements. In order to develop credible, effective management measures, it is important to identify the full context of documented whale-fishing gear interactions. Otherwise, NMFS risks the imposition of ineffective management measures that impose needless burdens on fishermen.¹

¹A review of the 1999 through 2010 marine mammal stock assessments indicated 12 right whales with serious injury or mortality from entanglement. Only one of the right whale cases could be traced back to a gear type at the location it was set, which was Danish seine gear set in Canada. Two were identified as gillnet gear and one was consistent with lobster gear. None are known to be from lobster gear set in Maine.

According to NMFS' records on gear removed from whales from 1997-2008, there are three cases in which gear that was set in Maine was removed from right whales. However, closer examination reveals that in only one of these cases was the gear set in Maine likely the primary entanglement, and none of these instances are known to have resulted in SI & M. The whales have been resighted in good health.

A whale's behavior leads to a high degree of variability in the level of risk from entanglement. Therefore, it is important to consider the relation between a whale's behavior and location in time and place and the location of fishing gear. We suggest that the risk to entanglement is not uniform along the East Coast. Further, there are areas along the Maine coast where there is likely a higher risk to whales from gear than in other areas. Both observations indicate a more fine-grained approach than the one-size-fits-all approach used in developing the sinking line rule.

Johnson et al. (2005) found that in cases where the point of gear attachment is known, right whale entanglements frequently involve the mouth, which may indicate that many entanglements occur while whales are feeding. A recent study by the Gulf of Maine Research Institute to detect abundance of *Calanus* along the Maine coast indicate that *Calanus* tend to aggregate in abundances great enough to support right whale foraging in deeper waters offshore of the 50-fathom contour. These studies additionally emphasize the need to protect whales in the areas of most frequent sightings and not unnecessarily take measures to protect whales where they are not.

Additionally, MLA believes that the type and weight of gear fished has a large impact on the severity of the entanglement, and the ultimate fate of the whale. Although the impact of heavier gear on entanglements has not been studied, common sense dictates that whales which encounter lighter weight lobster gear fished with ropes that break around 3,000 pounds are less likely to be involved in a lasting entanglement than those encountering heavier weight gear that does not break under the strain.²

Therefore ideas such as trawling up gear should balance the benefit of reducing rope in the water with the possibility that heavier strings of gear could pose a risk of more severe entanglement. Among Maine lobstermen there is a trend towards heavier ropes and heavier gear as an unintended result of the sinking line rule. Many lobstermen have increased the diameter and strength of the rope to reduce gear loss due to chaffing, but have found that the rope is often stronger than the components of the hauling system if it gets hung down. The plan should consider the impact that stronger ropes may have on the risk to SI & M to large whales.

Management Approach

MLA is fully committed to working with NMFS and the TRT to identify management goals and a strategy to reduce the risk of SI & M for large whales. MLA's overarching recommendation for the plan is that it must provide a measurable conservation benefit with the least possible economic impact on individuals and communities. In particular, the plan should consider the following:

² The Consortium for Wildlife Bycatch Reduction performed break strength testing on gear removed from entangled whales and hypothesized that weaker ropes equate to less severe entanglements.

- Conservation benefit – how does the management measure benefit whales? How is this benefit to be measured?
- Economics – what is a realistic economic cost, both short-term and long-term, of the management action on individual fishing businesses and the industry and communities as a whole? NMFS grossly underestimated the economic impacts of the sinking line rule.
- Safety of regulations and operational feasibility – what do these regulations mean in the day-to-day operations of the vessel? Do they pose a safety hazard to the captain and/or crew? Will they cause a lobsterman to make significant, and perhaps costly, adjustments to his fishing operation?³
- Flexibility – MLA strongly urges NMFS to analyze the broadest possible array of management options. This is especially important given the lack of guidance on the level of conservation that needs to be achieved. As the plan evolves and potential management options become more real, lobstermen may need to consider options beyond those they have contemplated at this phase of rulemaking. MLA believes that all options should be on the table at this point to provide the industry the greatest amount of flexibility when evaluating those options.
- Periodic review and revision – MLA believes that the management plan must provide for a periodic re-evaluation based on data compiled during a specified effective period, such as that which NMFS adopted for the ship strike rules.”⁴ MLA believes this is a necessary and prudent approach which should apply to the comprehensive whale plan. We strongly oppose keeping any management measures in place that are not known to be positively affecting the conservation of large whales.

Basis for plan

MLA strongly recommends that NMFS choose the ‘right whale only layer’ to guide selection of management areas. The 2011 draft marine mammal stock assessment report for North Atlantic right whales states “The small population size and low annual reproductive rate of right whales suggests that human sources of mortality may have a greater effect relative to population growth rates than for other whales.” Because it is the most critically endangered species, the

³ Many Maine lobstermen have given up lucrative fishing territory as a result of the sinking line rule, resulting in a substantial loss of revenue. They have had to balance the potential for catastrophic loss of gear and fear of injury with the need to earn a living from areas of hard bottom.

⁴As NMFS explained “There is some uncertainty regarding the manner in which ships and whales interact and the relationship of speed and other factors to whale injuries and mortalities... In view of these uncertainties, and the burdens imposed on vessel operators, this rule will expire five years from the date of effectiveness. During the five-year effectiveness of the rule, to the extent possible with existing resources NOAA will synthesize existing data, gather additional data, or conduct additional research on ship-whale interactions to address those uncertainties. NOAA will also review the economic consequences of this rule. After this analysis is complete, NOAA will determine what further steps to take regarding this rule.” 73 Federal Register 60, 173, 60, 183 (October 10, 2008).

MLA believes that the co-occurrence layers should focus on right whales alone to ensure that right whale interactions with fishing gear are targeted and minimized.⁵

NMFS is currently working to review the status of humpback whales worldwide. According to the November 2010 Humpback Status Review Update, NMFS expects in 2011 to finalize the revised humpback status review and draft the proposed and final rules for delisting or downlisting, if divisions or a change in status are appropriate. This review has been undertaken to determine whether the humpback's status as endangered is still warranted, given the continued growth in estimates of abundance.⁶

Management specifics

With respect to potential management measures, MLA preliminarily suggests the following:

1. Implement the most aggressive management measures in areas where data indicates whales and fishing gear are most likely to occur and risk is highest, such as in areas outside the 50-fathom curve or the 12-nautical mile line.
2. Do not implement additional measures in Maine state waters.
3. Allow for gear modifications to reduce risk of severe entanglement, such as modifying lobster gear by fishing a weaker rope on the top portion of the buoy line.⁷
4. Allow for a second endline for trawls larger than five traps; two endlines must be allowed for trawls of six or more traps.
5. Allow a short amount of float rope off the lead trap for management scenarios requiring gear to be fished as trawls.⁸
6. Explore options for both enhanced gear marking and reporting to improve the information available to guide the management process.

⁵As NMFS has determined for minke and fin whales, protections put in place to protect right whales will also lower risk of entanglement for humpback whales as well.

⁶The MLA believes that NMFS has overestimated SI & M for the Gulf of Maine humpback stock due to the change in NMFS' methodology in 2007 to assume that all entangled humpbacks in the southeastern and mid-Atlantic states are Gulf of Maine humpbacks unless identified as a member of another stock. The 2011 draft stock assessment report cites that 37.5% of humpbacks off the southeastern and mid-Atlantic states as known Gulf of Maine whales and 12% as Canadian whales and that these data likely under-represent the proportion of Canadian whales. Best available data should be used to determine which entangled humpbacks sighted in the southeast and mid-Atlantic regional are Gulf of Maine whales. This would lower the SI & M for the Gulf of Maine stock.

⁷The Consortium for Wildlife Bycatch Reduction performed break strength testing on gear removed from entangled whales and hypothesized that weaker ropes equate to less severe entanglements. Ropes of smaller diameter correlate with lower breaking strengths.

⁸A March seminar on sinking line revealed that among lobstermen along the Maine coast a common problem is the greatest amount of chaffing that occurs following the lead trap. Allowing a short section of floating line in this area would allow a lobsterman to safely haul back that gear and minimize the risk of losing the trawl.

- a. NMFS should consult with the disentanglement teams to determine which section of the vertical line is most likely to be documented, and add a second mark to this area. This could be done through high resolution photographs and/or gear retrieved from a whale.
 - b. NMFS must work closely with the disentanglement teams on techniques to carefully document the gear that the whale first encounters when it becomes entangled versus subsequent gear picked up after primary entanglement.
7. Remove the federal high flyer requirement for lobster gear fished outside of 12 miles in Area 1.
8. Eliminate the allowance of float rope at the surface between buoy and high flyer or between more than one buoy in the surface system.
9. Create incentives to minimize the amount of rope deployed throughout the gear system, to lighten the weight of gear and to reduce the breaking strength of rope, whenever possible.
10. Investigate the potential risk of trawling up gear by making the gear heavier, and strategies to make subcomponents of the gear safer if encountered.

The MLA will continue to fully engage with the agency and other stakeholders to identify solutions for reducing the risk of serious entanglement by endangered whales in fishing gear. We will continue to passionately represent the interests of Maine lobstermen as we seek constructive measures to reduce this risk while minimizing the costs to businesses and communities.

Thank you for your consideration of MLA's comments.

Best regards,



Patrice McCarron
Executive Director

Cc: Governor Paul LePage
Pat Keliher, Acting Commissioner, Maine Department of Marine Resources
Senator Olympia Snowe
Senator Susan Collins
Representative Chellie Pingree
Representative Michael Michaud
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