

**WRITTEN TESTIMONY OF
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EXECUTIVE DIRECTOR**

**HEARING ON:
CLIMATE CHANGE AND THE OCEAN**

**HOUSE NATURAL RESOURCES COMMITTEE
SUBCOMMITTEE ON WATER, OCEANS, AND WILDLIFE**

FEBRUARY 7, 2019

I grew up in the village of Brantrock in Marshfield, Massachusetts, with commercial lobstermen in my family and have been working at the Massachusetts Lobstermen's Association (MLA) since 2008. I have been the Executive Director for 5 years now.

I have extensive experience in committees and boards that involve fishermen. Specifically, I am on the Atlantic Large Whale Take Reduction Team, the Massachusetts Ocean Commission, the New England Fisheries Management Council Herring Advisory Panel, and the Atlantic States Marine Fisheries Commission Herring Advisory Panel. As the Executive Director, I am actively engaged in the Northeast Regional Ocean Council stakeholder processes, Massachusetts Coastal Zone Management, the Bureau of Ocean and Energy Management, the Massachusetts Fishermen's Advisory Board for offshore wind development, and the Massachusetts State Ocean Planning processes to advocate for commercial fishermen's needs and concerns. I am here today to give you the perspective of those fishermen's concerns and outline how climate change is just one of many issues we are facing as we try to operate our businesses. Climate change complicates our lives and increases the uncertainty in an already complex ocean.

The Massachusetts Lobstermen's Association is one of the leading, self-funded, commercial fishing organizations in New England and is member-driven, accepting and supporting the interdependence of species conservation and our members' collective economic interests. We were established in 1963 by commercial lobstermen and the 1800 MLA members hail from ports in Canada down to Maryland, commercially fishing for a multitude of species. We strive to be proactive on the many issues affecting the commercial lobster industry and, as I outlined above, are actively engaged in fisheries management processes at both the state and federal levels.

The MLA communicates with its members through a monthly newspaper, a weekly email, Facebook, Twitter and attendance at meetings. For the past 56 years, the MLA has become a trustworthy voice for the commercial lobster industry on important issues, and is looked to by both the commercial lobster industry and the management community alike for guidance on the needs and challenges of our industry.

Climate change is of concern to the commercial fishing industry as a whole. Without a healthy ocean, the many species our members harvest to earn a living would cease and many coastal communities would fail. For many coastal communities, commercial fishing has been a way of life for centuries and impacts to our fishery mean lasting impacts in our communities.

There are two fundamental ways climate change is impacting the lobster industry – warming waters and ocean acidification. Warming water trends are causing lobster stocks to shift, impacting fishermen and confounding regulators. The Gulf of Maine, for example, is one of the fastest warming bodies of water on the planet. In the last century, it has warmed faster than 99% of the oceans. It has been estimated that by 2050, that warming could cut lobster populations by 62% in the Gulf of Maine. Lobster stocks are also moving further offshore to deeper waters that make them more difficult and expensive to reach. This added difficulty means that fishermen have to often travel further offshore, increasing fuel cost that impact our business as we pursue stocks that were bountiful near shore.

Lobster is also shifting to the north with more and more of it now in Canadian waters instead of our U.S. waters. This shift means less lobster are available for our U.S. fishermen. The lack of access due to this shift is yet another impact to our businesses and coastal communities. To make matters even more complicated, fish that eat lobster are also moving north. This means more overlap between predators and once abundant lobster habitat off of Massachusetts. We are seeing a compounding effect, lobster are moving further offshore and loss of access as lobster as they move into Canadian waters, and the increase in those fish that are moving north from warm waters to the south that prey on lobster. All this disrupts the ecosystem and makes it more difficult for our lobstermen to make a living.

Ocean acidification happens as the ocean absorbs carbon from the atmosphere, adds even more harmful impacts and is an increasing threat for our industry. Juvenile lobsters have a harder time growing the shells they need to protect themselves from predators due to ocean acidification and the risk of disease in lobster also increases, compounding the already bad situation that I have outlined here today. It's a lot for our industry to deal with and these challenges will only increase.

These threats from climate change are intensified by the other challenges lobstermen are facing. We do not have the luxury of looking at any one of these impacts on its own – all of them collectively are causing declines in the resource, hurting our bottom line, and our communities.

Offshore wind is increasing exponentially on the East Coast. While this emerging use has the potential to mitigate climate impacts by creating more access to renewable energy, we must be mindful of selecting areas that do not put undue burden on important habitats for our fisheries. This means selecting turbine and cable areas without eel grass or hard bottoms, because these are important habitats for different life stages of lobster. MLA has engaged extensively in the Northeast Ocean planning process over the years. In doing so, we outline for decision makers the complexities of fisheries and their interactions with proposed projects. Our hope is that as offshore wind proposals advance that state and federal agencies will engage with fishermen early to drive better decisions moving forward. Fisheries data must be accurate, complete, transparent, and readily available for decision makers, and an important part of this process is talking to lobstermen early to ensure conflicts to our industry can be mitigated.

There is increasing concern about the impact on the future of fishing in offshore wind farms and many fishermen are concerned about navigating around the turbines. Depending on turbine placements, fishermen may not be able to set their gear as they typically do. Therefore, mitigation measures must be taken into consideration.

Additionally, as talks of offshore oil and gas development increase in the Northeast region, we worry about the environmental and economic risks associated with offshore drilling. An oil spill could

decimate stocks and local economies reliant on lobster. Yet another concern that we have to balance as we consider future impacts to fishing and local communities.

We are also engaged in the difficult challenge of right whale conservation, but this issue will only become more complicated as offshore wind farms spring up in the feeding grounds of right whales. Climate change impacts on right whales, such as water temperature and food availability, could alter their distribution patterns and eventually call for revised conservation measures. Lobstermen will need to adapt accordingly, especially if different areas become closed off. This is yet another challenge for lobstermen.

It is not simply what is occurring in the ocean that is affecting lobster. Ocean acidification and other climate change impacts are magnified by land use changes that increase local pollution and runoff. Land use changes and the increasing use of lawn fertilizers present challenges for fisheries. For example, lawn fertilizer contributes to polluted and nutrient-rich runoff. Runoff with high nitrogen levels often contributes to harmful algal blooms, resulting in low oxygen areas where lobster and fish struggle to survive and reproduce.

On top of all of our climate change concerns and the obstacles to fishing I've already described, our fishermen are also removing bags of trash every day from balloons, bottles, bags, and even fishing gear. The MLA supports many marine debris clean up initiatives, as lobster pots are lost due to storms or vessel traffic creating more marine debris. We are committed to help cleaning up the ocean through our own beach and island clean up initiatives.

In closing, commercial lobstermen are stewards of the sea. We are the first to see impacts to our environment and are currently experiencing the impacts of climate change. The concept of climate change is not something abstract to us. Not only are we balancing the challenges created by shifting stocks, but also the myriad of other challenges and impacts facing our industry. Without a healthy ocean there would be no commercial lobster industry, we no longer have the luxury of ignoring this threat to our livelihoods. We are here today asking for action from Congress to help the thousands of commercial lobstermen and women by mitigating climate change. We ask that you find effective ways to help the commercial lobster industry adapt to the changes that are already here and the ones that are coming if we do not stop them. As you discuss climate change and look for policies to support the communities affected, we ask that you consider that these impacts are one of many facing our industry and consider the multiplying affect that climate change has to the men and women fishing our seas.

Thank you for your time today. I look forward to answering your questions and I hope that you will use me as a resource as you develop funding and mitigation measures to address the climate change and multiplier impacts to our industry.

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