July 21, 2017

Via email to ITP.Laws@noaa.gov

Jolie Harrison
Chief, Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway, Silver Spring, MD 20910

RE: Comments on Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Geophysical Surveys in the Atlantic Ocean; RIN 0648–XE283, 82 Fed. Reg. 26,244 (June 21, 2017); Obstruction to Vitality of Commercial Fisheries

Dear Ms. Harrison:

On behalf of the Northwest Atlantic Marine Alliance we submit the following comments on the takes of marine mammals incidental to geophysical surveys and other specified activities. The Northwest Atlantic Marine Alliance is a national organization serving the interests of fishing communities, their fishermen, and the marine ecosystem. On the Atlantic coast, fishing communities from Key West, Florida to Eastport, Maine are part of our network and define the work we do.

As supporters of community fishermen and healthy fishery ecosystems, we oppose seismic airgun blasting in the Atlantic Ocean. We ask the National Marine Fisheries Service ("NMFS") to take steps toward responsible and proactive engagement with commercial fishing communities on this matter and to deny the Incidental Harassment Authorization ("IHA") applications for offshore oil and gas exploration in the Atlantic Ocean for the following reasons:

IHAs and Marine Mammal Protection

Under the Marine Mammal Protection Act ("MMPA"), NMFS must deny the IHA applications because the proposed takes exceed the "small numbers" requirement, and NMFS's proposed take authorization limit of 30 percent of a stock abundance is simply not in keeping with federal court guidance determining that taking 12 percent or more of a marine mammal species' population clearly goes against the congressional intent to limit takes to "small numbers" under the MMPA.

Under the MMPA, NMFS must deny the IHA applications because seismic airgun blasting by five seismic survey companies in approximately the same geographic area, whether consecutively or concurrently, will have more than a "negligible impact" on the populations of marine mammals

as the potential biological removal rate for several species will be exceeded by the proposed takes.

The mitigation measures proposed by NMFS are inadequate because (1) the cumulative impacts on marine mammals of five (and possibly more) seismic surveys occurring at or around the same time over the course of six months to a year are not properly taken into account; (2) the proposed visual and acoustic monitoring will not protect all marine mammals in the survey area from seismic airgun blasting, especially at night and during low visibility conditions and/or when the animals are not vocalizing; and (3) the proposed 500 meter exclusion zone and 1000 meter buffer zone are insufficient to protect marine mammals from the impacts of seismic airgun blasting.

The activities proposed by the seismic survey companies are not eligible for an IHA pursuant to the MMPA because impacts to marine mammals will not be limited to "Level B Harassment," but instead will result in "Level A Harassment." The proposed mitigation measures are insufficient to ensure the marine mammals are only exposed to Level B Harassment. If and when a marine mammal is found injured from Level A Harassment, NMFS should respond by revoking the IHAs of similar seismic activities and mitigation measures that were permitted under an assumption of Level B Harassment.

Protecting Non-IHA Species and Ensuring Stakeholder Involvement

Due to the importance of ensuring protection of other marine species not covered under the MMPA protections, in the following sections we discuss additional reasons why we oppose seismic testing in the Atlantic, urging NMFS to deny the IHA applications and consider other marine species in their decision making process.

We also believe it is vitally important that NMFS, in partner with BOEM, engage the commercial fishing community in the seismic testing permitting processes. The impact on fisheries by seismic testing is not negligible. The ecosystem, fish stocks, and commercial fishing businesses will all be directly and/or indirectly affected by seismic airgun blasting in the U.S. Atlantic, regardless of latitude. It is a disappointment that the public process has progressed to this stage without a single Town Hall outreach event in any of our fishing communities that will be impacted.

Fishery Ecosystem

The proposed seismic airgun blasting overlaps with Essential Fish Habitat ("EFH") for the following shark species: Scalloped Hammerhead Shark, Big Eye Thresher Shark, Common thresher Shark, and Porbeagle Shark. Sharks, however, are a keystone species, and vital to the ocean ecosystem. As an apex predator, removing or reducing shark populations from an area can create significant imbalances in the food chain. With low reproductive potential, it is irresponsible and dangerous to move forward with seismic testing activities in areas designated as EFH for shark species until the deleterious impacts of seismic airgun blasting on these populations have been further investigated.

Bluefin tuna are also a particularly fragile stock and serve an important role as a keystone species. Listed as a NMFS "Species of Concern," it is unacceptable that the proposed seismic testing areas overlap with Bluefin Essential Fish Habitat, especially considering the Gulf areas of the species' habitat that have been tainted by oil spills.

Science on the effects of seismic airgun blasting on marine life notates a variety of harmful effects on fish. Several studies indicated that species were found most susceptible to death or injury in the egg through juvenile life stages. During these life stages fish serve as prey for larger predators or are learning behaviors they will use throughout their life to successfully migrate and communicate. Harming fish in these life stages is a threat to the food chain by damaging eggs and larvae before they have reached maturity and is a threat to the migratory, communication, and feeding abilities of fish that are injured as fry or juveniles by damaging auditory and orientation systems. The sub-lethal injury to other tissues and organs such as swimming bladders may not result in immediate death, but may lead to reduced fitness, prohibiting the ability to successfully carry out important processes.

Commercial Fisheries

The proposed seismic testing permitting areas overlap over 90% of the Essential Fish Habitat from Maryland to Florida for the following highly migratory species, collectively: Albacore Tuna, Bigeye Tuna, Bluefin Tuna, Skipjack Tuna, Yellowfin Tuna, Blue Marlin, Sailfish, Swordfish, and White Marlin. It is unacceptable to permit continuous harassment of this many highly migratory species, especially given our understanding of their known habitats. It is a waste to collect such information on species essential habitats if such data does not play a role in guiding ocean usage.

Tuna is highlighted as a key commercial species in the newly published 2015 FEUS report. As a highly migratory species central to the commercial fishing economy, we do not support seismic testing that threatens the species in their Essential Fish Habitats. The report also notes the progress made by Northeast fishermen and fishery managers who have worked hard to earn an MSC Certification in two North Atlantic swordfish fisheries. Their hard work and dedication to sustainability in this fishery should not be muted by the destruction of swordfish that are thriving in known Essential Fish Habitats of the Mid- and South Atlantic.

In 2014, the University of North Carolina Chapel Hill, Duke University, and the National Oceanic and Atmospheric Administration (NOAA) conducted a study of reef-fish during seismic surveying. The results showed a 78% decline in reef-fish abundance during the evening hours when fish habitat use was highest on the previous three days without seismic noise. According to the study, "the significant reduction in fish occupation of the reef represents disruption to daily pattern." Another study by Engas, Lokkeborg, Ona and Vold Solda showed trawl catches of cod and haddock, and longline catches of haddock declined by about 70%, and longline catches of cod by 45% after seismic surveys started. Furthermore, the study found that "abundance of catch rates did not return to preshooting levels during the 5-day period after seismic shooting ended.

Seismic surveys not only threaten commercial fishing by harming fish resources but also by interfering with fishing operations. Each seismic survey vessel trails multiple streamers that are miles long. This results in a buffer zone not only around the immediate area of the vessel, but also requires fishing vessels to maintain distance from the miles of towed

streamers to avoid destruction of gear. The streamers are also likely to damage set gear such as traps or fishing nets placed in the water column. The large buffer zone requirement could result in safety hazards if the survey vessel has a trajectory that dissects a fisherman's return path to port or safe harbor. Because fish have been found to alter behaviors for many days following exposure to seismic airgun blasting, these survey vessels would be competing with fishermen for not only space, but time on the water as well.

The economic benefits of commercial fishing and the seafood industry are vast, yet also fragile. The infrastructure on which the entire supply chain relies is precariously positioned on the delicate divide of land and sea, tourism and heritage, climate change and structural integrity. Pressures threaten the industry daily: to sell prime real estate, to invest in new docks and buildings, or succumb to the weathering affront of increasingly volatile storms brought on by climate change. As these key pieces of dockside property fold under these pressures, it is consumed by forces that work against the development of new fishing infrastructure—and there is not enough stability in the profession to invest in new buildings once the property has been replaced by resorts or vacation homes. Once the foundation of the seafood supply chain has fallen, there is no replacing it. The non-negligible influence of seismic testing on fisheries is one additional pressure that this delicate system should not have to endure at a time when the profession is undertaking great strides toward a future of sustainability, implementing revolutionary models that reflect a new relationship with the ocean.

This enormous yet fragile economic powerhouse of U.S. commercial fishing and the greater seafood industry generates over a million jobs nationally surmounting in $144.2 billion in sales. The proposed seismic testing activities are a threat to those securities and especially the almost $2 billion in landings revenue generated by the South Atlantic, Mid-Atlantic and New England regions. The magnitude of the risk to commercial fisheries can be postulated, but the full extent of the harm imposed may not be understood until long after the damage has been done. America sets a high bar for fisheries management, providing an example for other nations to follow. It is unlikely, however, that the world will continue to hold our policies for sustainable oceans in high regard if the result of our management is the collapse of commercial fishing. The future of fishing is a hopeful one. The changes made by fishermen over the last ten years will provide a solid foundation on which the next generation of fishermen thrives. It is too great a risk for commercial fishermen to bear the brunt of seismic blasting effects during such an important time of transition.

Cultivating Ethos of Sustainability and Trust

Motivated by their own ethics and strict regulations, the fishing communities we represent have invested in sustainable harvesting gear and practices, continually adapting to changing quotas and oceans. It was a movement forced upon them by our country's collective commitment to a more ecological approach to resource management and our growing respect for the ocean. The use of seismic airgun blasting for geological surveys, however, is an outdated practice that has seen almost no evolution towards more acceptable methods of data collection. On behalf of the American public, this is NMFS' opportunity offer seismic testing companies that same compelling encouragement to reinvent their technology and identify more sustainable methods of engaging with the ocean by denying permission to use such hazardous practices. It is also an opportunity to show your commercial fishing communities that you will defend their efforts toward sustainability by holding all ocean

users equally accountable for their impacts on fisheries, safeguarding the resources on which so many livelihoods rely. Our fishermen take MMPA regulations seriously and work hard to avoid any harm to protected species, yet in some cases are fined or lose licenses for far lesser harm than the harm being considered for the proposed seismic activities. It is important for NMFS to consider the message that will be sent to commercial fishermen if NMFS allows such large-scale harassment of these protected species. Allowing seismic testing companies to proceed with such large-scale harassment would give rise to an ambiguity in NMFS priorities, setting a false assumption that the Service is willing to give preferential treatment to oil and gas exploration while disregarding the efforts of those in the pursuit and supply of sustainable seafood.

Recommendations

Seismic testing threatens the economic vitality of the communities that depend on fish resources. For the numerous reasons offered above, we ask that NMFS take every measure possible to adhere to their mission of promoting productive and sustainable fisheries by taking the following measures:

1) Deny all of the proposed IHAs related to seismic surveys for oil and gas exploration in the Atlantic.

2) Establish a process for considering the impact of non-MMPA protected species to be formally considered in the decision-making and public comment processes of oil and gas exploration and any other activities significantly influencing the health of-- and access to-- fisheries, regardless of location in the Atlantic. As a component of this, we recommend that public hearings be held in all Atlantic Coast states for fishermen to contribute testimony on the immediate and long-term threats of seismic testing to their businesses.

3) In partner with BOEM, engage the commercial fishing community and other concerned individuals by providing public informational meetings that address:

- The seismic testing permitting process
- Research on the effects of seismic airgun blasting on fish and the marine ecosystem
- Specify the species and gear types threatened by proposed seismic testing activities

4) In partner with BOEM and the commercial fishing community, create a “Best Practices” document that outlines responsible engagement and outreach to the commercial fishing community during all stages of offshore oil and gas exploration activities.

5) Ensure that a component of the permit approval process of seismic testing is to conduct a detailed Environmental Impact Statement that reviews all species and habitats threatened by the activity. These findings should be: a) widely and actively distributed to the commercial fishing community prior to any public comment periods and; b) be used to inform a formal report on the impacts of offshore seismic testing activities on U.S. commercial fisheries and the seafood industry.

6) Ensure seismic testing is addressed in ocean planning initiatives in a responsible manner without conducting ocean planning for the purpose of accommodating seismic testing or other gas and oil exploration activities.

Sincerely,

Amy MacKown

Commercial Fisheries Representative
Northwest Atlantic Marine Alliance