IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH CAROLINA CHARLESTON DIVISION

SOUTH CAROLINA COASTAL CONSERVATION LEAGUE; CENTER FOR BIOLOGICAL DIVERSITY; DEFENDERS OF WILDLIFE; NATURAL RESOURCES DEFENSE COUNCIL, INC.; NORTH CAROLINA COASTAL FEDERATION; OCEANA; ONE HUNDRED MILES; SIERRA CLUB; and SURFRIDER, FOUNDATION,))))))))))))))
Plaintiffs,)
STATE OF MARYLAND; STATE OF CONNECTICUT; STATE OF DELAWARE; STATE OF MAINE; COMMONWEALTH OF MASSACHUSETTS; STATE OF NEW JERSEY; STATE OF NEW YORK; STATE OF NORTH CAROLINA; AND COMMONWEALTH OF VIRGINIA, Plaintiffs-Intervenors,)) No. 2:18-cv-03326-RMG))))
v.)
WILBUR ROSS, IN HIS OFFICIAL CAPACITY AS THE SECRETARY OF COMMERCE; NATIONAL MARINE FISHERIES SERVICE; and CHRIS OLIVER, IN HIS OFFICIAL CAPACITY AS THE ASSISTANT ADMINISTRATOR FOR FISHERIES,))))))))))
Defendants.	<i>)</i>)

PROPOSED COMPLAINT-IN-INTERVENTION OF PLAINTIFFS-INTERVENORS STATES OF MARYLAND, CONNECTICUT, DELAWARE, MAINE, NEW JERSEY, NEW YORK, AND NORTH CAROLINA AND COMMONWEALTHS OF MASSACHUSETTS AND VIRGINIA FOR DECLARATORY AND INJUNCTIVE RELIEF

PRELIMINARY STATEMENT

- 1. The undersigned Atlantic Coast states ("the States") intervene in this case to protect their coastal and marine resources and economies from the impacts of the National Marine Fisheries Service's ("NMFS") decision to authorize the harassment of hundreds of thousands of marine mammals. Each of the States has an interest in wildlife, including marine mammals, that frequent or inhabit areas within its boundaries, including waters within its jurisdiction. Each of the States, moreover, has a thriving coastal tourism industry. The prospect of seeing marine mammals—whether directly from the States' shores, or from boats launched from their shores—is an important draw for the States' coastal economies.
- 2. Whales, dolphins, and porpoises have finely tuned senses of hearing, on which they rely to navigate, seek food, avoid danger, and communicate among themselves. Many species of these animals are vulnerable to human activities—a vulnerability that prompted Congress to enact the Marine Mammal Protection Act ("MMPA") in 1972. The MMPA generally bars actions that kill or injure marine mammals (such as whales, dolphins, and porpoises) or disrupt their behavioral patterns. It allows the authorization of "incidental harassment" of "small numbers" of marine mammals in limited circumstances, however, if such harassment will have only a "negligible impact" on a species or population stock. 16 U.S.C. § 1371(a)(5)(D)(i). For marine mammal species listed and protected under the Endangered Species Act ("ESA"), any authorized harassment may occur only in accordance with an incidental take statement contained in a valid biological opinion, and only if it does not jeopardize any protected species' continued existence. *Id.* § 1536. And when incidental harassment authorizations constitute major federal action, they are subject to the requirements of the National Environmental Policy Act ("NEPA"), 42 U.S.C § 4321 *et seq.*, and its implementing regulations.

- 3. Contrary to Congress's mandates to protect imperiled species of marine life, NMFS (sometimes known as NOAA Fisheries) has authorized five private companies to harass marine mammals by using airguns to survey the ocean floor for oil and gas. Deployed in the Atlantic Ocean off the coasts of states as far north as Delaware and as far south as Florida, those airguns will expose whales, dolphins, and porpoises to repeated sound blasts louder than 160 decibels. NMFS expects that they will result in more than 373,000 instances of marine mammal harassment, corresponding to well over 300,000 marine mammals.
- 4. Authorizing harassment of this magnitude, for surveys that overlap both geographically and temporally, makes a mockery of Congress's choice to limit harassment to "small numbers" of marine mammals with merely a "negligible impact." 16 U.S.C. § 1371(a)(5)(D)(i). Indeed, NMFS's decision rests on the absurd notion that the "small numbers" limitation actually means as much as one-third of each species' or stock's population, and applies to each company separately. No more defensible is NMFS's determination, through a biological opinion, that the authorized harassment is not likely to threaten the continued existence of any ESA-protected species—including the North Atlantic right whale, which NMFS has warned "may decline to extinction." Finally, NMFS's determination that the five companies' seismic testing activities will have no significant environmental impact, and thus do not require preparation of an EIS, cannot survive scrutiny.
- 5. The seismic testing activities at issue here will harm the States and their citizens. They will harass marine mammals and other wildlife that commonly move between federal and state waters, including the waters of the States. Further, seismic testing's negative impact on marine mammals' health and abundance will make the States less attractive for coastal tourism, will deprive each State of tax revenues associated with coastal tourism, and could create cascading

effects on the States' economically important commercial and recreational fishing industries. The States accordingly request that this Court set aside NMFS's unlawful actions.

PARTIES

- 6. The Plaintiffs in this action are described in paragraphs 19 through 31 of the Complaint for Declaratory and Injunctive Relief, ECF No. 1.
- 7. The Defendants in this action are described in paragraphs 32 through 34 of the Complaint for Declaratory and Injunctive Relief, ECF No. 1.
- 8. Plaintiff-Intervenor State of Maryland is a sovereign entity that intervenes on its own behalf and on behalf of its citizens and residents to protect State property and natural resources held in trust by the State, and to protect the State and its citizens and residents from harm to its economy.
- 9. Plaintiff-Intervenor State of Connecticut is a sovereign entity that intervenes on its own behalf and on behalf of its citizens and residents to protect State property and natural resources held in trust by the State, and to protect the State and its citizens and residents from harm to its economy.
- 10. Plaintiff-Intervenor State of Delaware is a sovereign entity that intervenes on its own behalf and on behalf of its citizens and residents to protect State property and natural resources held in trust by the State, and to protect the State and its citizens and residents from harm to its economy.
- 11. Plaintiff-Intervenor State of Maine is a sovereign entity that intervenes on its own behalf and on behalf of its citizens and residents to protect State property and natural resources held in trust by the State, and to protect the State and its citizens and residents from harm to its economy.

- 12. Plaintiff-Intervenor Commonwealth of Massachusetts is a sovereign entity that intervenes on behalf of itself and as trustee, guardian, and representative of all its residents and citizens to protect the Massachusetts economy and all wildlife and natural resources held in trust by the Commonwealth.
- 13. Plaintiff-Intervenor State of New Jersey is a sovereign entity that intervenes on its own behalf and on behalf of its citizens and residents to protect State property and natural resources held in trust by the State, and to protect the State and its citizens and residents from harm to its economy.
- 14. Plaintiff-Intervenor State of New York, a body politic and sovereign state, intervenes in this action on behalf of itself, and as trustee, guardian and *parens patriae* representative of all residents and citizens of New York State, to protect wildlife, natural resources, and the interests of its residents and citizens in such wildlife and resources. New York State is the sovereign and proprietary owner of all marine wildlife within the State, which the State holds in public trust for the benefit for all of its people.
- 15. Plaintiff-Intervenor State of North Carolina is a sovereign state that intervenes to protect the resources of the State that it holds in trust for the benefit of its citizens and to protect the State and its citizens from harm to the State's economy.
- 16. Plaintiff-Intervenor Commonwealth of Virginia is a sovereign state that moves to intervene to protect its natural resources and economic interests for the benefit of the Commonwealth and its citizens.

JURISDICTION AND VENUE

17. This action arises under the MMPA, 16 U.S.C. § 1361 et seq.; the ESA, 16 U.S.C. § 1531 et seq.; NEPA, 42 U.S.C. § 4321 et seq.; the Administrative Procedure Act ("APA"), 5

- U.S.C. § 551 *et seq.*; and the Declaratory Judgment Act, 28 U.S.C. § 2201. This Court has subject matter jurisdiction over this action, including the States' claims, pursuant to 28 U.S.C. § 1331.
- 18. Venue in this Court is proper pursuant to 28 U.S.C. § 1391(e)(1)(C) because Plaintiff South Carolina Coastal Conservation League resides in this judicial district and no real property is involved in this action.
- 19. Pursuant to Local Rule 3.01(A)(2), assignment to the Charleston Division is proper because Plaintiff South Carolina Coastal Conservation League resides in Charleston.
- 20. This Court has personal jurisdiction over all Defendants because all Defendants are United States government agencies or United States employees served in their official capacities, and thus are subject to nationwide service of process pursuant to 28 U.S.C. § 1391(e)(1) and Fed. R. Civ. P. 4(i)(2).
- 21. The States' requested relief will redress their injuries. The States have no other adequate remedy at law.

STATUTORY AND REGULATORY BACKGROUND

A. The Marine Mammal Protection Act

22. The MMPA rests on a congressional finding that "certain species and population stocks of marine mammals are, or may be, in danger of extinction or depletion as a result of man's activities." 16 U.S.C. § 1361(1). Consistent with that finding, the MMPA declares that "such species and population stocks should not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part, and, consistent with this major objective, they should not be permitted to diminish below their optimum sustainable population." *Id.* § 1361(2); *see id.* § 1361(6) (stating that marine mammals "should be

protected and encouraged to develop to the greatest extent feasible commensurate with sound policies of resource management and that the primary objective of their management should be to maintain the health and stability of the marine ecosystem").

- 23. As relevant here, the MMPA imposes a moratorium on "taking" marine mammals. 16 U.S.C. § 1371(a). The MMPA defines "take" as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." *Id.* § 1362(13).
- 24. The MMPA further defines "harassment," dividing it into two categories of actions. "Level A harassment" is "any act of pursuit, torment, or annoyance which . . . has the potential to injure a marine mammal or marine mammal stock in the wild." 16 U.S.C. § 1362(18)(A)(i), (C). "Level B harassment" is "any act of pursuit, torment, or annoyance which . . . has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering." *Id.* § 1362(18)(A)(ii), (D).
- 25. Notwithstanding its broad take prohibition, the MMPA allows permits for the taking of marine mammals to be granted in certain limited circumstances. 16 U.S.C. § 1371(a). One such set of circumstances is set forth in Section 1371(a)(5)(D)(i), which allows the Secretary of Commerce to authorize "the incidental, but not intentional, taking by harassment of small numbers of marine mammals of a species or population stock." *Id.* § 1371(a)(5)(D)(i). To issue an incidental harassment authorization ("IHA") under this provision, the Secretary must find that the harassment in question "will have a negligible impact" on the marine mammal species or stock. *Id.*; *see* 50 C.F.R. § 216.103 (defining "negligible impact" as "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival").

- 26. The MMPA prescribes certain additional requirements for IHAs issued under 16 U.S.C. § 1371(a)(5)(D)(i). For instance, the statute requires that the IHA "prescribe, where applicable" (1) "permissible methods of taking by harassment pursuant to [the activity at issue], and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance"; and (2) "requirements pertaining to the monitoring and reporting of such taking by harassment." 16 U.S.C. § 1371(a)(5)(D)(ii)(I), (III). IHAs are granted by NMFS, exercising authority delegated by the Secretary of Commerce.
- 27. NMFS's own regulations further govern its consideration of IHA applications. Those regulations permit NMFS to grant IHAs with respect to "[t]he taking of small numbers of marine mammals" only if, among other things, it "[f]inds, based on the best scientific evidence available, that the total taking by the specified activity during the specified time period will have a negligible impact on species or stock of marine mammal(s) and will not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses." 50 C.F.R. § 216.102(a).

B. The Endangered Species Act

28. The ESA, 16 U.S.C. § 1531 *et seq.*, declares that "all Federal departments and agencies shall seek to conserve endangered species and threatened species." 16 U.S.C. § 1531(c)(1). "Each Federal agency," the statute provides, generally must "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary . . . to be critical." *Id.* § 1536(a)(2).

- 29. The ESA establishes an interagency consultation process to assist agencies in complying with their duty to avoid jeopardy or destruction or adverse modification of crucial habitat. *See* 16 U.S.C. § 1536(a)(2); *id.* § 1532(5); 50 C.F.R. § 402.14. For most marine species, NMFS is the agency that must be consulted, and the consultation process culminates in NMFS's issuance of a biological opinion. *See id.* § 1536(b)(3)(A); 50 C.F.R. §§ 402.02, 402.14. Among other requirements, the biological opinion must state NMFS's opinion regarding "whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of [ESA-] listed species or result in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.14(g)(4); *see id.* § 402.02. If so, NMFS must list any "reasonable and prudent" alternatives to the proposed action that would avoid jeopardy. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(3). NMFS must base its determination on "the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2).
- 30. If NMFS concludes that the proposed action is *not* likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat for such species, but nonetheless expects the action will incidentally "take" members of listed species, it must issue an "incidental take" statement. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1); *see* 16 U.S.C. § 1532(19) (defining "take" for ESA purposes as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct"). Among other requirements, the incidental take statement must specify the take's impact on the listed species, as well as any reasonable and prudent measures that are necessary or appropriate to minimize that impact. 16 U.S.C. § 1536(b)(4); *see* 50 C.F.R. § 402.14(i)(1)(i) (equating "impact" with "amount or extent"). The take of an ESA-listed species is not prohibited where it complies with a valid incidental take statement. 16 U.S.C. § 1536(b)(4), (*o*)(2).

31. NMFS may authorize the incidental take of an endangered or threatened marine mammal under the ESA only if the taking also complies with the MMPA. 16 U.S.C. § 1536(b)(4)(C).

C. <u>The National Environmental Policy Act</u>

- NEPA, 42 U.S.C. § 4321 *et seq.*, requires that federal agencies give careful consideration to their actions' environmental consequences before proceeding. *Id.* § 4332(2)(C); 40 C.F.R. §§ 1500.1(b) 1501.2, 1502.5. More specifically, NEPA requires federal agencies to prepare an environmental impact statement ("EIS") for any "major Federal action[] significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C). Regulations promulgated by the Council on Environmental Quality set forth factors that agencies must consider in determining whether an action's effects are "significant[]" within the meaning of NEPA. *See* 40 C.F.R. §§ 1508.27.
- 33. In instances where it is unclear whether an action's environmental impact will be significant, an agency may use an environmental assessment ("EA") to determine whether to conduct a full EIS. *See* 40 C.F.R. § 1508.9(a)(1). An EA reaching a finding of no significant impact—tantamount to a conclusion that no EIS is necessary—must adequately explain why the federal action at issue will have no "significant effect on the human environment." 40 C.F.R. § 1508.13. Among other requirements, an EA must consider the proposed action's cumulative effects—*i.e.*, its "incremental impact . . . when added to other past, present, and reasonably foreseeable future actions"—and must consider reasonable alternatives to the proposed action. 40 C.F.R. §§ 1508.7, 1508.9(b); *see* 40 C.F.R. § 1502.1; 42 U.S.C. § 4332(2)(E).
- 34. An agency may use a programmatic EIS to broadly consider the impacts of a group of related or similar actions. 40 C.F.R. § 1502.4. Although the agency may later incorporate the

programmatic EIS by reference as appropriate—a process known as "tiering"—it still must analyze the effects of the specific actions encompassed by the programmatic EIS. *See id.* § 1502.20.

D. The Administrative Procedure Act

- 35. The APA allows any person "suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action," to seek judicial review of that action. 5 U.S.C. § 702.
- 36. The APA requires a reviewing court to, among other things, "hold unlawful and set aside agency action, findings, and conclusions" that it finds "arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law"; "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right"; or "without observance of procedure required by law." 5 U.S.C. § 706(2).

FACTUAL BACKGROUND

- 37. The Outer Continental Shelf Lands Act ("OCSLA"), 43 U.S.C. § 1331 *et seq.*, governs management of the outer Continental Shelf ("OCS") for purposes of oil and gas exploration and development.¹ Among other things, OCSLA allows the Secretary of the Interior to grant permits to conduct "geological and geophysical explorations" on the OCS, provided that such explorations "are not unduly harmful to aquatic life in such area." 43 U.S.C. § 1340(a)(1); *see id.* § 1340(g)(3); 30 C.F.R. Part 551 (setting forth procedures applicable to permits).
- 38. In one form of geophysical survey, arrays of airguns are fired underwater; data from the return of the soundwaves is then used to map the ocean floor. A person wishing to conduct such activity (hereinafter referred to as "seismic testing") on the OCS must obtain a permit from

¹ The OCS consists of undersea lands that are (1) within the United States' jurisdiction; but (2) at least a certain distance, generally three miles but sometimes more, from the coastline. *See* 43 U.S.C. §§ 1301, 1331(a).

the Bureau of Ocean Energy Management ("BOEM"), to which the Secretary of the Interior has delegated authority for this purpose. BOEM, in turn, will issue such a permit only if the applicant has first received authorization from NMFS, pursuant to the MMPA, for any incidental takes.

A. The Applications at Issue

- 39. In 2014 and 2015, five companies—Spectrum Geo Inc. ("Spectrum"), TGS-NOPEC Geophysical Company ("TGS"), ION GeoVentures ("ION"), WesternGeco, LLC ("Western"), and CGG—submitted applications for permits to conduct seismic testing activities in defined areas of the Atlantic Ocean in support of oil and gas exploration ("the Permit Applications"). Each of those companies also submitted applications for IHAs in connection with its proposed activities ("the IHA Applications"). Seeking IHAs was necessary because the companies' activities would incidentally harass members of numerous marine mammal species, including endangered and threatened species (such as the endangered North Atlantic right whale) as well as other stocks designated as depleted, such as the blue whale and sperm whale.
- 40. At the time of the Permit Applications, the Secretary of the Interior was formulating a plan, pursuant to 43 U.S.C. § 1344, to lease portions of the OCS for oil and gas development. That plan, as initially released in draft form, included new oil and gas leasing in areas of the Atlantic Ocean. However, the final leasing plan that was issued in November 2016, and formally approved in January 2017, excluded the Atlantic Ocean from new leasing.
- 41. On January 6, 2017, BOEM denied the Permit Applications. The denial stressed that the Atlantic Ocean had been removed from leasing consideration; that future technological developments might enable seismic testing to be conducted in a manner with less potential for environmental impacts; and that the mitigation measures proposed were not certain to avoid all

possible high-intensity environmental impacts. At the time the Permit Applications were denied, the IHA Applications remained pending.

- 42. On April 28, 2017, however, President Donald J. Trump signed an executive order directing the Secretary of the Interior to develop "a streamlined permitting approach for privately funded seismic data research and collection aimed at expeditiously determining the offshore energy resource potential of the United States." Exec. Order No. 13,795, 82 Fed. Reg. 20,815 (2017).
- 43. On May 1, 2017, Secretary of the Interior Ryan Zinke signed Secretarial Order No. 3350, entitled "America-First Offshore Energy Strategy" ("Order No. 3350"). Order No. 3350 directed BOEM to "expedite consideration of appealed, new, or resubmitted seismic permitting applications for the Atlantic." BOEM's Acting Director then instructed BOEM to reverse its earlier denial of the Permit Applications and resume considering them. On May 16, 2017, BOEM formally reversed the denials, so that the Permit Applications were pending once again. BOEM later issued a draft OCS leasing plan that included areas of the Atlantic Ocean for new oil and gas leasing.

B. NMFS's Proposal to Grant the IHA Applications

44. Following BOEM's reversal of its earlier denial of the Permit Applications, NMFS proposed to grant the IHA Applications (which the applicants had supplemented or revised since their initial submission). *See* Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Geophysical Surveys in the Atlantic Ocean, 82 Fed. Reg. 26,244 (June 6, 2017). Still, NMFS recognized that "[h]earing is the most important sensory modality for marine mammals underwater," and that "exposure to anthropogenic sound can have deleterious effects." *Id.* at 26,274; *see id.* at 26,274-80 (describing loss of hearing sensitivity at certain frequency ranges, behavioral effects, stress responses, and masking of biologically important sounds).

- 45. As noted above, the MMPA envisions the potential grant of IHAs for takes of "small numbers" of marine mammals. In proposing to grant the IHA Applications, NMFS stated that it "interprets the concept [of small numbers] in relative terms through comparison of the estimated number of individuals expected to be taken to an estimation of the relevant species or stock size." *Id.* at 26,295. It therefore "propose[d] a take authorization limit of 30 percent of a stock abundance estimate." *Id.* In doing so, NMFS did not distinguish among marine mammal species—even though, in some instances, 30 percent of a species' stock abundance estimate would amount to tens of thousands of marine mammals.
- 46. For each of the five applicants, and for each of twenty-seven marine mammal species (or, in certain instances, groups of species), NMFS proposed to authorize specific numbers of takes, with separate numbers proposed for Level A harassment and Level B harassment. Thus, for instance, NMFS proposed to allow Spectrum to take 67 striped dolphins by Level A harassment and 8,339 striped dolphins by Level B harassment. *Id.* at 26,295.
- A7. NMFS based the numbers of proposed authorized takes partly on estimates of how many marine mammals would be affected by the applicants' proposed seismic testing activities. In some instances, however, NMFS estimated that an applicant company's activities would result in takes exceeding 30 percent of a species' stock abundance estimate. In those instances, NMFS proposed to authorize a number of takes equivalent to 30 percent of the species' stock abundance estimate. In support of this approach, NMFS continued: "Although 30 percent is not a hard and fast cut-off, in cases such as this where exposure estimates constitute sizable percentages of the stock abundance and there are no qualitative factors to inform why the actual percentages are likely to be lower in fact, we believe it is appropriate to limit our proposed take authorizations to reasonably ensure the levels do not exceed 'small numbers.'" *Id*.

- 48. In view of this gap between estimated and authorized takes, NMFS proposed certain monitoring and reporting requirements to ensure that certain applicants' actual takes would not exceed the levels authorized. "In order to limit actual take to [30 percent] of estimated stock abundance," NMFS stated, "we propose to require monthly reporting from those applicants with predicted exposures of any species exceeding this threshold (*i.e.*, Spectrum, TGS, CGG, and Western)." *Id.* at 26,307. NMFS further stated that "[u]pon reaching the pre-determined take threshold, any issued IHA would be withdrawn." *Id.*
- 49. NMFS proposed to apply its 30 percent take authorization limit on an applicant-by-applicant basis, without aggregating estimated takes across multiple applicants. As to the Atlantic spotted dolphin, for instance, NMFS proposed to restrict the applicants' Level B takes to numbers of individuals corresponding to 30, 30, 30, 12, and 1 percent of the species' stock abundance—thus allowing *each* of three applicants to take 30 percent of the species' stock abundance. *Id.* at 26,295.
- 50. NMFS's proposal then considered whether the activities proposed by the five applicants would have a "negligible impact" on the marine mammal species affected. To assess the question of "negligible impact," NMFS employed an approach that took account of the magnitude of the impact (including the amount of take, the spatial extent of the species' exposure to seismic testing, and the temporal extent of the effects); the likely consequences for individuals; and so-called contextual factors (including proposed mitigation measures).
- 51. NMFS proposed to conclude that, in light of various mitigation measures that it proposed to require, each of the applicants' seismic testing activities would have a negligible impact on all marine mammal stocks affected by those activities. As with its "small numbers" analysis, NMFS reached these conclusions on an applicant-by-applicant basis—*i.e.*, it considered

whether the impact of each applicant's own activities would be negligible as to a particular species, without considering whether the aggregate impact of all applicants' activities would itself be negligible as to that species. Nor did NMFS consider whether the impact of any one applicant's proposed activities might be more than negligible in light of any other applicant's proposed activities. Instead, NMFS evaluated each applicant's proposed activities as if no other applicant's activities would take place.

52. On July 21, 2017, many of the States submitted comments to NMFS opposing the seismic survey proposals and urging NMFS to deny the IHA applications.

C. NMFS's Grant of the IHAs

- 53. On November 30, 2018, NMFS granted IHAs to the five applicants, conditioned on various mitigation measures that purportedly would ensure the least practicable adverse impact to marine mammal species or stocks. Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Geophysical Surveys in the Atlantic Ocean, 83 Fed. Reg. 63,268 (Dec. 7, 2018). NMFS's decision authorized more than 373,000 instances of take, corresponding to—by the agency's own calculations—more than 300,000 individual marine mammals, including nearly 74,000 of a single species. *Id.* at 63,376-79. NMFS nevertheless concluded that these were takes of "small numbers" of marine mammals and would have a "negligible impact" on the affected species or stocks.
- 54. With respect to the "small numbers" requirement, NMFS increased its upper bound from 30% to one-third of a species' stock abundance estimate. Specifically, NMFS now concluded that "when the estimated number of individual animals taken . . . is up to, but not greater than, one third of the species or stock abundance, NMFS will determine that the numbers of marine mammals taken of a species or stock are small." *Id.* at 63,375. NMFS justified this conclusion as

follows: "A plain reading of 'small' implies as corollary that there also could be 'medium' or 'large' numbers of animals from the species or stock taken. We therefore use a simple approach that establishes equal bins corresponding to small, medium, and large proportions of the population abundance." *Id.*

- 55. NMFS then articulated a separate route to satisfying the "small numbers" requirement. With respect to "a species or stock that may potentially be taken but is either rarely encountered or only expected to be taken on rare occasions," NMFS stated that "one or two assumed encounters with a group of animals (meaning a group that is traveling together or aggregated, and thus exposed to a stressor at the same approximate time) should reasonably be considered small numbers, regardless of consideration of the proportion of the stock (if known), as rare encounters resulting in take of one or two groups should be considered small relative to the range and distribution of any stock." *Id.* at 63,375-76; *see id.* at 63,376 (stating that "NMFS may appropriately find that one or two predicted group encounters will result in small numbers of take relative to the range and distribution of a species, regardless of the estimated proportion of the abundance").
- 56. In granting the IHAs, NMFS applied the "small numbers" requirement in a manner that made it even more forgiving to the applicants. First, as in its proposal, NMFS applied its percentage on an applicant-by-applicant basis, rather than assessing whether the total amount of take across the five applicants would exceed one-third of the species or stock abundance. The result was that, for some species, NMFS authorized takes well in excess of one-third of its population estimate. For beaked whales, for instance, NMFS authorized takes totaling more than 72 percent of the abundance estimate. *Id.* at 63,376, 63,378-79.

- 57. Second, for one individual applicant—TGS—NMFS allowed a downward adjustment to estimates of take that otherwise would have exceeded the one-third limit. TGS had proposed instances of take amounting to 37 percent of the sperm whale abundance estimate, 48 percent of the beaked whale abundance estimate, and 38 percent of the Atlantic spotted dolphin abundance estimate. 83 Fed. Reg. at 63,377-78. Instead of determining that these figures were not "small numbers," NMFS translated them into total numbers of individual marine mammals exposed, and thus arrived at figures lower than one-third of the corresponding abundance estimate. To enable this translation, NMFS first noted that 84 percent of the TGS survey area would be surveyed (or "ensonified") more than once, then stated that "[i]n a static density model, the same animals occur in the overlap regardless of the time elapsed between the first and second exposure." Id. at 63,377. Relying on this assumption of static density, NMFS adjusted the TGS estimates downward for eleven species by treating 42 percent of each species' total instances of take (half of 84 percent) as second exposures of individuals that have already been exposed once. Id. at 63,378. For instance, NMFS translated 12,072 instances of harassment of beaked whales (48 percent of the beaked whale abundance estimate, as noted above) into harassment of 7,002 individual beaked whales, by treating 42 percent of the 12,072 figure (i.e., 5,070) as second exposures. Id. NMFS did not explain, however, why it was appropriate or realistic to assume mammals are "static in space"—i.e., that they will not move "regardless of the time elapsed." Id. at 63,377.
- 58. Third, in estimating the numbers of takes, NMFS counted marine mammals as taken via Level B harassment only where it expected that seismic testing would expose them to received sound levels of 160 dB or higher. *Id.* at 63,284-87. NMFS did so even though (1) NMFS' own decision characterized the use of the 160 dB threshold as "simplistic" and acknowledged "the potential for Level B harassment at exposures to received levels below" 160 dB, *id.* at 63,285; (2)

studies have shown that, in segments of marine mammal populations, behavioral impacts (including changes in vocalization) result even from exposures below 160 dB; (3) elsewhere, NMFS has found the use of thresholds lower than 160 dB consistent with the best available science; and (4) at a distance, the noise produced by impulsive seismic testing can become continuous, making it particularly appropriate to use a decibel threshold lower than 160 dB. Declining to count exposures below 160 dB as Level B harassment had the effect of reducing NMFS's take estimates, and thus reducing the numerator for its percentage calculations.

- 59. As it had proposed, NMFS determined that the five applicants' proposed activities would have a "negligible impact" on the affected marine mammal species. 83 Fed. Reg. at 63,362-75. In reaching this determination, NMFS again used a matrix-based approach that took account of the magnitude of the impact; the likely consequences for individuals; and "contextual factors," including mitigation measures. *Id.* at 63,362.
- 60. NMFS's "negligible impact" analysis, like the analysis contained in its proposal, evaluated each applicant's activities without regard to the other applicants' activities—even though the five applicants' proposed activities would significantly overlap in time and location, and even though NMFS acknowledged that "the aggregate impacts of the five surveys will be greater than the impacts of any given survey." *Id.* at 63,384. Thus, for example, NMFS did not analyze whether the 7,917 total takes of sperm whales would have more than a negligible impact on that species. Instead, it analyzed only whether each applicant's *own* takes of sperm whales would themselves have more than a negligible impact, measured against a baseline taking into account "the impacts of other past and ongoing anthropogenic activities." *Id.* at 63,283.

- 61. To justify this approach, NMFS stated that "cumulative effects from future, unrelated activities . . . are not considered in making findings under [16 U.S.C. § 1371(a)(5)] concerning negligible impact," *id.* at 63,283, and then "deem[ed] each of these IHAs a future, unrelated activity relative to the others" because "[a]lthough these IHAs are all for surveys that will be conducted for a similar purpose, they are unrelated in the sense that they are discrete actions under [16 U.S.C. § 1371(a)(5)(D)], issued to discrete applicants," *id.* at 63,283-84. Although NMFS did state that its NEPA process had considered cumulative and aggregate impacts, it did not claim to have conducted a negligible-impact analysis under the MMPA—much less an analysis using the matrix approach it prescribed for the five individual applicants—that took into account all five applicants' proposed activities, whether on a cumulative or on an aggregate basis. 83 Fed. Reg. at 63,284, 63,297 ("We considered five distinct specified activities and, therefore, performed five distinct negligible impact analyses.").
- 62. As noted above, NMFS's decision conditioned the IHAs on mitigation measures that it concluded would ensure the least practicable adverse impact on affected species or stocks. For instance, NMFS's decision required the applicants to refrain from seismic testing within 90 kilometers of the coast during calving season for the endangered North Atlantic right whale. But even as to this measure, NMFS included a significant exception: at distances as close as 47 kilometers to shore, seismic testing may proceed during calving season as long as "comparable protection is achieved through implementation of a NMFS-approved mitigation and monitoring plan," 83 Fed. Reg. at 63,303, even though the IHAs elsewhere disclaim any "expectation that [visual and acoustic monitoring] will detect all marine mammals," *id.* at 63,304. NMFS provided no indication of what kinds of plans might be approved, or even what criteria it might use to approve

them. See 16 U.S.C. § 1371(a)(5)(D)(ii), (ii)(I) (authorization "shall prescribe . . . means of effecting the least practicable impact on such species or stock and its habitat" (emphasis added)).

63. NMFS stated that each of the IHAs would take effect "upon written notification from the applicant to NMFS" (not later than one year from November 30, 2018, the date of issuance) and would remain in effect for one year. 83 Fed. Reg. at 63,269. Although the applicants cannot commence seismic testing activities before they receive permits from BOEM, issuance of the IHAs is the consummation of NMFS's decisionmaking process and eliminates a significant obstacle to BOEM's issuance of the permits. BOEM, for its part, has previously stated that it expects to issue the permits within two weeks after NMFS's issuance of the IHAs (although that period has already elapsed).

D. The Biological Opinion and Environmental Assessment

- 64. NMFS issued a biological opinion in conjunction with the IHAs and the anticipated BOEM permits. That biological opinion was necessary because, as NMFS acknowledged, the IHAs are likely to adversely affect various endangered or threatened species. These include five species of marine mammals (which also are protected by the MMPA), as well as four species of sea turtles.
- 65. In the biological opinion, NMFS concluded that the proposed action was not likely to jeopardize the continued existence or recovery of a series of listed species—including the North Atlantic right whale—and would not destroy or adversely modify critical habitat for such species. It reached these conclusions despite acknowledging that at least 19 North Atlantic right whales have been found dead off the Atlantic coast since June 2017 (out of a population estimated at only 451 individuals in 2016); "the species may decline towards extinction"; and seismic testing can have serious consequences for right whales, such as the separation of mother-calf pairs.

- 66. The biological opinion rested in part on NMFS's assessment that, for members of listed species, exposure to seismic testing would be "brief" and cause only temporary harm. In reaching this conclusion, however, NFMS did not adequately take into account that the five applicants' survey areas will overlap or that surveys could be carried out in sequence, thus enhancing and prolonging the impacts to threatened and endangered species. Nor did NMFS adequately consider the cumulative effects of other activities in the area, such as Navy sonar activities.
- 67. NMFS's biological opinion included an incidental take statement applicable to marine mammals and to certain sea turtle species. Although the incidental take statement generally quantified the numbers of individual marine mammals and sea turtles expected to be taken, it did not include enforceable conditions limiting takes to NMFS's estimates. Further, for sea turtles smaller than 30 centimeters, NMFS used a habitat surrogate in lieu of estimating numbers of individual sea turtles to be taken. In choosing to use a habitat surrogate, NMFS did not establish that it was impossible or even impractical to conduct reliable surveys of the numbers of individuals. It also did not establish a causal link between the habitat and the species that would allow for effects to the habitat to adequately approximate takes of the species.
- NMFS did not conduct an EIS in connection with the IHAs, even though it recognized that they constitute "major Federal action" within the meaning of NEPA. Instead, it conducted only an EA and issued a finding of no significant impact. NMFS issued that finding even though multiple circumstances counseled in favor of a finding of significance, and thus in favor of a full EIS. *See* 40 C.F.R. § 1508.27(b) (considerations relevant to determining significance include "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial"; "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks"; "[t]he degree to which the action may establish a

precedent for future actions with significant effects"; and "[t]he degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973").

- 69. As with its biological opinion, NMFS's EA did not adequately consider the aggregate or overlapping impacts of the five applicants' expected activities. It also did not adequately consider cumulative effects from other activities taking place in the same geographic area.
- 70. In conducting its EA, NMFS tiered to the programmatic EIS that BOEM had conducted in 2014 for seismic testing activities in the Atlantic Ocean. NMFS did so even though the period since 2014 had seen particularly alarming developments with respect to the status of the North Atlantic right whale, as well as new scientific studies regarding that species' plight and the effects of seismic testing.

COUNT ONE:

ARBITRARY, CAPRICIOUS, AND UNLAWFUL ACTION IN VIOLATION OF THE MARINE MAMMAL PROTECTION ACT AND THE ADMINISTRATIVE PROCEDURE ACT

- 71. Paragraphs 1 through 70 are realleged as if set forth in full herein.
- 72. The grant of the IHA Applications constituted final agency action within the meaning of the APA.
- 73. The MMPA allows the Secretary of Commerce to authorize "the incidental, but not intentional, taking by harassment of small numbers of marine mammals of a species or population stock." 16 U.S.C. § 1371(a)(5)(D)(i). To issue such authorization, the Secretary must find that such harassment "will have a negligible impact on such species or stock." *Id.* § 1371(a)(5)(D)(i)(I). The "negligible impact" finding must be "based on the best scientific evidence available." 50 C.F.R. § 216.102(a). Incidental harassment authorizations must prescribe

means sufficient to ensure "the least practicable impact on [each] species or stock and its habitat." 16 U.S.C § 1371(a)(5)(D)(ii)(I).

- 74. NMFS's determination that the IHAs satisfied the MMPA's "small numbers" requirement was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); and was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C). NMFS set a percentage threshold that was arbitrary and capricious or otherwise unlawful, and calculated compliance with that threshold in a manner that was arbitrary and capricious or otherwise unlawful.
- 75. NMFS's determination that the IHAs satisfied the MMPA's "negligible impact" requirement was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); and was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C). In analyzing the question of "negligible impact," NMFS considered each applicant's proposed seismic testing activities without considering whether the cumulative or aggregate impacts from all applicants' seismic testing activities would be negligible. Additionally, NMFS failed to base its conclusions on the best scientific evidence available.
- 76. NMFS's determination that its prescribed mitigation measures would ensure the least practicable impact on each species or stock and its habitat was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); and was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C). The decision permits some seismic testing within right whale calving grounds during calving season pursuant to currently unspecified mitigation

and monitoring plans, even while recognizing that monitoring will not detect all marine mammals in the vicinity.

COUNT TWO:

ARBITRARY, CAPRICIOUS, AND UNLAWFUL ACTION IN VIOLATION OF THE ENDANGERED SPECIES ACT AND THE ADMINISTRATIVE PROCEDURE ACT

- 77. Paragraphs 1 through 76 are realleged as if set forth in full herein.
- 78. The ESA generally requires "[e]ach Federal agency" to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of any such species' designated critical habitat. 16 U.S.C. § 1536(a)(2).
- 79. The biological opinion that NMFS issued here concluded that the proposed seismic testing activities are not likely to jeopardize the continued existence of any endangered species or threatened species or to result in the destruction or adverse modification of any such species' designated critical habitat.
- 80. NMFS's issuance of a biological opinion in connection with the proposed seismic testing activities constituted final agency action within the meaning of the APA.
- 81. NMFS's conclusion referenced in paragraph 79 was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); and was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C). NMFS failed to base its conclusions on the best scientific evidence available, including recent population assessments, and thus did not take adequate account of the North Atlantic right whale's precarious conservation status; failed to use best available science or take adequate account of seismic testing's potential for serious consequences

for right whales; and failed to adequately consider the cumulative or aggregate impacts from all applicants' seismic testing activities together with the cumulative effects of other stressors.

- 82. NMFS's determination that its prescribed mitigation measures would ensure that the authorized surveys would not jeopardize the North Atlantic right whale's continued existence was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); and was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C). The decision permits some seismic testing within right whale calving grounds during calving season pursuant to a NMFS-approved mitigation and monitoring plan, even while recognizing that monitoring will not detect all marine mammals in the vicinity.
- 83. NMFS's incidental take statement was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); and was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C). The incidental take statement failed to establish enforceable take limits and failed to adequately justify the use of affected habitat as a surrogate for estimating individual takes.

COUNT THREE:

ARBITRARY, CAPRICIOUS, AND UNLAWFUL ACTION IN VIOLATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT AND THE ADMINISTRATIVE PROCEDURE ACT

- 84. Paragraphs 1 through 83 are realleged as if set forth in full herein.
- 85. NEPA requires federal agencies to prepare an EIS if they undertake "major Federal action" that may significantly affect the environment. 42 U.S.C. § 4332(C). An EIS is not required if the agency validly finds, through an EA, that its action will have no significant impact on the

environment. Whether the agency conducts an EIS or an EA, it must take a "hard look" at the action's impacts.

- 86. NMFS's issuance of an EA and finding of no significant impact in connection with the proposed seismic testing activities constituted final agency action within the meaning of the APA.
- 87. NMFS's conclusion that the IHAs would have no significant impact on the environment, and its resulting decision not to conduct a full EIS in connection with the IHAs, were arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); were in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C); and were without observance of procedure required by law, within the meaning of 5 U.S.C. § 706(2)(D). NMFS did not adequately consider the IHAs as connected or similar actions, did not adequately consider their cumulative effects, and did not base its decision on high-quality information and scientific analysis.
- 88. NMFS's decision to tier to BOEM's 2014 programmatic EIS was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, within the meaning of 5 U.S.C. § 706(2)(A); was in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, within the meaning of 5 U.S.C. § 706(2)(C); and was without observance of procedure required by law, within the meaning of 5 U.S.C. § 706(2)(D).

RELIEF REQUESTED

WHEREFORE, Plaintiffs-Intervenors respectfully request that this Court:

- A. Declare that Defendants violated the Marine Mammal Protection Act;
- B. Declare that Defendants violated the Endangered Species Act;

- C. Declare that Defendants violated the National Environmental Policy Act;
- D. Declare that Defendants violated the Administrative Procedure Act;
- E. Vacate the Incidental Harassment Authorizations;
- F. Vacate the Biological Opinion and Incidental Take Statements;
- G. Vacate the Environmental Assessment and Finding of No Significant Impact;
- H. Enjoin Defendants from authorizing takes of marine mammals incidental to seismic testing for purposes of oil and gas exploration in the Mid- and South Atlantic unless and until Defendants comply with all requirements of the Marine Mammal Protection Act, Endangered Species Act, National Environmental Policy Act, and Administrative Procedure Act;
- I. Grant Plaintiffs-Intervenors their costs of suit, including reasonable attorneys' fees to the extent authorized by law; and
- J. Grant Plaintiffs-Intervenors such further relief as the Court deems just and proper.

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