IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

CENTER FOR BIOLOGICAL DIVERSITY, et al., Plaintiffs, v. WILBUR ROSS, et al., Federal Defendants, and MAINE LOBSTERMEN'S ASSOCIATION, INC., and MASSACHUSETTS LOBSTERMEN'S ASSOCIATION, Defendant-Intervenors.	Civil Action Nos. 18-112 (JEB) 18-283 (JEB)

DECLARATION OF JAMES H. LECKY, DIRECTOR NMFS OFFICE OF PROTECTED RESOURCES (RETIRED) IN SUPPORT OF DEFENDANT-INTERVERVENORS REMEDY RESPONSE BRIEF.

I, James H. Lecky, declare the following:

1. I submit this declaration in support of Defendant-Intervenors' request for remand of NMFS' biological opinion and incidental take statement without vacatur or imposition of

restrictions on the fishery. The statements I make are true and correct to the best of my knowledge and, in the case of my opinions, I believe them to be true.

2. My qualifications include a bachelor's degree in biology from California State University at Fullerton, two years of graduate studies in marine biology with a focus on the biology of eastern tropical Pacific dolphins, and 36 years as fishery biologist employed by National Marine Fisheries Service.

3. I was employed as a fishery biologist by National Marine Fisheries Service (NMFS) from 1976 to 2012. I spent 28 years in NMFS' Southwest Region culminating that portion of my career as the Assistant Regional Administrator for Protected resources. My accomplishments in NMFS Southwest Region included

a. Establishment of the California Coastal Marine Mammal Program in cooperation with the California Department of Fish and Game to research and manage coastal marine mammal population and manage fishery interactions;

b. Successful establishment NMFS' first take reduction team to address the incidental take of marine mammals in the California offshore drift gillnet fishery;

c. Implementation of the Dolphin Protection Consumer Information act to promote international conservation of dolphin taken incidental tuna purse seine fisheries;

d. Listing of 10 populations of salmon as threatened or endangered species and establishment of programs to work collaboratively with tribes, farmers, foresters, fishers and others to restore watersheds and salmon populations.

4. The last six years of my career I served as the Director Office of Protected Resources. Major accomplishments during that time included:

a. Implementation of the NMFS rule to minimize and mitigate the effects of marine transportation on right whales, referred to as the NMFS ship speed rule;

b. Implementation of a 2008 modification to the Atlantic Large Whale Take Reduction Plan (TRP) known as the sinking groundline rule which applied to all east coast fixed gear fisheries including the New England lobster fishery;

c. Establishment of a program to permit US Naval training exercises with sonar and other technologies which may impact marine mammals;

d. Creation of a program to reconcile EPA pesticide risk assessment and registration program with EPA's responsibility to consult with NMFS pursuant to Section 7 of the ESA;

e. Implementation of program to permit oil and gas exploration in the Arctic consistent with MMPA's requirement that the authorized activities have no more than a negligible impact on bowhead whales and other marine mammals important to Alaska Native subsistence and culture.

5. The purpose of my declaration is to

a. Support Defendants NMFS's request that the ITS be remanded to it and that vacatur of the 2014 BiOp would (a) be disruptive to the agency's work and (b) undermine cooperation between the agency and stakeholders from the lobster industry

b. Support Defendant-Intervenors' request for use of sound science and an opportunity to collaborate with NMFS in establishing meaningful measures for an effective and equitable approach to addressing the issue of entanglement of right whales in vertical lines

c. Establish a record of the broader context of anthropogenic threats to right whales which extend beyond the American lobster fishery

d. Critique arguments supporting plaintiffs' motion for injunctive relief to establish a protected area in ocean waters south of the islands of Nantucket and Martha's Vineyard that prohibits trap/pot fishing with static vertical lines, and

e. Provide guidance on best practices for the application of scientific knowledge to the fishery management and endangered species conservation process.

f. The statements I make are true and correct to the best of my knowledge.

6. In preparation of this declaration, I have reviewed pleadings by both sides in this case, court findings and rulings, the results of recent Atlantic Large Whale Take Reduction Team deliberations, as well as recent literature on the status of right whales and oceanographic conditions.

7. The opinions expressed in this declaration are mine and do not purport to represent those of NMFS, my former employer.

Background

8. There appears to be broad consensus among the right whale researchers in the scientific community that the North Atlantic right whale population is in decline (Pace et al. 2017), that human caused mortality is a major factor in the decline (Corkeron et al. 2018), and that intervention is necessary to influence recent trends (Kraus et al. 2016). The ESA and MMPA provide NMFS with the tools to intervene in support of the recovery of the species, but there is a sub text in those statutes that economics of the regulated activities are important. Any reasonable and prudent alternative proposed by NMFS should avoid the likelihood of jeopardy and adverse modification of critical habitat, but it should also be implementable by the action agency,

consistent with the purpose of the project, and economically and technologically feasible (50 CFR 402.02). The entire management system created by the 1994 amendments to the MMPA was developed to address court interpretation of the requirements of the original act which threatened to preclude NMFS from authorizing take of marine mammals incidental to commercial fishing (Kokechik decision) and threatened severe restrictions on commercial fishing (House Report 103-439).

9. Finding reasonable and prudent alternatives, which meet the Section 7 requirements of the ESA, requires coordination and collaboration with the federal agency and applicants (USFWS and NMFS 1998), and, as appropriate, other interested parties. In my experience, NMFS often does not have the experience, knowledge, or familiarity with technology it is required to regulate under the ESA. Thus, collaboration with federal agencies (in this case NMFS Office of Sustainable Fisheries, Domestic Fisheries Division), applicants, and appropriate interested parties is essential to identifying reasonable and prudent alternatives consistent with the requirements contained within the definition.

10. For large, complex, and controversial biological opinions, reinitiation of Section 7 consultation is often required because incidental take may have been exceeded, new information becomes available that was not considered in the consultation, the project is modified subsequent to the conclusion of consultation, or a new species is listed (50 CFR 402.16). See for example NMFS consultations on the Federal Central Valley Water Project, or the Federal Columbia Power System, the Federal Pacific Coast Salmon Fishery Management Plan, or consultations on Navy training exercises involving use of sonar.

11. In this instance, NMFS has reinitiated consultation on several federal fishery management plans which authorize fisheries that take North Atlantic right whales to address the

new information regarding the status of the species which was not available for its consultation in 2014. (see Mark Murray Brown – presentation to NEFMC, New Port RI, North Atlantic Right Whale 5-year Review and Reinitiation of ESA Section 7 Fishery Biological Opinions Dec 5, 2017).

12. Where incidental take of threatened or endangered marine mammal species exceeds levels established pursuant to Marine Mammal Protection Act (MMPA) section 3(20) and section 117(a)(6) (referred to as Potential Biological Removal levels, or PBR), the MMPA authorizes NMFS to establish take reduction teams (MMPA section 118 (f)(6)(A)-(D)). If convened, take reduction teams are required to have expertise regarding the conservation or biology of the marine mammal species which the take reduction plan will address, or the fishing practices which result in the incidental mortality and serious injury of such species. Members shall include representatives of Federal agencies, each coastal State which has fisheries which interact with the species or stock, appropriate Regional Fishery Management Councils, interstate fisheries commissions, academic and scientific organizations, environmental groups, all commercial and recreational fisheries groups and gear types which incidentally take the species or stock, Alaska Native organizations or Indian tribal organizations, and others as the Secretary deems appropriate. Take reduction teams shall, to the maximum extent practicable, consist of an equitable balance among representatives of resource user interests and nonuser interests.

13. Such a team was convened in 1995 to assist NMFS in reducing the incidental take of North Atlantic right whales and other large whale species in Federally managed fisheries along the Atlantic coast. The Atlantic Large Whale Take Reduction Team (ALWTRT) provides the relevant membership and expertise to assist NMFS in its efforts to conserve right whales and it has been effective in developing conservation measures for fixed gear fisheries along the

Atlantic coast, including the American lobster fishery. For example, it recommended, and NMFS promulgated regulations to require, weak links in 1997 to allow the release of gear for entangled whales and preclude entanglements. In 2000, gear marking requirements were implemented to improve data collection and assignment of entanglements to specific gear and locations. In 2007 seasonal gillnet closures were implemented and the removal of floating rope deployed on bottom was required through implementation of the sinking groundline rule in 2009. In 2014, time area closures were modified, and the vertical line rule was promulgated to reduce the number of buoy lines in the water. In the sinking groundline rule required conversion of over 27,000 miles of floating ground line to sinking groundline effectively removing that amount of line from the water column and in the vertical line rule, NMFS required 2,540 miles of vertical line to be removed from the water (Mark Murry Brown, NMFS GARFO Section 7 coordinator, presentation to the New England Fishery Management Council meeting Newport Rhode Island, Dec. 5, 2017).

14. NMFS has convened seven ALWTRT meetings from November 2017 to May 2019, in addition to multiple subgroup meetings, to address right whale entanglement risk. NMFS held eight scoping meetings during the summer of 2019 to solicit public feedback from the April 2019 ALWTRT meeting for incorporation into the draft Environmental Impact Statement (https://www.fisheries.noaa.gov/past-events?title=Atlantic+Large+Whale+Take+Reduction+Plan&region%5B1000001111%5D=1000001111&sort_by=field_begin_date_value). In the ensuing months, proposals to reduce entanglement risk to right whales have been recommended to NMFS by each state (Maine, Massachusetts and Rhode Island) to address risk in Lobster Management Areas 1, 2 and 3. (See minutes of April 2019 Atlantic Large Whale Take reduction team meeting, (see summary of

recent ALWTRT meetings https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/atlantic-large-whale-take-reduction-plan#the-team)). Significant time and resources have been expended to collaborate with stakeholders and the public to identify conservation measures to benefit right whales through this process.

15. Based on experience in working on several controversial and contentious conservation issues during my career, remanding the 2014 biological opinion on the American lobster fishery to NMFS to address the deficiencies identified by the court and providing NMFS the latitude to complete its planned rulemaking for amendment of the Atlantic Large Whale Take Reduction Plan would be the appropriate remedy. NMFS currently has before it guidance from the ALWTRT, several proposals from state marine resource agencies, and a proposal from the Lobster Conservation Management Team for Area 3 which is based on stakeholder advice. Vacatur of the biological opinion and/or unilateral imposition of additional management measures would undermine and negate the public stakeholder process and damage any trust that has been built through NMFS stakeholder processes and delay its planned rule making process at the expense of the American lobster fishery and right whales.

16. Plaintiffs present an argument based on the lengthy record of monitoring, research, and management efforts to conserve right whales over the past several decades. But their arguments do not accurately address the threat of the New England lobster fishery to right whales and do not present information in an appropriate context considering recent trends in climate and oceanic conditions, changes in right whale distribution, the variability in fishing practices among the states and fishing areas, progress in implementing risk reduction measures over time, or exposure to risks resulting from the expansion of the right whales foraging habitat into Canadian waters.

17. The plaintiffs argue that the American lobster fishery presents a threat to North Atlantic right whales (see Moore declaration). While there were unassigned entanglements reported in U.S. waters for the period 2013-2017, how these are apportioned is a point of contention on the ALWTRT. Dr. Kraus acknowledged in a public forum, convened by the Conservation Law Foundation on April 10, 2018, that smaller inshore gear is less of a problem than the offshore gear. And that in addition to the crab fishery in the Gulf of Saint Lawrence, there is a very extensive lobster fishery around all of the maritime provinces, and we have yet to really understand how much of that gear is responsible for entanglements. The recent serious injuries and mortalities are associated with larger diameter line, particularly risky is the large diameter line use in the Canadian snow crab fishery. Recognizing the shift in right whale distribution into Canadian waters since 2010 (Record et. al 2019) and the fact that the Canadian government has only recently entered into enhanced conservation efforts (Davis and Brilliant 2019), would support weighting the risk in assigning serious injuries and mortality for the 2013 -2017 period toward Canadian fisheries (How 2019). In addition, the justification in Dr. Moore's declaration supporting a broad closure off Massachusetts appears to be based on summary presentation of sightings over several years in that area, which masks the seasonality and inter-annual variability in the distribution of whales. The plaintiffs ignore the fact that the State of Massachusetts has proposed a right whale management strategy to NMFS (Massachusetts Department of Marine Fisheries 2020), which includes a seasonal closure in a similar area. Rather than working through the ALWTRT process and NMFS regulatory process, the plaintiffs have chosen to seek unilateral imposition of their view by the court. The court should reject the plaintiffs' proposal for a closure and defer to NMFS and its expertise in this area to resolve this issue.

18. Record et al. (2019) investigate the effects of ocean warming on distribution of *Calanus finmarchicus*, a species of lipid rich copepod upon which right whales prey and the consequent change in the distribution of right whales. They conclude that that there has been a significant shift in distribution of *C. finmarchicus* between the early and late periods and that the shifts in right whale distribution correspond to these changes. In testing this hypothesis, they aggregated data from oceanographic buoys, transect, and multiple zooplankton and whale surveys focus on the period of rapid warming 2004- 2016. Then they divided the data into early (2004-2008) and late (2012-2016) periods to test the significance of changes in *C. finmarchicus* distribution from before to after the changes in right whale distribution around 2010 (Kraus et al. 2016).

19. Much of the information presented by the plaintiffs (see Moore declaration) regarding distribution of vertical lines and whale interactions spans the entire period of observation, ignoring right whale distribution shifts that occurred beginning around 2010, and refers to entanglements generally, rather than specifically addressing those from the New England lobster fishery. This fails to account for the changing trends in distribution of the whales, prey species, harvestable resources, and fishing effort under rapidly changing environmental conditions (Pershing et al. 2015, Simonds and Isaac 2007). This failure to consider ongoing effects of climate change can result in mis-assignment of risk between and among the various anthropogenic sources of potential harm to the species. Accurate assignment of risk is a key to the development of a successful program of conservation measures for a species under threat from multiple sources with complex interactions.

20. Davis et al. (2107) also confirmed a shift in right whale distribution around 2010 by analyzing passive acoustic monitoring data from 2004 to 2014 and demonstrated year-round habitat use of the western North Atlantic Ocean, with a decrease in detections in waters off Cape

Hatteras, North Carolina in summer and fall. Data collected post 2010 showed an increased right whale presence in the mid-Atlantic region and a simultaneous decrease in the northern Gulf of Maine where much of the New England lobster fishery takes place. Right whales appear to have shifted from previously prevalent northern grounds in the Bay of Fundy and greater Gulf of Maine, to spending more time in mid-Atlantic regions year-round. No data from the Gulf of Saint Lawrence were available for this study, but the authors noted changes to that area based on visual surveys and plan to incorporate data from that area in the future to assist with assessing the new and substantial risk of entanglement there. Data from the NOAA Right Whale Sighting Advisory System confirms significant right whale sightings in the Gulf of Saint Lawrence in recent years (https://fish.nefsc.noaa.gov/psb/surveys/MapperiframeWithText.html).

21. NMFS developed a decision support tool (DST), which is a model under development to evaluate the conservation benefit of various management strategies to address entanglement risk, in April 2019. As part of this work, NMFS set a risk reduction target to reduce entanglement from commercial fisheries to below PBR. During discussions with the ALWTRT, some members expressed concern over NMFS' assumptions about how unassigned entanglements were assigned to a country (U.S. or Canada) and gear type. The team recommended the DST be peer reviewed before it is used to evaluate the efficacy of proposed conservation measures in a proposed rule. In November 2019, NMFS convened an independent peer review, open to the public, with three reviewers from the Center for Independent Experts. The reviewers applauded NMFS' effort to develop a tool, however, the review panel reported a number of concerns over the DST's underlying data, which is coarse (spatially and temporally), stagnant (set years) and does not account for variation in the various data sources. Considerable work should be aimed at

improving the inputs to the model across the three major data sources, fishery data, whale distribution, but particularly the assessment of gear threat (CIE 2019).

22. The arguments presented by the plaintiff (see Moore declaration) appear to treat every vertical line as having comparable or equal risk for whales. Moore's justification does not adequately reflect the variability in fishing strategy or gear type. NMFS recognizes that risk varies depending on the type of gear encountered by a right whale and has attempted to address this by rating of the risk of various gear used in trap/pot fisheries based on rope diameter and length of trawl, as one of three inputs to its decision support tool. However, the initial approach was flawed and requires further development. Also, as described in the most recent American Lobster Benchmark Stock Assessment (Atlantic States Marine Fisheries Commission 2015), there are differences in the status of the lobster stocks fished in New England: Gulf of Maine, Georges Bank, and Southeast New England. These differences have led to differing trends in fishing effort and strategy which are also not considered by the plaintiffs.

23. Dr. Moore notes there are one million vertical lines in the ocean, based on data published in NOAA Technical Memorandum (Hayes, NOAA Technical Memorandum NMFS -NE-247), but does not acknowledge this represents lines fished in both the U.S. and Canada or that the validity of this report was questioned by Maine Department of Marine Resources (letter to NEFSC Oct 3, 2018). This argument fails to consider that risk has been defined by NMFS as "likelihood" (which considers amount of lines and density and encounter rate with whales including whale behavior, where and when) x "severity" (the outcome of the encounter) (October 2018 ALWTRT meeting https://archive.fisheries.noaa.gov/garfo/protected/whaletrp/trt/meetings/October%202018/risk.pdf). Any discussion without consideration of the distribution of those lines as related to the

distribution of right whales over time leads to the impression each line presents a similar level of risk, when in fact different lines present different levels of risk (Knowlton et al. 2016) and trends in the lobster resource and fishery management measures can affect where and when lines are set. For example, only about 5,400 lines are in lobster management area 3 where encounters with whales are more likely.

24. This apparent assumption that all lines and areas are equal, is inconsistent with the fact that the majority of recent entanglements, including those resulting in serious injuries and mortalities, have been attributed to the high incidents of entanglement in Canadian waters and involve heavy line from the snow crab fishery. This heavy line is distinguishable from heavy lines used in the U.S. offshore lobster fishery, thus assigning equal levels of risk to both may not result in the best management outcome.

25. The plaintiff's proposal for a closure, which would result in the prohibiting of vertical lines, appears to be based on summary information on right whale sightings over many years. This obscures the inter- and intra-annual variability in right whale distribution which if accounted for could be used to fine tune appropriate management measures based on whale distribution, much like the dynamic management areas used to advise the shipping industry of the need for caution as right whales are in the area.

Conclusion

For the reasons discussed above, the plaintiffs do not adequately consider multiple important factors including the entanglement rates associated with the American lobster fishery, the recent shift in right whale distribution away from previously prevalent northern grounds in the Bay of Fundy and greater Gulf of Maine, or the multiple factors associated with entanglement risk and

the severity of the outcome as a product of presence and behavior of whales, varying levels of risk presented by different ropes and gear configurations and trends in the lobster resource and fishery management measures, in its proposal for remedy.

I think remanding the flawed 2014 biological opinion and incidental take statement to NMFS to address the deficiencies identified by the court by a date certain, without vacatur or imposition of any unilateral restrictions on fishing restrictions, would be an appropriate remedy in this case. NMFS has already made significant progress in developing a rulemaking to amend the Atlantic Large Whale Take Reduction Plan and reinitiating a Section 7 consultation on the American lobster fishery. Vacatur of the biological opinion and/or unilateral imposition of management measures outside the ongoing NMFS regulatory process would undermine and negate the public stakeholder process and damage any trust that has been built through NMFS stakeholder processes and delay its planned rule making process at the expense of the American lobster fishery and right whales. The measures under consideration by NMFS are likely to result in substantial reductions in exposure to vertical lines, as well as a reduction in potential for entanglement when whales do encounter lines. Protecting this consensus and the collaborative relationships that support it is likely to pay conservation benefits in the long run.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on June 18, 2020 in Seattle Washington

James H. Lecky

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