

Center for Regulatory Effectiveness’ (“CRE”) Comments on the National Marine Fisheries Service’s (“NMFS”) Draft Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing—Acoustic Threshold Levels for Onset of Permanent and Temporary Threshold Shifts (“Draft Guidance”), 80 FR 45642 (July 31, 2015), at <http://www.gpo.gov/fdsys/pkg/FR-2015-07-31/pdf/2015-18790.pdf>.

Comments filed September 14, 2015, at www.regulations.gov, Document ID # NOAA– NMFS–2013–0177.

I. EXECUTIVE SUMMARY

CRE commends NMFS for emphasizing the need to comply with Information Quality Act (“IQA”) Guidelines, and for requiring multiple peer reviews of the Draft Guidance.

NMFS needs to clearly state whether use of the Draft Guidance is mandatory during regulation of offshore oil and gas seismic. If use is mandatory then the Draft Guidance is a rule and should be treated as such.

NMFS should perform a cost benefit analysis of the Draft Guidance. The Draft Guidance is much more cumbersome, burdensome and complex than current regulation without any apparent need or justification. NMFS and the U.S. Bureau of Ocean Energy Management (“BOEM”) have repeatedly and correctly emphasized that there is no adverse impact from oil and gas seismic under current regulation. Consequently, there are few if any benefits from using the Draft Guidance.

No current Information Collection Request (“ICR”) authorizes the Draft Guidance, and any new ICR will have to demonstrate compliance with IQA Guidelines, which NMFS has not yet done. Demonstrating IQA Compliance is unlikely because peer review and public comment raise significant questions about the Draft Guidance. The Draft Guidance should not be classified as Best Available Science given critical peer reviews of it, and the critical public comments on it.

Several key parts of the draft Guidance will not be available until publication of final Guidance. NMFS should not publish final guidance until the public has had an opportunity to comment on these missing key parts.

In light of these flaws, omissions and concerns, NMFS should not publish the Draft guidance as final.

II. NO HARM UNDER CURRENT REGULATION

CRE recently filed its Initial Comments with the National Academy of Science's ("NAS") Committee on the Assessment of the Cumulative Effects of Anthropogenic Stressors on Marine Mammals, DELS-OSB-13-01.¹ CRE's NAS comments explain that the Government consistently and correctly concludes that oil and gas seismic has a negligible impact on aquatic life under current regulation, which uses 160 and 180 dB acoustic criteria. Some of this NAS explanation is set forth below.

NMFS issued an Incidental Harassment Authorization under the Marine Mammal Protection Act to Shell Gulf of Mexico, Inc., to take marine mammals by harassment incidental to offshore exploration drilling on Outer Continental Shelf leases in the Chukchi Sea, Alaska. This IHA is effective July 1, 2015, through October 31, 2015. The Federal Register notice of this action includes NMFS' response to several critical comments on the proposed IHA. Among other criticisms, NGOs commented that there "are large gaps in basic scientific information about both the Chukchi Sea ecosystem and marine mammal responses to noise, and that these gaps prevent adequate analysis of the potential impacts of Shell's proposed activities on wildlife."²

NMFS responded to this comment by stating that

"Industrial activities have been occurring (at varying levels) in the U.S. Arctic Ocean for decades, and the available measurable indicators do not suggest that these activities are having long-term impacts on marine mammal species/stocks in the area. For example, bowhead whales continued to increase in abundance during periods of intense seismic activity in the Chukchi Sea in the 1980s (Raftery et al., 1995; Angliss and Outlaw, 2007), even without implementation of current mitigation requirements. This increase has been observed to continue to date (Givens et al. 2013). Additionally, industry has been collecting data and conducting monitoring in the region for many years and will continue to do so under this IHA. Therefore, NMFS' negligible impact finding is supported by the available facts and science."³

After extensive study NMFS has repeatedly concluded while regulating that:

1. "There is no specific evidence that exposure to pulses of air-gun sound can cause PTS [physical injury] in any marine mammal, even with large arrays of airguns."⁴

¹ CRE's comments to the NAS Committee are available at <http://www.thecre.com/forum13/wp-content/uploads/2015/08/Comments-on-DELS-OSB-13-01-1.pdf>. These previous CRE comments are incorporated by reference in their entirety into these current CRE comments on the Draft Guidance.

² 80 FR 35748, at <http://www.gpo.gov/fdsys/pkg/FR-2015-06-22/pdf/2015-15013.pdf>.

³ *Id.*

⁴ 78 FR 28419, at <http://alaskafisheries.noaa.gov/notice/78fr28412.pdf>.

2. “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 airgun arrays.”⁵

3. “NMFS does not expect that any marine mammals will incur serious injury or mortality in the Prudhoe Bay or strand as a result of the proposed seismic survey.”⁶

4. “Thus, the proposed [seismic] activity is not expected to have any habitat related effects on prey species that could cause significant or long-term consequences for individual marine mammals or their populations.”⁷

5. “Gray whales have continued to migrate annually along the west coast of North America despite intermittent seismic exploration (and much ship traffic) in that area for decades (Appendix A in Malme et al. 1984; Richardson et al. 1995), and there has been a substantial increase in the population over recent decades (Allen and Angliss 2010). The western Pacific gray whale population did not seem affected by a seismic survey in its feeding ground during a prior year (Johnson et al. 2007). Similarly, bowhead whales have continued to travel to the eastern Beaufort Sea each summer despite seismic exploration in their summer and autumn range for many years (Richardson et al. 1987), and their numbers have increased notably (Allen and Angliss 2010). Bowheads also have been observed over periods of days or weeks in areas ensonified repeatedly by seismic pulses (Richardson et al. 1987; Harris et al. 2007).”⁸

BOEM’s Chief Environmental Officer William Y. Brown recently explained, “To date, there has been no documented scientific evidence of noise from air gun geological and geophysical (G&G) seismic activities adversely affecting animal populations.”⁹

Dr. Brown notes, “because of its abundance, the bottlenose dolphin heads the class in number of potential exposures to air gun sound levels with potential effects on behavior. Yet Federal stock assessments for the dolphin do not identify air gun seismic surveys as adversely impacting stock sustainability in the Gulf of Mexico, where air gun surveys are routine.”¹⁰

BOEM recently issued a Final Supplemental Environmental Impact Statement for a Gulf of Mexico Oil and Gas Lease Sale. This final SEIS for the GOM concluded that, after

⁵ 76 FR 58477, at <http://www.nmfs.noaa.gov/pr/pdfs/fr/fr76-58473.pdf> .

⁶ 79 FR 36735, at <http://alaskafisheries.noaa.gov/notice/79fr36730.pdf> .

⁷ 79 FR 73050, at <http://www.gpo.gov/fdsys/pkg/FR-2014-12-09/html/2014-28807.htm> .

⁸ 77 FR 25834, at <http://www.gpo.gov/fdsys/pkg/FR-2012-05-01/pdf/2012-10386.pdf> .

⁹ Dr. Brown’s article is available online at <http://www.boem.gov/BOEM-Science-Note-August-2014/> .

¹⁰ *Id.*

more than 50 years of oil and gas G&G: “there are no data to suggest that activities from the preexisting OCS Program are significantly impacting marine mammal populations”¹¹

The US National Academy of Sciences’ National Research Council similarly concluded: “No scientific studies have conclusively demonstrated a link between exposure to sound and adverse effects on a marine mammal population.”¹²

As one final example, NMFS very recently stated with regard to its issuance of an IHA for a seismic survey in Cook Inlet, Alaska, that under current acoustic criteria:

“The survey is not expected to result in the death of any marine mammal species, and no such take is authorized. Extensive analysis of the proposed geotechnical and geophysical survey was conducted in accordance with the MMPA, Endangered Species Act (ESA), and National Environmental Policy Act (NEPA). Pursuant to those statutes, we analyzed the impacts of the survey activities to marine mammals (including those listed as threatened or endangered under the ESA), their habitat (including critical habitat designated under the ESA), and to the availability of marine mammals for taking for subsistence uses. The MMPA analysis revealed that the activities would have a negligible impact on affected marine mammal species or stocks and would not have an unmitigable adverse impact on the availability of marine mammals for taking for subsistence uses. The ESA analysis concluded that the activities likely would not jeopardize the continued existence of ESA-listed species or destroy or adversely modify designated critical habitat. The NEPA analysis concluded that there would not be a significant impact on the human environment.”¹³

This issue is also discussed in some detail by CRE in its Report entitled *Seismic Exploration is Heavily and Effectively Regulated In the Gulf of Mexico*.¹⁴

In sum, the record does not show any need for and benefit from the Draft Guidance, which is remarkably more complex and burdensome than current regulation.

¹¹ Page 4-215 of document available online at <http://www.boem.gov/nepaprocess/>. Click on “Gulf of Mexico OCS Oil and Gas Lease Sale: 2012; Central Planning Area Lease Sale 216/222; Final Supplemental Environmental Impact Statement; Volume I: Chapters 1-4

¹² Marine Mammal Populations and Ocean Noise: Determining when Noise causes Biologically Significant Effects, Oceans Studies board (2005), page 15, at <http://www.nap.edu/openbook.php?isbn=0309094496>.

¹³ 80 FR 50991, at <http://www.gpo.gov/fdsys/pkg/FR-2015-08-21/pdf/2015-20605.pdf>.

¹⁴ This CRE document is available at http://www.thecre.com/forum13/wp-content/uploads/2013/03/State_of_Marine_Sound_Regulation1.pdf.

III. IS THE DRAFT GUIDANCE MANDATORY? IF SO, THEN IT'S A RULE AND SHOULD BE TREATED AS SUCH

NMFS needs to state clearly whether the Draft Guidance is mandatory. Do regulators and the regulated community have to use it? Or may they use other acoustic criteria during the regulatory process?

NMFS has not answered this very important question. NMFS has merely stated:

“Purpose of the Acoustic Guidance

The Guidance provides acoustic threshold levels for onset of permanent threshold shift (PTS) and temporary threshold shifts (TTS) for all sound sources. It is intended to be used by NOAA analysts/managers and other relevant user groups/stakeholders, including other federal agencies to better predict a marine mammal's response to sound exposure. The manner of response has the potential to trigger certain requirements under one or more of NOAA's statutes (**MMPA**, **ESA**, and **National Marine Sanctuaries Act**).¹⁵

This statement does not answer the crucial question of whether the Draft Guidance must be used to determine rights and responsibilities during the regulation of offshore oil and gas seismic. If it must be used, then the Draft Guidance is a substantive rule under the Administrative procedure act because it

“is the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency [NMFS]....”¹⁶

If the Draft Guidance is mandatory and a rule, then it needs a cost benefit analysis.

IV. NMFS SHOULD PERFORM A COST BENEFIT ANALYSIS OF THE DRAFT GUIDANCE

Executive Orders 13563 and 12866 require cost benefit analyses for regulations or

¹⁵ <http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm> .

¹⁶ 5 USC 551(4), at <http://www.archives.gov/federal-register/laws/administrative-procedure/551.html> .

rules.¹⁷ Executive order 13563 states:

“This order is supplemental to and reaffirms the principles, structures, and definitions governing contemporary regulatory review that were established in Executive Order 12866 of September 30, 1993. As stated in that Executive Order and to the extent permitted by law, each agency must, among other things: (1) propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); (2) tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.”¹⁸

NMFS has not taken any of these actions with regard to the Draft Guidance. They are required if this is a rule, and if it’s mandatory then it’s a rule.

The Draft Guidance is clearly significant under the Executive Orders. NMFS states that the Draft Guidance’s

“ dissemination could have a potential impact of more than \$500 million in any one year on either the public or private sector; or that the dissemination is novel, controversial, or precedent-setting; or that it has significant interagency interest (OMB 2005).”¹⁹

Compare this NMFS statement with the Executive Order 12866 definition of “significant regulatory action”:

¹⁷ Executive Order 13563 is available at https://www.whitehouse.gov/sites/default/files/omb/inforeg/eo12866/eo13563_01182011.pdf . Executive order 12866 is available at <http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf> .

¹⁸ Section 1(b), at https://www.whitehouse.gov/sites/default/files/omb/inforeg/eo12866/eo13563_01182011.pdf .

¹⁹ Draft Guidance, page 3 n. 2, at <http://www.nmfs.noaa.gov/pr/acoustics/draft%20acoustic%20guidance%20July%202015.pdf> .

“Significant regulatory action” means any regulatory action that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in this Executive order.”²⁰

Even if the Draft Guidance is not mandatory, then NMFS should still explain what benefits are expected from use of the Guidance, and compare those expected benefits with the costs and other burdens of the Guidance.

As demonstrated above, oil and gas seismic cause no harm under current acoustic criteria (*i.e.*, 160 and 180 dB) and other current regulation. The Draft Guidance is significantly more cumbersome, difficult and consuming than current criteria and other regulation.

What justifies this increased burden and cost?

V. NO CURRENT ICR AUTHORIZES THE DRAFT GUIDANCE, AND ANY NEW ICR MUST DEMONSTRATE IQA GUIDELINES COMPLIANCE

NMFS’ current MMPA ICR does not authorize information collections based on the draft Acoustic Guidance because the Guidance differs significantly from the information collections authorized by the current ICR .²¹

CRE has commented to NMFS previously on ICRs and the Draft Guidance. These comments are incorporated in their entirety into these current CRE comments on the Draft Guidance.²²

²⁰ Section 1(f), at <http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf> .

²¹ See OMB’s website for NMFS’ current MMPA Takes ICR at <http://www.reginfo.gov/public/do/PRAOMBHistory?ombControlNumber=0648-6>

²² These previous CRE comments are available online at <http://thecre.com/pdf/mmnoaicr.pdf>; <http://thecre.com/pdf/mmgidancecomments.pdf>; and <http://thecre.com/pdf/CRE-ICR.0648-0515.pdf> .

NMFS responded to CRE's previous comments at pages 7-10 of the Supporting Statement that accompanies the ICR NMFS sent to OMB for review.²³ NMFS' response generally agrees with CRE's comments. For example,

- NMFS' Supporting Statement agrees with CRE that NMFS will have to conduct a new PRA /ICR burden analysis and review if and when NMFS proposes rules for MMPA takes by oil and gas seismic in the gulf of Mexico.

- NMFS' Supporting Statement agrees with CRE that NMFS will have to conduct a new PRA/ICR burden analysis and review if and when NMFS requires companies to comply with the Draft Guidance.

- NMFS' Supporting Statement agrees with CRE that NMFS have to comply with IQA Guidelines in NMFS' development of the Draft Guidance and a new ICR for it.²⁴

The Draft Guidance itself emphasizes that NMFS must comply with IQA Guidelines:

“1.2.2 Data Standards

In assessing potential acoustic effects on marine mammals, as with any such issue facing the agency, standards for determining applicable data need to be articulated. Specifically, NOAA has Information Quality Guidelines (IQG) for ‘ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by the agency’ (with each of these terms defined within the IQG). Furthermore, the IQG stipulate that ‘To the degree that the agency action is based on science, NOAA will use (a) the best available science and supporting studies (including peer-reviewed science and supporting studies when available), conducted in accordance with sound and objective scientific practices, and (b) data collected by accepted methods or best available methods.’ The National Research Council (NRC 2004) provided basic guidelines on National Standard (NS2) under the Magnuson-Stevens Fishery Conservation and Management Act, section 301, which stated, ‘Conservation and management measures shall be based upon the best scientific information available’ (NOAA 2013a). They recommended that data underlying the decision-making and/or policy-setting process be: 1) relevant, 2) inclusive, 3) objective, 4) transparent and open, 5) timely, 6) verified and validated, and 7) peer reviewed. Although NRC's guidelines (NRC 2004) were not written specifically for marine mammals and this particular issue, they do provide a means of articulating minimum data standards. NOAA considered this in assessing acoustic effects on marine mammals. Use of

²³ This Supporting Statement is available at http://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201312-0648-015 .

²⁴ See page 5 of NMFS' Supporting Statement for a discussion of IQA Guidelines compliance. NMFS' IQA Guidelines are available at http://www.cio.noaa.gov/services_programs/info_quality.html .

the NRC Guidelines does not preclude development of acoustic-specific data standards in the future.”²⁵

NMFS further explains that

“The peer review of this document [the Draft Guidance] was conducted in accordance with NOAA’s Information Quality Guidelines (IQG), which were designed for ‘ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by the agency’ (with each of these terms defined within the IQG). Furthermore, the IQG stipulate that ‘To the degree that the agency action is based on science, NOAA will use (a) the best available science and supporting studies (including peer-reviewed science and supporting studies when available), conducted in accordance with sound and objective scientific practices, and (b) data collected by accepted methods or best available methods.’ Under the IQG and in consistent with OMB’s Final Information Quality Bulletin for Peer Review (OMB Peer Review Bulletin (OMB 2005), the Guidance was considered a Highly Influential Scientific Assessments (HISA), and peer review was required before it could be disseminated by the Federal Government. OMB (2005) notes ‘Peer review should not be confused with public comment and other stakeholder processes. The selection of participants in a peer review is based on expertise, with due consideration of independence and conflict of interest.’”²⁶

NMFS has not demonstrated that the Draft Guidance and any requested ICR for it meet IQA Guidelines.

VI. PEER REVIEW AND PUBLIC COMMENT RAISE SIGNIFICANT QUESTIONS ABOUT THE DRAFT GUIDANCE

In its latest peer review of the Draft Guidance,

“NOAA did not request the peer reviewers evaluate the entire Acoustic Guidance document but instead a particular, brief (15 page) technical section relating to the Acoustic Guidance’s proposed application of impulsive and non-impulsive PTS

²⁵ Draft Guidance, page 6, at <http://www.nmfs.noaa.gov/pr/acoustics/draft%20acoustic%20guidance%20July%202015.pdf>.

²⁶ Draft Guidance, page 129, at <http://www.nmfs.noaa.gov/pr/acoustics/draft%20acoustic%20guidance%20July%202015.pdf>.

acoustic threshold levels based on physical characteristics at the source and how those characteristics change with range.”²⁷

Consequently, the latest peer review does not address all the other problems that previous peer review and previous public comment identified in the Draft Guidance. These problems are discussed in CRE’s previous comments on the Earlier Draft Guidance, which are incorporated by reference herein.²⁸

The latest peer review raises new and additional questions about the Draft Guidance. For example,

Comment 47: This is my, perhaps long-winded way, to say that there undoubtedly merit in the criterion being proposed by NOAA but it could be subject to a large amount of criticism since validating this merit could be difficult and is certainly a function of the details of any situation. The guidance recognizes this by using what is believed to be a very conservative range (based on data) in transitioning from impulsive to non-impulsive source calculations. However, it is difficult for me to see the need (from a purely physics standpoint, I can believe there is regulatory need) for this extra complexity (and the risk of criticism) when peak pressure and SEL would seem to suffice regardless of the nature of the source. I say this while being fully aware of my lack of understanding of the nuances in play in formulating a realistic, enforceable, set of guidelines.”²⁹

NMFS’ response does not adequately rebut this question as to whether there “need...for this extra complexity.”

NMFS will need to demonstrate IQA compliance for the Draft Guidance in order to obtain ICR approval and for other reasons. Given the flaws discussed above, the Draft Guidance is not based on the Best Available Science, and it does not comply with IQA Guidelines.

²⁷ Page 1, at

http://www.cio.noaa.gov/services_programs/prplans/pdfs/ID43_FINAL_Technical_Secti_on_Peer_Review_Report_3rd_round.pdf .

²⁸ CRE’s comments on previous Draft Guidance are available at <http://thecre.com/pdf/mmguidancecomments.pdf> .

²⁹ Pages 18-19 at

http://www.cio.noaa.gov/services_programs/prplans/pdfs/ID43_FINAL_Technical_Secti_on_Peer_Review_Report_3rd_round.pdf .

VII. THE DRAFT GUIDANCE SHOULD NOT BE PUBLISHED AS FINAL UNTIL AND UNLESS THE PUBLIC’S HAD AN OPPORTUNITY TO COMMENT ON ALL SIGNIFICANT ASPECTS OF IT

Several key parts of the draft Guidance will not be available until publication of final Guidance.³⁰

These missing parts include “NOAA responses to the initial public comment” and “a spreadsheet...to help action proponents use this methodology to determine isopleths for 20 PTS onset associated with their activity.”

NMFS should not publish final guidance until public’s had an opportunity to comment on these missing key parts

VIII. CONCLUSION

Given the flaws and omissions discussed above, NMFS should not publish the Draft Guidance as final.

We thank you for the opportunity to comment, and we look forward to NMFS’ response to our comments.

Respectfully submitted,

The Center for Regulatory Effectiveness
www.TheCRE.com

³⁰ See, e.g., pages 134, 145, at <http://www.nmfs.noaa.gov/pr/acoustics/draft%20acoustic%20guidance%20July%202015.pdf> .