

performed.” DPEIS at 2-47. The Associations object to these proposed reductions because there is no legal basis for imposing them and they are arbitrary.

G&G exploration activities authorized by BOEM may be denied or conditioned if they “would probably cause serious harm or damage to life (including fish and other aquatic life).” *See* 43 U.S.C. § 1340(c)(1); *see also id.* § 1340(a)(1) (“any person authorized by the Secretary may conduct geological and geophysical explorations in the outer Continental Shelf ... which are not unduly harmful to aquatic life in such area”). BOEM may also temporarily stop off-lease exploration or scientific research activities under a permit when the Regional Director determines that the “[a]ctivities pose a threat of serious, irreparable, or immediate harm. This includes damage to life (including fish and other aquatic life) ... [and] to the marine, coastal, or human environment.” 30 C.F.R. § 551.9(a)(1); *see also* 30 C.F.R. § 551.6(a)(2) (prohibiting a permittee from causing harm to marine life). None of these requirements are satisfied based upon the information provided in the DPEIS. Even the unrealistic and overly conservative effects analysis does not conclude that there will be any “serious harm or damage” or “serious, irreparable, or immediate harm” to marine life. Moreover, such arbitrary reductions in activity levels directly contradict OCSLA’s primary mandates, particularly because no adverse effects from the original activity levels have been demonstrated. *See supra* Section III.A.

To the extent the proposed reductions are premised on the MMPA, they are also without any legal basis. Under the MMPA, NMFS has the authority to grant or deny, or to reasonably condition, marine mammal incidental take authorizations (“ITAs”). *See Ctr. for Biological Diversity v. Salazar*, 695 F.3d 893, 916 (9th Cir. 2012) (MMPA ITAs only authorize incidental take, not the underlying activity). Accordingly, any mitigation measures premised upon NMFS’s MMPA authority may only address the proposed MMPA action—*i.e.*, authorization of incidental take, not the actual exploration activities. *See id.*; *see also* 16 U.S.C. § 1371(a)(5)(A)(i) (Secretary “shall allow” incidental taking that meets applicable statutory standards).

Finally, the proposed reductions also present practical implementation problems. For example, one could perform a 3D survey with a 4,000 cubic inch array or a 2D survey with 10 km track spacing and have half or fewer the number of takes in the same number of track miles. In this example, would 50,000 track miles at half the exposure levels be translated into 25,000 track miles for purposes of calculating the remaining allocations available? How will the reductions be fairly apportioned among the various applicants over the course of a year? Such questions are not addressed at all in the DPEIS, further highlighting the impracticability of the proposed measure.

3. Buffer zones between concurrent surveys

In Alternative B, BOEM recommends an expanded 40 km buffer zone between concurrent seismic surveys within the area of concern (“AOC”) and a 30 km buffer zone between concurrent seismic surveys outside of the AOC. No scientific evidence, published studies, or other rationales are provided for this proposed measure. Indeed, to our knowledge, no

buffer zones even approaching this size have ever been required as a condition of offshore seismic authorizations.²⁵

Moreover, buffer zones have little or no value in the GOM where directional migrations have not been documented and animals are likely to be moving in a variety of directions as they track dynamic features. Additionally, unless the vessels are moving parallel to each other at the same speed and direction, the static concept of a corridor is not applicable, with the space between vessels opening and closing depending on the relative speed of the vessels and their direction. Marine mammals are unlikely to perceive anything like a corridor when the two sound sources are moving dynamically. All that vessel separations achieve are to expose the animals to a more prolonged period of sound exposure than would otherwise be the case and expand the zone that animals might avoid.

We therefore agree with BOEM's statement that "it is doubtful that separation distances would provide the necessary benefits to offset potential impacts from sound exposure." DPEIS at 2-39. Because there is no support for this proposed measure, it should be eliminated entirely from the DPEIS.

4. Exclusion zones greater than 500 meters

All of the alternatives "use a standard exclusion zone radius of 500 m (1,640 ft) around a sound source." DPEIS at 2-40. The DPEIS explains that exclusion zones "will be dependent upon the source levels, array configuration, operational parameters, and environmental and oceanographic conditions" and that the "actual extent of the acoustic isopleths around the sound source will depend on the source level, source configuration, water depth, bottom properties, and sound propagation through the immediate environment." *Id.* BOEM's suggested approach for exclusion zones will require a substantial modeling effort and will result in exclusion zones that are many times greater than those that have typically been implemented (with success) in the GOM. The expanded exclusion zones are especially concerning because they will ultimately be dictated by the marine mammal hearing group with the largest modeled radii once new group-specific acoustic criteria are implemented.²⁶

²⁵ See, e.g., 78 Fed. Reg. 35,364, 35,423 (June 12, 2014) (vessel spacing of 24 km required to avoid any effects of multiple surveys on migrating or foraging walrus). Moreover, current technology has enabled many operators to decrease typical exposure radii to less than 10 km. See BOEM, *Atlantic OCS Proposed G&G Activities Final Programmatic EIS* (2014-001), page 2-37 and Appendix D, <https://www.boem.gov/atlantic-g-g-peis/>.

²⁶ The DPEIS does not make clear which exclusion zone size is being used. For example, on page B-72, it is stated that the radius of the exclusion zone would be the predicted range at which animals are exposed to 180 dB SPL rms, and in the very next sentence it is stated that the exclusion zone is within a radius of 500 m surrounding the center of the airgun array.