



# Center for Regulatory Effectiveness 47

Suite 700  
11 Dupont Circle, N.W.  
Washington, D.C. 20036-1231  
Tel: (202) 265-2383 Fax: (202) 939-6969  
secretary1@mbsdc.com [www.TheCRE.com](http://www.TheCRE.com)

March 14, 2005

P. Michael Payne  
Chief  
Marine Mammal Conservation Division  
Office of Protected Resources  
Room 13635  
1315 East-West Highway  
Silver Spring, MD 20910  
TP 301/713-2322

## HAND DELIVERY

Re: Notice of Public Scoping and Intent to Prepare an Environmental Impact Statement, 70 FR 1871 (Jan. 11, 2005)

Dear Mr. Payne:

Enclosed for filing in the above-captioned proceeding are comments by the Center for Regulatory Effectiveness.

Sincerely, ..

Scott Slaughter

Attachment

Center for Regulatory Effectiveness

**COMMENTS BY THE CENTER FOR REGULATORY EFFECTIVENESS ON NOTICE OF PUBLIC SCOPING AND INTENT TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT: 70 FR 1871 (JAN. 11, 2005)**

The Center for Regulatory Effectiveness (“CRE”) appreciates this opportunity to comment on the above-captioned proceeding. CRE understands that the purpose of this proceeding is to develop science-based criteria for the assessment and regulation of acoustic effects on marine mammals. If CRE’s understanding is correct, then we applaud NMFS for its efforts. Science-based criteria in this area are long overdue.

1

CRE intends to comment further when the actual acoustic criteria are available. CRE’s comments at this point in the proceeding are summarized below with a more detailed discussion following the summary.

First, NMFS’s development and use of the acoustic criteria must comply with Data Quality Act (“DQA”) pre-dissemination review requirements, and NMFS must document DQA compliance in the administrative record of this proceeding and in the record of any further agency action involving the criteria.<sup>1</sup>

2

Second, in order to be useful for regulatory purposes, the acoustic criteria should focus on assessment and regulation of acoustic effects on marine mammals at the population or stock level.

3

Third, the acoustic criteria should distinguish among various sound sources (*e.g.*, sonar versus seismic) because they have different sound characteristics..

4

Fourth, any models relevant to the acoustic criteria should be developed and used in a manner consistent with DQA standards.

5

Fifth, NMFS should consider Potential Biological Removal (“PBR”) as one of the alternatives in the Agency’s EIS scoping and review of the acoustic criteria.

6

---

<sup>1</sup> The DQA is codified at 44 U.S.C. § 3516 historical and statutory notes. NMFS is subject to the Office of Management and Budget’s (“OMB”) government-wide DQA guidelines and the agency-specific DQA guidelines published by the Department of Commerce (“DoC”) and by the National Oceanic and Atmospheric Administration (“NOAA”). The text of the DQA is available at

[http://www.thecre.com/quality/OMB\\_Implements\\_New\\_DataQualityLaw.html#StatutoryLanguageforDataQuality](http://www.thecre.com/quality/OMB_Implements_New_DataQualityLaw.html#StatutoryLanguageforDataQuality). The OMB government-wide DQA guidelines are available at FR (Feb. 22, 2002) and at <http://www.whitehouse.gov/omb/fedreg/reproducible2.pdf>. The DoC DQA guidelines are available at <http://www.osec.doc.gov/cio/oipr/iqg.html>. The NOAA DQA guidelines are available at <http://www.noaanews.noaa.gov/stories/iq.htm>.

Sixth, NMFS should state clearly whether any final acoustic criteria will be binding on NMFS decision makers and explain how the criteria relate to the regulatory process. There should also be some mechanism for adapting final criteria to new studies and data.

#### I. NMFS MUST COMPLY WITH THE DQA PRE-DISSEMINATION REVIEW REQUIREMENTS

The DQA, OMB's DQA guidelines, DoC's DQA guidelines, and NOAA's DQA guidelines establish quality standards that NMFS must meet before it publicly disseminates information regarding the acoustic criteria, including but not limited to the criteria themselves. The DQA and relevant DQA guidelines require that NMFS establish a pre-dissemination review process to ensure these quality standards are met. At the San Francisco public hearing on the acoustic criteria scoping, NMFS representatives stated that NMFS will comply with these DQA requirements with respect to the criteria.

The OMB government-wide DQA guidelines require that agencies establish a pre-dissemination review process to "substantiate the quality of the information [the agency] has disseminated...."<sup>2</sup> In discussing the need for the pre-dissemination review process, OMB emphasizes, "Agencies shall treat information quality as integral to every step of an agency's development of information, including creation, collection, maintenance, and dissemination."<sup>3</sup>

The DoC guidelines emphasize that the Department's "goal is to ensure and maximize the quality of information we release to the public. We are committed to making the methods, models, and processes that produce our information transparent and rigorous."<sup>4</sup>

The NOAA DQA guidelines confirm the agency's commitment to pre-dissemination review in order to ensure compliance with the DQA quality standards:

"Information quality is composed of three elements — utility, integrity and objectivity. Quality will be ensured and established at levels appropriate to the nature and timeliness of the information to be disseminated. Information quality is an integral part of the pre-dissemination review of information disseminated by NOAA."<sup>5</sup>

CRE commends NMFS on its commitment to DQA pre-dissemination review for the

---

<sup>2</sup> 67 FR 8459 (Feb. 22, 2002).

<sup>3</sup> *Id.*

<sup>4</sup> DoC Guidelines, "Commerce Commitment to Information Quality"

<sup>5</sup> NOAA Guidelines, Part II.

acoustic criteria. CRE has previously commented to NMFS on implementation of the DQA pre-dissemination review requirements with respect to acoustic effects on marine mammals. CRE's previous comments and their attachments are incorporated by reference into these CRE comments on the acoustic criteria EIS scoping.<sup>6</sup>

9

## II. THE ACOUSTIC CRITERIA SHOULD FOCUS ON BIOLOGICALLY SIGNIFICANT EFFECTS ON POPULATIONS OR STOCKS OF MARINE MAMMALS

In response to CRE's comments on a recent Incidental Hazard Authorization ("IHA") application, NMFS explained that the Marine Mammal Protection Act ("MMPA") requires NMFS

"[t]o authorize the taking of marine mammals incidental to otherwise lawful activities, provided that the activity will have no more than a negligible impact on the affected species or stock of marine mammals. 'Negligible impact' is defined in 50 CFR 216.103 [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'].... This is the relevant standard for the Secretary's decision. Although the term 'biologically significant' is not used, this concept is captured through application of NMFS' definition of 'negligible impact.'" <sup>7</sup>

CRE understands this NMFS statement to mean the "relevant standard" is biologically significant effects on the population level.

If CRE's understanding is correct, then CRE agrees with NMFS's above-quoted interpretation of its duty under the MMPA, which will be the relevant statutory standard for most NMFS decisions regarding marine mammals and acoustic effects.

10

Therefore, in order to be used for regulatory purposes, the acoustic criteria should enable

11

---

<sup>6</sup> CRE's previous DQA comments to NMFS are attached as an Appendix to CRE's comments on NMFS's acoustic criteria scoping. These previous CRE comments and their attachments are incorporated herein by reference.

<sup>7</sup> 70 FR 8768, 8772 (Feb. 23, 2005). The NMFS interpretation of the regulatory standard was affirmed by the court in *NRDC v. Evans*, 279 F. 3d 1129, 1158-59 (N.D. Calif. 2003), where the court cited congressional intent that the term "negligible impact" means "'an impact that cannot reasonably be expected to, and is not likely to affect adversely the overall population through effects on annual rates of recruitment or survival....'" *Id.* at 1158-59 (quoting 132 Cong. Rec. 16305 (Oct. 15, 1986)).

decision makers to assess a particular sound source's effects on marine mammal populations or stocks. Any effect that is not biologically significant on the population or stock level (*i.e.*, does not significantly affect the survival of the population or stock) should not be a matter of regulatory concern. Any such insignificant effects should at least be automatically granted "small take" authorization/permits.

## II. THE BEST AVAILABLE SCIENCE AND EVIDENCE IS THAT ANTHROPOGENIC SOUND HAS NO EFFECT ON MARINE MAMMAL POPULATIONS AND STOCKS

There is "no evidence that anthropogenic noise has had a significant impact on any marine mammal population."<sup>8</sup> This unequivocal conclusion is from a recent report by the National Research Council ("NRC") of the National Academy of Science.

NMFS itself has concluded that there is no evidence of any marine mammal physical effects from seismic operations.<sup>9</sup> For example, NMFS recently stated, "Temporary or permanent hearing impairment is a possibility when marine mammals are exposed to very strong sounds, but there has been no specific documentation of this for mammals exposed to [seismic] airgun pulses."<sup>10</sup>

Similarly, NMFS stated that "there is no specific evidence that exposure to pulses of airgun sounds can cause PTS in any marine mammals, even with the largest airgun arrays..."; and that "marine mammals are unlikely to be exposed to received levels of seismic pulses that could cause TTS...."<sup>11</sup>

With regard to non-auditory physiological effects, NMFS recently stated :

"Possible types of non-auditory physiological effects or injuries that might theoretically occur in marine mammals exposed to strong underwater sound might include stress, neurological effects, bubble formation, resonance effects, and other types of organ or tissue damage. There is no evidence that any of these effects occur in marine mammals

---

<sup>8</sup> <http://www.mmc.gov/sound/plenary4/pdf/wartzok.pdf> (Slide 13).

<sup>9</sup> 70 FR 8768, 8770-71, 8774-76 (Feb. 23, 2005).

<sup>10</sup> *Id.* at 8774.

<sup>11</sup> *Id.* at 8775.

exposed to sound from airgun arrays (even large ones).”<sup>12</sup>

In light of the current evidence and science, it is not surprising that the Minerals Management Service issued a NEPA Finding of No Significant Impact with regard to seismic oil and gas explorations in the Gulf of Mexico.<sup>13</sup>

Speculation that PTS or TTS or some other effect might possibly be caused by airguns or other sources of seismic sound is not science or evidence of such effects. The acoustic criteria should avoid any such speculation as not supported by the best available science and evidence, or by any science or evidence at all.

With regard to sonar, the International Council for the Exploration of the Sea recently concluded, “It appears that sonar is not a major threat to marine mammal populations generally, nor will it ever be likely to form a major part of ocean noise.”<sup>14</sup>

CRE is not aware of any evidence that anthropogenic sound has any biologically significant effect on marine mammal populations or stocks, and that is the relevant regulatory standard that the acoustic criteria should address and reflect.

12

### III. THE ACOUSTIC CRITERIA SHOULD CLEARLY DISTINGUISH AMONG DIFFERENT SOUND SOURCES

Not all sounds are the same. The acoustic criteria should clearly distinguish among different sound sources, such as seismic and sonar. They should also address only population or stock level effects for each type of sound. Once again, the best available science and evidence is that there are no such effects for seismic, sonar, or any other anthropogenic sound.<sup>15</sup>

13

---

<sup>12</sup> *Id.* at 8776.

<sup>13</sup> <http://www.gomr.mms.gov/homepg/regulate/environ/nepa/2004-054.pdf>

<sup>14</sup> Report of the Ad-hoc Group on the Impact of Sonar on Cetaceans and Fish (AGISC), at page 28, International Council for the Exploration of the Sea, ICES Advisory Committee on Ecosystems, ICES CM 2005/ACE:01 (2005)

<sup>15</sup> *See generally* 70 FR 8768, 8776 (Feb. 23, 2005).

IV. NMFS SHOULD DOCUMENT, VALIDATE, AND MAKE PUBLICLY AVAILABLE ALL MODELS RELEVANT TO THE ACOUSTIC CRITERIA

Development and application of the acoustic criteria will presumably rely on certain models to determine sound propagation in water and for other purposes. CRE is aware of specific models that have been used in this context: e.g., the Acoustic Integration Model (“AIM”) and the Lamont-Doherty Earth Observatory Model (“L-DEO”).

In response to CRE comments, NMFS has acknowledged that the L-DEO Model has flaws and limitations.<sup>16</sup> CRE understands that the AIM Model is proprietary and is, therefore, unavailable to the public.<sup>17</sup> Consequently, the AIM’s model’s accuracy and reliability are impossible to judge.

NMFS should ensure that all models relevant to the acoustic criteria are sufficiently accurate, reliable and transparent to warrant their use. NMFS should also make the documentation and components of these models publicly available so that stakeholders can verify NMFS’s verification of the models. The best way to achieve these goals is to establish an NMFS web site containing the necessary information.

14

The United States Environmental Protection Agency (“EPA”) has established valuable precedent and developed useful guidance in this area.<sup>18</sup> EPA’s models web site is also a ‘model’ for other agencies in this area.<sup>19</sup>

CRE cannot emphasize too strongly the need to ensure the public that models used by the acoustic criteria meet Data Quality Act standards. CRE urges NMFS to comply with those standards by adopting EPA’s models validation, verification, documentation and disclosure process.<sup>20</sup>

15

---

<sup>16</sup> 70 FR 8768, 8771 (Feb. 23, 2005)

<sup>17</sup> The AIM model is discussed at <http://64.233.161.104/search?q=cache:tbIdkuJM8IgJ:www.nap.edu/openbook/0309085365/html/121.html+aim+AND+%22marine+mammals%22+&hl=en>. The AIM model is also discussed in *Evans*, 279 F. Supp. at 1185-86.

<sup>18</sup> EPA’s draft guidance for developing and using models is available at [http://www.epa.gov/osp/crem/library/CREM%20Guidance%20Draft%202012\\_03.pdf](http://www.epa.gov/osp/crem/library/CREM%20Guidance%20Draft%202012_03.pdf)

<sup>19</sup> EPA’s models database is available at [http://cfpub.epa.gov/crem/knowledge\\_base/knowbase.cfm#overview](http://cfpub.epa.gov/crem/knowledge_base/knowbase.cfm#overview)

<sup>20</sup> This models issue is further discussed in App. A to these comments, pages 1-2 and 7-9, and in the App. A attachments cited by those pages. This discussion, as well as the rest

## Center for Regulatory Effectiveness

### V. NMFS SHOULD CONSIDER PBR IN ITS NEPA ALTERNATIVES ANALYSIS

The NRC's Biological Diversity Report recommended use of Potential Biological Removal ("PBR") to assess and regulate acoustic effects on marine mammals.<sup>21</sup> The PBR was developed by NMFS. It has been widely and successfully used in regulating commercial fisheries. It has been demonstrated to be reasonably accurate and reliable if developed and applied correctly. It is especially useful in circumstances where there are limited data.<sup>22</sup> It is designed and used to prevent biologically significant effects on marine populations and stocks. It is a perfect fit for the marine mammals acoustic effects context.

Yet, based on the relevant *Federal Register* notices and public hearings, PBR is not an option being considered by NMFS as an alternative. Why not?

16

### VI. NMFS SHOULD CLARIFY WHETHER THE ACOUSTIC CRITERIA ARE BINDING AND EXPLAIN THEIR ROLE IN THE REGULATORY PROCESS

CRE representatives at the public meetings on the acoustic criteria asked whether the final criteria will be binding on NMFS decision makers. The NMFS representatives at the meetings gave inconsistent responses to this question.

NMFS should clarify this issue by stating clearly in the *Federal Register* whether the final acoustic criteria will be binding on NMFS decision makers and by explaining how the criteria relate to the NMFS regulatory process.

17

In addition, NMFS should develop some process that allows modification of the criteria to accommodate new data or studies that are generated after the criteria are final, but which warrant modification of the final criteria.

18

---

of App. A, is incorporated by reference herein.

<sup>21</sup> *Marine Mammal Populations and Ocean Noise: Determining When Noise Causes Biologically Significant Effects*, pages 51-52 (NAS 2005).

<sup>22</sup> *Id.*



## Center for Regulatory Effectiveness

### VI. RECOMMENDATIONS

- NMFS should document compliance with the DQA in the administrative record for this proceeding and all other relevant proceedings, and make that documentation publicly known and available.
- NMFS should ensure that any final acoustic criteria focus on assessment and regulation of acoustic effects on marine mammals on the population or stock level.
- Any final acoustic criteria should clearly distinguish among different sound sources.
- In order to comply with the DQA, NMFS should treat any and all models relevant to the acoustic criteria in a manner analogous to EPA's treatment of models it uses.
- NMFS should consider use of PBR as an alternative.
- NMFS should explain whether any final acoustic criteria will be binding on NMFS decision makers and how the criteria relate to the NMFS regulatory process. There should also be some mechanism for adapting final criteria to new studies and data.

  
\_\_\_\_\_  
Scott Slaughter  
The Center for Regulatory Effectiveness

Attachment

**APPENDIX TO**

**COMMENTS BY THE CENTER FOR REGULATORY  
EFFECTIVENESS ON NOTICE OF PUBLIC SCOPING AND  
INTENT TO PREPARE AN ENVIRONMENTAL IMPACT  
STATEMENT: 70 FR 1871 (JAN. 11, 2005)**