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STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

PATRICK C. KELIHER
COMMISSIONER

September 16, 2019

Michael Pentony
Regional Administrator
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, Massachusetts 01930

Dear Mr. Pentony,

The Maine Department of Marine Resources (ME DMR) appreciates the opportunity to comment on the upcoming rule-making to amend the Atlantic Large Whale Take Reduction Plan (ALWTRP). Proposed changes to the ALWTRP are likely to have large impacts on Maine's lobster fishery, the social and economic backbone of Maine's coastal and island communities. In 2018, landings from the Maine lobster fishery were valued at over \$486 million and a recent economic study determined the fishery has an economic impact of an addition \$1 billion annually¹. This fishery not only encompasses the roughly 4,800 lobster license holders and 1,100 student license holders but also sternmen, dealers and distributors, bait dealers, and trap builders who contribute to this fishery and their communities. Understanding the full impact of these pending regulations on the Maine lobster fishery, and to the North Atlantic right whale population, will be critical to ensure the appropriate suite of measures is implemented.

A. Characteristics of the Maine Lobster Fishery

The Maine lobster fishery is comprised of a diverse set of vessels, fishermen, and fishing practices. According to data collected in 2018, roughly 20% of vessels registered to Maine lobster license holders are less than 18 feet in length while 10% of vessels are greater than 39 feet in length. Thus, most fishermen who participate in the lobster fishery use smaller boats and typically fish close to shore. In addition to length, vessels in the Maine lobster fleet vary in their construction and layout. Smaller vessels, less than 25 feet in length, tend to be outboards and have extremely limited deck space for the temporary storage of gear. Some boats have open sterns which allow individual traps, or trawls, to be easily set off the back of the vessel. However, other boats have closed sterns, requiring traps to be set over the side of the boat. As a result, safe and fishable trawl lengths are not only dictated by the size of the vessel but also its construction.

Fishing practices within the Maine lobster fishery vary between the eastern and western ends of the State, and between inshore and offshore fishermen. In most state waters, the average trawl length can be characterized by singles, doubles, and triples; however, this masks important regional differences.

¹ Lobsters to Dollars: The Economic Impact of the Lobster Distribution Supply Chain in Maine by Michael Donihue, Colby College. June 2018.

For example, as a long-standing convention, fishermen in Casco Bay often fish trawls with two endlines. In this area, recreational and commercial boat traffic is very high and, as a result, fishermen can experience significant buoy loss. Longer trawls allow these fishermen to reduce their number of buoy lines and minimize their potential loss. In contrast, fishermen in mid-coast Maine tend to fish smaller trawl lengths which allow for a higher degree of precision to set traps on specific ledges and cracks, the preferable habitat of lobsters. This increases a fisherman's trap efficiency. An added benefit of fishing singles, pairs, and triples is that it reduces potential gear conflicts between other fishermen if, and when, traps are set over one another. In federal waters, trawl lengths increase, in part due to existing regulations in the ALWTRP. In some of Maine's furthest fishing grounds (outside of 12 miles from shore), trawl lengths average around 15 traps per trawl.

Fishing operations also differ by the number of crew onboard. 29% of license holders have a Class I license, which allows only the individual named on the license to participate in lobster fishing. Therefore, at a minimum, a quarter of the fleet operates without an unlicensed crew. 39% of Maine lobster fishermen have a license which allows for one unlicensed crew member onboard while the remaining 32% have a license which allows 2 unlicensed crew onboard.

Landings in the Maine lobster fishery have spatial and regional patterns. While the pounds of lobster landed vary across the State, most landings occur within state waters. In 2008, 81% of pounds landed were harvested within three miles of shore. Federal waters, broken up by 3 to 12 miles and outside 12 miles from shore, landed 15% and 4% of the pounds in that year, respectively. Recently, the pattern of catch based on distance from shore has slightly shifted, with an uptick in federal waters landings. In 2016, state waters accounted for 68% of the pounds landed, while 3 to 12 and beyond 12 miles accounted for 23% and 9%, respectively. This pattern of landings does not, however, equate to an identical shift in effort offshore. Between 2008 and 2016, the number of trips recorded within state waters dropped by only 7%, while the number of trips outside 12 miles increased by just 3%.

B. Management Tools Considered

At the April Atlantic Large Whale Take Reduction Team (ALWTRT) meeting, several management tools were discussed which could reduce the risk of serious injury and mortality from entanglements. Some of the tools considered included: area closures, dynamic management areas, trap reductions, vertical line reductions, and 1700 pound rope. Following the ALWTRT meeting, ME DMR reviewed the measures to understand the potential conservation benefits to right whales versus the burden to fishermen. The intent was to consider a range of measures, and then take the most viable options out to industry for feedback.

ME DMR held seven industry meeting to get input from fishermen on the feasibility and implications of these management tools. Based on our internal analysis and the feedback obtained through industry meetings, the following comments are offered regarding the various management tools.

Area closures were proposed and discussed at the ALWTRT meeting but were ultimately not included in any of the final recommendations. Following the ALWTRT meeting, ME DMR continued to discuss the potential efficacy of area closures. Ultimately, ME DMR did not include an area closure in the June 2019 presentation (see Appendix I) to industry due to several pertinent concerns. First, the efficacy of area closures relies on the assumption that gear within the closure is brought to shore. While this assumption holds true in the existing Cape Cod Bay closure due to its

timing and location, the same assumption would not hold in Maine waters. Offshore fishermen deploy gear year-round, moving traps to various fishing grounds as lobsters respond to environmental changes. As a result, a federal waters closure, akin to some of the proposals discussed at the ALWTRT, would not result in traps taken out of the water but may instead result in fishermen moving gear to the boundaries of the closure, concentrating gear around an area intended to protect right whales. This ‘curtain effect’ may have the unintended consequence of increasing vertical line densities in areas of known right whale distribution.

Industry members also asked about the potential conservation benefits of a seasonal closure during the spring months in state waters. After conducting analysis, ME DMR found negligible reductions in risk through this type of measure given right whales are infrequently sighted in state waters and there is minimal lobster gear set during the spring months. As a result, a spring state waters closure resulted in more of a paper exercise than a meaningful conservation benefit for right whales. ME DMR found specific areas and times for closures which resulted in a meaningful risk reduction were hard to define due to a lack of right whale sightings, and their more diffuse and changing use of the habitats in the Gulf of Maine.

Also discussed at the ALWTRT meeting were dynamic management closures. A potential benefit of this approach is that protections are enacted only when right whales are present, lessening the burden on industry. ME DMR considered this approach but quickly came up with several concerns regarding their effectiveness in protecting right whales. The primary concern is that dynamic management is reactive; it relies on right whales being spotted to enact a management response. Given right whales are notoriously hard to observe and weather conditions along the Maine coast can impede sighting efforts, ME DMR questioned the ability to effectively patrol northern Gulf of Maine waters and spot whales. Furthermore, the resources needed to support successful dynamic management are intensive and expensive, raising concerns of whether dynamic management is a long-term solution for right whale protection. Ultimately, ME DMR concluded measures which can provide year-round protections to right whales are stronger given all whales are positively impacted, not just those sighted.

The ALWTRT briefly discussed trap reductions at its April meeting, particularly those that are ongoing in Lobster Management Areas 2 and 3. ME DMR evaluated the potential benefit of trap reductions as a right whale protection measure and presented these findings to the lobster industry to get feedback. The most frequent concern raised by industry regarding trap reductions was that the ratio between vertical lines and traps is not one-to-one. This means that, particularly offshore, a substantial trap reduction is needed to see a modest reduction in the number of vertical lines. Industry expressed concern that, as a primary management tool to save right whales, trap reductions could result in large economic consequences due to reduced catch and revenue. Others noted that focusing on trap reductions is ancillary to the conversation since it is vertical lines, not traps, which pose a risk to whales. In addition, the diversity of Maine’s lobster fleet, as well as varying levels of participation, make it challenging to implement a trap reduction which does not result in some individuals increasing their effort. This was the result of a substantial trap reduction in 1997; some individuals removed gear from the water while others increased their effort up to the new limit.

One of the primary management tools ME DMR discussed with industry was vertical line reductions via trawling-up. After analyzing many of the potential management tools, trawling-up appears to provide some of the strongest benefits; namely, it addresses serious injury and mortality considered under the Marine Mammal Protection Act as well as risk under the Endangered Species Act. Further,

it directly addresses the cause of entanglements: vertical lines in the water column. At the June industry meetings, a series of trawling-up scenarios were presented to industry. These ranged from doubles to quads in state waters and from twenty to forty trap trawls offshore. In response, industry provided critical input on the extent of trawling-up which is feasible and safe in the Maine lobster fishery. Specifically, while offshore fishermen expressed some ability to add traps to an existing trawl, they expressed grave concerns about moving to thirty or forty trap trawls. Several noted that only a few boats are safely equipped to handle forty traps, in addition to the mile of rope needed to fish at these trawl lengths. As a result, requiring fishermen to operate beyond their boat capacities would result in dangerous fishing practices and the loss of human life. Inshore fishermen also highlighted that trawling-up scenarios need to consider the feasibility of smaller boats, particularly skiffs, which have limited deck space and are often operated by a single individual. Moreover, fishermen noted that, at longer trawl lengths, those who operate alone may have to hire a crew.

Outside of safety concerns, fishermen also provided insight on the potential consequences of trawling-up on fishing operations. First, longer trawls may increase gear conflicts and gear loss as there is a higher chance of trawls being set over one another. Second, longer trawls may decrease a fisherman's ability to maneuver traps on to specific ledges and cracks which produce high catch rates. This would reduce a trap's efficiency. Third, industry highlighted that fishermen frequently move traps across regulatory boundaries (i.e. the three mile line, the six mile line, etc.). This movement needs to be considered to ensure ongoing fishing practices and new regulations are congruent. To this end, fishermen suggested that any trawling-up scenario differentiated by distance from shore be comprised of multiples of one another so trawl lengths can easily be extended or shortened. In addition, law enforcement personnel were asked to provide input on the feasibility of enforcing long trawl lengths; they noted that, with the current platforms available, it would be nearly impossible for enforcement to safely haul long trawls to check compliance with the ALWTRP and lobster resource management measures.

Finally, the implementation of 1700 pound rope was also considered by both the ALWTRT and ME DMR. One advantage of 1700 pound rope is it offers a level of protection for all lines left in the water and can substantially reduce the occurrence of a serious injury or mortality which results from an entanglement. However, it does not address the risk of an entanglement occurring. In its June industry meetings, ME DMR presented 1700 pound rope as a potential management tool for consideration. At the time, ME DMR presented this as 75% topper in federal waters. It became clear from several comments that, to accommodate a 75% topper, fishermen intended to increase the length of their vertical line to ensure there was enough rope strength at the bottom where the strain of hauling traps is highest. This result would be counter to the efforts of the ALWTRT and a clear example of the unintended consequences which can result from management action. Instead, several industry members felt that, with existing vertical line lengths, modifications to the top 50% of the rope would be more feasible. Industry also commented that 1700 pound rope should be achieved through modifications to existing rope, as opposed to requiring fishermen to buy new rope. This could be achieved through specific splices or the threading of existing swivels into the rope to achieve a 1700 pound breaking strength. Law enforcement personnel also provided guidance on the enforceability of 1700 pound rope. They noted a specific number of weak points in a rope is more enforceable than 1700 pound rope regulations based on depth fished or the length of the vertical line. They also highlighted that enforcement of a rope diameter, as a proxy for 1700 pound rope, would be challenging since rope can expand in the water and differs by manufacturer.

C. Gear Marking

It is widely recognized that one of the biggest challenges faced by the ALWTRT when discussing the entanglement of right whales is the lack of data on the source of entanglements. This creates large amounts of uncertainty about which fisheries and regions are contributing to serious injury and mortality. At its industry meetings in June, ME DMR proposed a Maine-only purple gear mark to the lobster industry. This purple mark would replace the current red mark used to distinguish the Northeast trap/pot fishery and would allow Maine to better understand its role in the right whale conversation. The use of a Maine-only gear mark was unanimously supported by fishermen at all seven industry meetings as fishermen expressed strong support for identifying their gear from other trap/pot fisheries.

As stated in a letter to NOAA dated July 10th, ME DMR fully supports the improvement of gear marking to better inform conversations on right whale entanglements. As a result, the State intends to implement a Maine-only gear mark ahead of the federal regulatory process. ME DMR has already begun the State's regulatory process and, under the current timeline, the Maine-only gear mark could be required for Maine licensed lobster fishermen by spring 2020. Critical to this effort is guidance and confirmation from NOAA regarding the placement and color of the Maine-only mark. ME DMR highlights that it has not received a response to its July 10th letter to NOAA requesting written confirmation regarding the location and color of the Maine-only gear mark. This level of communication is needed to support Maine's efforts to enact regulations ahead of the federal process. For example, it is unclear if additional gear marking areas, such as Jeffery's Ledge and Jordan Basin, will be maintained as states move to their own marks. ME DMR recommends that, as a part of the proposed rule, NOAA re-evaluates these markings against recent sightings data to determine the usefulness of area-specific marks in addition to state-specific marks.

D. Recommendations for the Proposed Rule-Making

As NOAA engages in the writing of a proposed rule, ME DMR requests the agency consider two topics which were not fully discussed or voted on at the ALWTRT meeting. A question repeatedly raised at the ME DMR industry meetings was the continued use of Maine's exemption line. As outlined in the 2007 Final Rule to the ALWTRP, the exemption line is based on the low number of right whale sightings in this area. NOAA has consistently defended the exemption line in previous rule-makings, commenting "NMFS does not believe that regulating the waters that will be exempted from the ALWTRP would have a significant benefit to large whales."² Additionally, studies have shown there are low concentrations of calanus copepods shoreward of the 100 meter isobath, which do not support the aggregation of right whales.³ As a result, NOAA did not include exempted waters as a part of the critical habitat designation for right whales. Instead, NOAA used the exemption line from the ALWTRP as the nearshore boundary, stating "late stage copepods in quantities sufficient to trigger right whale foraging are not present inshore of the Maine exemption line"⁴. Given no vote at the April ALWTRT meeting was taken in regards to the exemption line, ME DMR requests NOAA consider the impacts to industry versus the conservation benefits of establishing regulations within

² Taking of Marine Mammals Incidental to Commercial Fishing Operations; Atlantic Large Whale Take Reduction Plan Regulations, 72 Fed. Reg. 57103 (October 5, 2007).

³ Runge 2012 Report "Summer distribution of the planktonic copepod, *Calanus finmarchicus*, along the coast of the Gulf of Maine"

⁴ Endangered and Threatened Species; Critical Habitat for Endangered North Atlantic Right Whale, 81 Fed. Reg. 4837 (January 27, 2016).

the exemption line. Taking extensive action in areas where right whales rarely, if ever, visit will not have a measurable impact on the right whale population.

In addition, ME DMR requests NOAA include a method for conservation equivalency within the proposed rule. As previously described, a key feature of the Maine lobster fishery is its diversity. This breadth of vessel size, fishing location, and crew precipitates the need for different management approaches within the State. Allowing for conservation equivalency in the rule-making provides an opportunity for fishermen to develop equivalent, or more conservative, regulations in their region to meet the requirements of the ALWTRP. This flexibility is needed to ensure not only the long-term success of the lobster fishery but also the protections provided to right whales.

E. Conclusions

ME DMR appreciates the opportunity to comment on the upcoming proposed rule regarding right whales and the Northeast trap/pot fishery. The Maine lobster fishery has been an active participant in the conservation of right whales for over twenty years. While ME DMR recognizes the scope of this comment period pertains to US entanglements in the trap/pot fishery, the Department highlights that this scope does not encompass the full set of impacts on the right whale population. Specifically, entanglement records indicate the full risk reduction outlined by NOAA should not be solely on the Northeast lobster fishery and the apportionment of risk to Canada should reflect the stark increase in right whale mortalities resulting from the snow crab fishery and Canadian vessel strikes. ME DMR underscores that placing further regulations on the Maine lobster fishery will not improve the status of the right whale population if mortalities are happening elsewhere.

We appreciate NOAA's consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Pat Keliher', written in a cursive style.

Pat Keliher, Commissioner