

GOM.¹⁹ We therefore strongly urge BOEM to adopt only the mitigation measures set forth in Alternative A.²⁰

1. Seasonal restriction for coastal waters

Alternatives C-F include a seasonal restriction for seismic surveys for all coastal waters, federal and state, shoreward of the 20 meter isobath from February 1 to May 31. However, this proposed restriction is unsupported for a number of reasons, as set forth below. For these reasons, we request that the seasonal restriction be eliminated from Alternatives C-F.

First, the Settlement Agreement restricts operation of airguns within federal coastal waters shoreward of the 20 meter isobath from March 1 to April 30, and the stipulation to extend the Settlement Agreement extended the closure from January 1 to April 30 to a smaller area within the unusual mortality event (“UME”) (Texas/Louisiana border to Franklin County, Florida).²¹ It is unclear to us how BOEM derived the four-month February 1 to May 31 restriction used in Alternatives C-F and why it has proposed to include all nearshore coastal waters. No explanation is provided in the DPEIS.²²

Second, the rationale originally offered by the plaintiff parties to the Settlement Agreement for the nearshore restriction was in response to coastal bottlenose strandings and mortalities (*i.e.*, the Northern GOM UME). However, the UME has since been closed. *See* http://www.nmfs.noaa.gov/pr/health/mmume/cetacean_gulfofmexico.htm. Moreover, none of the strandings or deaths in the UME have been attributed to deep penetration seismic survey activities. Instead, recent research demonstrates that seismic impulses at even higher thresholds fail to induce even temporary threshold shifts (“TTS”) in dolphin hearing (Finneran J.J., et al. 2015). Accordingly, no relevant scientific evidence supports a further restriction of deep

¹⁹ The mitigation measures also increase the amount of time the vessel spends surveying because shutdowns and delays necessarily result in overall increased surveying time to preserve data quality and integrity.

²⁰ On a positive note, we commend BOEM for not including a 60-minute “all clear” period in the DPEIS. We also commend BOEM for apparently not including any shutdown requirements for dolphins or sea turtles. *See* DPEIS, Section 2.11.1. These are flawed measures that were inappropriately included in the PEIS for Atlantic OCS G&G activities.

²¹ We also object to the seasonal restriction set forth in Alternative B, which is based upon the Settlement Agreement, for the reasons explained in this subsection.

²² The analysis of the coastal restrictions on page 4-90 appears to incorrectly assume that, during the 10-year period covered by the DPEIS, there would be a “2 month per year restriction”—not the four-month per year restriction that is proposed.

penetration seismic surveys, let alone suggests that such a restriction would result in any meaningful benefit to coastal bottlenose dolphin populations.²³

Third, another rationale for the nearshore restriction was that seismic activity is an additional stressor to an already stressed bottlenose dolphin population in the UME, and that such additional stress may impact dolphin breeding rates. However, there is no evidence that sound from deep penetration seismic surveys is a stressor to coastal bottlenose dolphin populations or contributes in any way to dolphin late-term pregnancy complications or perinatal and postnatal responses that would lead to increased calf mortality, or UMEs (Litz et al. 2014; Venn-Watson et al. 2015).

Fourth, there are unleased blocks within the area covered by the seasonal restriction stated for Alternatives B-F. Because existing seismic data in these areas is outdated and inadequate to inform decisions regarding future lease sales, such a restriction would significantly impede industry's and BOEM's evaluation of blocks for planned future lease sales. Moreover, given the amount of time required to acquire additional seismic data, any extension of the existing seasonal exclusion period significantly increases the likelihood that an affected deep penetration seismic survey cannot be completed within its one-year permit term, thereby increasing the overall number of surveys that will need to be conducted.²⁴

2. Reduced activity levels

In Alternative E, BOEM proposes to reduce levels of deep-penetration, multi-client seismic activities by either 10% or 25%. This measure would be a "Gulfwide strategy designed to reduce overall exposures and sound levels," the stated purpose of which is to "reduc[e] protected species cumulative sound exposures because a reduced number of surveys would be

²³ There are no data to suggest that sound is a problem for the bottlenose dolphin population in general or the mother-calf pairs in particular, and it is equally, if not more, plausible that the animals are completely unaffected by the sound. The fact that these populations may be affected by coastal pollution, vessel traffic in the estuaries, or endemic diseases is not a basis for restricting an activity that has no demonstrated adverse effect.

²⁴ Additionally, the DPEIS mistakenly assumes that the large proposed closures in Alternative F will result in the same amount of seismic survey activity being conducted elsewhere. DPEIS at 2-32. As explained in Section III.D *infra*, such closures will actually result in a reduction in the overall amount of seismic survey activity conducted in the 10-year period. Moreover, the DPEIS's assumption that closure of these areas would provide "refuge" (DPEIS at 2-32) is an anthropomorphism that is unsupported in the DPEIS by any data or science-based explanation.