

than improbable precautionary worst case scenarios—not fair simulations or representations of likely environmental effects. The DPEIS relies upon this worst case scenario analysis to implausibly conclude that the potential effects of seismic surveying on marine mammals are “moderate”—*i.e.*, “detectable, short-term, extensive, and severe; or ... detectable, short-term or long-lasting, localized, and severe; or ... detectable, long-lasting, extensive or localized, but less than severe.” DPEIS at 4-8.

Aside from being scientifically and legally indefensible, BOEM’s conclusion is not supported by the best available information, which demonstrates that no “long-lasting” or “severe” impacts to marine mammal populations from seismic activities have occurred in the GOM. Indeed, BOEM’s conclusion is not even supported by its own statements. *See* DPEIS at 4-59 (“the best available information, while providing evidence for concern and a basis for continuing research, does not, at this time, provide grounds to conclude that [seismic] surveys would disrupt behavioral patterns with more than negligible population-level impacts” (emphases added)). To make matters worse, the unrealistic scenario presented in the DPEIS is evaluated in a vacuum, with no meaningful consideration of the effectiveness of the mitigation measures that are expressly included in the proposed action. Insofar as we are aware, no seismic activities in the United States OCS have caused impacts amounting to anything more than temporary changes in behavior, without any known injury, mortality, or other biologically significant consequence to any marine mammal species or stocks.¹⁵

In sum, the DPEIS’s finding that seismic activities will cause “moderate” impacts to marine mammals has no factual or scientific support, is contrary to the best available information, and violates NEPA.¹⁶ For the reasons set forth above, the Associations strongly object to this unsupported finding.¹⁷

¹⁵ Additional technical comments are provided in Attachment C to this letter.

¹⁶ The biased and overly conservative effects analysis is the very reason why application of various mitigation measures are supposedly “not sufficient to change the overall impact ratings” (*i.e.*, “moderate” for seismic effects on marine mammals). DPEIS at xxii. The effects analysis is so flawed that the results it produces are meaningless and non-specific, providing no basis for comparison among the alternatives. *See NRDC v. U.S. Forest Serv.*, 421 F.3d 797, 811 (9th Cir. 2005) (“Where the information in the initial EIS was so incomplete or misleading that the decisionmaker and the public could not make an informed comparison of the alternatives, revision of an EIS may be necessary to provide a reasonable, good faith, and objective presentation of the subjects required by NEPA.”).

¹⁷ The Associations’ position that there are currently no demonstrated adverse effects from seismic surveys on marine mammal populations does not preclude our taking a proactive and environmentally responsible approach by actively investigating legitimate concerns raised by subject matter authorities, and doing so in the best traditions of independent, peer-reviewed

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C. Certain Mitigation Measures Are Infeasible, Unsupported, and Unnecessary

The record demonstrates that the Standard Mitigation Measures, as applied to offshore operations in the GOM, are already more than adequate to protect marine mammals, sea turtles, and fish species in a manner consistent with federal laws.¹⁸ Despite this record, the DPEIS recommends certain mitigation measures that have never been required for offshore exploratory operations in the United States, and that are more stringent (and less supported) than the measures that have already been successfully implemented. Many of the unprecedented measures recommended in the DPEIS are a direct result of BOEM's flawed impact assessments. As described above, the DPEIS creates a hypothetical worst case scenario for marine mammal impacts, determines that the projected adverse effects in that scenario will be substantial, and then recommends mitigation measures to address those supposed effects. However, because the adverse effects identified in the DPEIS are inaccurate and unrealistic, some of the mitigation measures intended to address those effects are similarly flawed and without support.

The unwarranted and arbitrary mitigation measures are addressed in detail below. Without question, these measures, if implemented, will have substantial adverse effects on offshore geophysical operations and substantial economic impacts. These measures will also result in increased survey duration, which, in turn, can increase the potential exposure of marine mammals to sound from seismic surveys and the potential for interference with other users of the

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scientific study. See E&P Sound and Marine Life Joint Industry Programme ("JIP"), www.soundandmarinelife.org).

¹⁸ See *supra* note 12; see also Mary Jo Barkaszi et al., *Seismic Survey Mitigation Measures and Marine Mammal Observer Reports* (2012); A. Jochens et al., *Sperm Whale Seismic Study in the Gulf of Mexico: Synthesis Report*, at 12 (2008) ("There appeared to be no horizontal avoidance to controlled exposure of seismic airgun sounds by sperm whales in the main SWSS study area."); 78 Fed. Reg. 11,821, 11,827, 11,830 (Feb. 20, 2013) ("it is unlikely that the proposed project [a USGS seismic project] would result in any cases of temporary or permanent hearing impairment, or any significant non-auditory physical or physiological effects"; "The history of coexistence between seismic surveys and baleen whales suggests that brief exposures to sound pulses from any single seismic survey are unlikely to result in prolonged effects."); 79 Fed. Reg. 14,779, 14,789 (Mar. 17, 2014) ("There has been no specific documentation of temporary threshold shift let alone permanent hearing damage[] (i.e., permanent threshold shift, in free ranging marine mammals exposed to sequences of airgun pulses during realistic field conditions."); 79 Fed. Reg. 12,160, 12,166 (Mar. 4, 2014) ("To date, there is no evidence that serious injury, death, or stranding by marine mammals can occur from exposure to air gun pulses, even in the case of large air gun arrays.").