

Center for Regulatory Effectiveness (“CRE”) Comments on National Marine Fisheries Service’s (“NMFS”) Notice of 12-Month Finding on a Petition To List the Gulf of Mexico (“GOM”) Bryde’s Whale as Endangered Under the Endangered Species Act (“ESA”):

NOAA-NMFS-2014-0157;

<https://www.gpo.gov/fdsys/pkg/FR-2016-12-08/pdf/2016-29412.pdf>, and <https://www.gpo.gov/fdsys/pkg/FR-2016-12-20/pdf/2016-30659.pdf>.

Comments Filed Feb. 6, 2017, at www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2014-0157

I. Executive Summary

The Bryde’s whale is thriving all over the world. There is no evidence that they are declining in the GOM. NMFS has not identified a single Bryde’s whale that has actually been injured by oil and gas seismic, or by any other oil and gas activity in the GOM.

Nevertheless, the proposed Bryde’s Whale Listing Rule labels “anthropogenic noise associated with seismic surveys as a ‘high’ severity threat with ‘moderate’ certainty.”¹ This score is inaccurate, unreliable and misleading for the following and other reasons:

A) Based on NMFS’ ambient noise sampling, Bryde’s whales are not exposed to any harmful noise levels. Ambient noise levels are well below the historic seismic regulatory level of 180 and 160 dB, and well below NMFS’ new Acoustic Guidance levels.

B) Regulation of oil and gas seismic under the Marine Mammal Protection Act (“MMPA”) and the Outer Continental Shelf lands Act (“OCSLA’) already protects Bryde’s whales and other marine mammals from harm.

C) BOEM and NMFS have repeatedly emphasized that oil and gas seismic has not harmed any marine mammal population in the GOM.

D) The proposed Bryde’s Whale Listing Rule relies on inaccurate, unreliable and unvalidated models that are inconsistent with field data and violate the

¹ 81 FR 88639, 88651 (Dec. 8, 2016), <https://www.gpo.gov/fdsys/pkg/FR-2016-12-08/pdf/2016-29412.pdf>.

Information Quality Act (“IQA”). The proposed Rule also violates OMB’s Peer Review Bulletin.

NMFS should withdraw its proposed Bryde’s Whale Listing Rule. NMFS should propose new action on the listing petition that is consistent with CRE’s comments above and below, but only after conducting additional external peer review that complies with OMB’s Peer Review Bulletin. NMFS should provide the public an opportunity to comment to the peer reviewers during this additional review.

II. No Harm and Bad Models

The proposed Bryde’s Whale Listing Rule is remarkable because there are no real world data that the whale is losing population in the GOM or anywhere else.

Equally remarkable is NMFS’ proposed conclusion that oil and gas Geological and Geophysical operations (“G&G”), which include seismic airgun surveys, pose a ‘high’ severity threat to the whale. There are no real world data that oil and gas G & G has ever posed any population threat to any marine mammal in the GOM or anywhere else.

As BOEM’s Science Officer recently emphasized:

“To date, there has been no documented scientific evidence of noise from air guns used in geological and geophysical (G & G) seismic activities adversely affecting marine mammal populations or coastal communities.”²

BOEM has also emphasized that

“Within the [GOM] CPA, which is directly adjacent to the [GOM] EPA, there is a long-standing and well-developed OCS Program (more than 50 years); there are no data to suggest that activities from the preexisting OCS Program are significantly impacting marine mammal populations.”³

² <http://www.thecre.com/forum13/?p=1743>.

³ Bureau of Ocean Energy Management’s Draft Environmental Impact Statement (“DEIS”), for the Gulf of Mexico, Outer Continental Shelf (“OCS”), Eastern Planning Area (“EPA”) Lease Sales 225 and 226, page 2-22. The DEIS is available online at <https://www.boem.gov/nepaprocess/>. *Accord*, Gulf of Mexico OCS Oil and Gas Lease Sales: 2012-2017; Western Planning Area Lease Sales 229, 233, 238, 246, and 248; Central Planning Area Lease Sales 227, 231, 235, 241, and 247; Final Environmental Impact Statement; Volume I, page 4-215; Volume II, page 4-710; available online at <https://www.boem.gov/nepaprocess/>.

NMFS itself has repeatedly and correctly concluded “there is no evidence that serious injury, death, or stranding by marine mammals can occur from exposure to airgun pulses, even in the case of large air gun arrays.”⁴

There is no support for NMFS’ sudden change of mind in the proposed Bryde’s Whale Listing Rule. This proposed rule depends on unvalidated ocean models that are inconsistent with real world data.

One of NMFS’ own peer reviewers explained this fatal problem with NMFS’ Bryde’s whale models:

“My detailed comments relate to strengthening the report with regards to characterization of ambient noise in the Gulf of Mexico in general and in the area of Bryde’s presence in particular. I do not find the noise models presented in Figures 12 – 17 convincing at all. When I compare them to the actual noise data we have collected in the GOM for the period since 2010, they do not accurately represent the ambient noise field that we measured. Particularly troubling is the > 20 dB discrepancy between our measured data in the Bryde’s whale area (see Table 6 for site DC, 50% = 76dB) and the model values (Figure 17 at DC site ~ 100 dB). Likewise the model shows extremely patchy noise levels in deepwater (60 – 120 dB) when we actually measure relatively high but consistent noise levels (Table 6 91-95 dB) in deepwater. ***I personally would leave the models out due to their lack of agreement with measured data, probably due to use of highly imperfect inputs on ships and seismic activity.***”⁵

NMFS itself acknowledges these model problems in its Status Review Report for the Bryde’s whale (“SRR”):

“These apparent inconsistencies highlight the need to validate modeled noise predictions with in situ measures to determine if the model predictions are accurate or biased.”⁶

⁴ E.g., 79 FR 13626, 13635-36 (March 11, 2014), at <https://www.gpo.gov/fdsys/pkg/FR-2014-03-11/pdf/2014-05158.pdf>; 79 FR 12160, 12166 (March 4, 2014), at <https://www.gpo.gov/fdsys/pkg/FR-2014-03-04/pdf/2014-04770.pdf> ; and 75 FR 49759, 49795 (Aug. 13, 2010), at <http://edocket.access.gpo.gov/2010/2010-19962.htm> .

⁵ Bryde’s whale Status Review Report (ID 337) Peer Review Report, Reviewer 3 (emphasis added), at http://www.cio.noaa.gov/services_programs/prplans/pdfs/ID337_BrydesWhale_PeerReviewReport.pdf .

⁶ SRR, page 49 (emphasis added), at http://sero.nmfs.noaa.gov/protected_resources/listing_petitions/documents/bryde_s_whale_status_review_final.pdf .

NMFS further acknowledges that its SRR “noise level estimates are subject to a number of caveats and assumptions particularly with respect to the data on vessel distributions and densities.”⁷ The SRR describes these “caveats and assumptions” at some length.⁸

NMFS cannot use the SRR models to regulate until and unless the models have been properly validated. Validation requires demonstrating that model predictions reflect reality. This demonstration requires comparing model predictions with field data--with real-world observations.

The National Academy of Sciences (“NAS”) emphasizes that, “[i]n all cases, field data must be collected to validate the model predictions.”⁹

Another NAS report, “Models in Environmental Regulatory Decision Making (2007),” similarly explains that “[c]omparing model results with observations is a central component of any effort to evaluate models.”¹⁰

The NAS rendered this advice during its peer review of models guidance being developed by EPA’s Council for Regulatory Environmental Modeling (“CREM”). After NAS review, EPA published final CREM Guidance. EPA’s CREM Guidance explains that evaluation of model quality requires an answer to the following question: “How closely does the model approximate the real system of interest?”¹¹

All models used in the SRR need to be validated in accordance with these principles in order to ensure their accuracy and reliability.

NMFS also needs to come up with an accurate reliable standard of harm before it can accurately assess any risk to the Bryde’s whale in the GOM. The SRR does not provide any risk or harm standards for ocean noise.

⁷ SRR, page 47, at

http://sero.nmfs.noaa.gov/protected_resources/listing_petitions/documents/bryde_s_whale_status_review_final.pdf.

⁸ SRR, pages 47-49, at

http://sero.nmfs.noaa.gov/protected_resources/listing_petitions/documents/bryde_s_whale_status_review_final.pdf.

⁹ Ocean Noise and Marine Mammals (NAS 2003), page 126, at

<https://www.nap.edu/read/10564/chapter/6#126> .

¹⁰ National Academy of Sciences, Models in Environmental Regulatory Decision Making (2007) (“NAS Report”), page 122, at

http://www.nap.edu/download.php?record_id=11972# .

¹¹ CREM Guidance, page vii, at

<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1003E4R.PDF> .

Historic marine mammal acoustic standards in the GOM for G & G seismic are 180 dB for physical injury and 160 dB for behavioral effects.¹² NMFS' new Acoustic Guidance changes these acoustic standards for physical injury, but does not change the 160 dB behavioral effects standard.¹³

The SRR incorrectly states,

“In some regions of the GOMx (e.g., MARU sites HF4 and HF7 in the CPA, Table 6, Figure 14), ambient noise sound pressure levels over a 10-200 Hz bandwidth may exceed NOAA acoustic guidance thresholds for behavioral disturbance during a proportion of the year.”¹⁴

This statement is incorrect because none of the referenced sites show acoustic levels anywhere near as high as 160 dB or 180 dB, or anywhere near as high as the physical injury standards in NMFS' new Acoustic Guidance.¹⁵

In other words, the SRR GOM noise levels present no harm to the Bryde's whale under any current or historic regulatory standard.

The SRR discusses the Deep Water Horizon Natural Resources Damage Assessment (“DWH”), which

“estimated that 17% (95% Confidence Interval (CI) 7% – 24%) of the Bryde's Whale population was killed, 22% (95% CI 10% – 31%) of reproductive females experienced reproductive failure due to the spill and 18% (95% CI 7% – 28%) of the population likely suffered adverse health effects due to the spill (DWH Trustees 2016).”¹⁶

¹² The historic G & G acoustic standards are at, e.g., <https://www.boem.gov/BOEM-NTL-2016-G02/> and at http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/threshold_guidance.html.

¹³ NMFS' new Acoustic Guidance is available at http://www.nmfs.noaa.gov/pr/acoustics/Acoustic%20Guidance%20Files/opr-55_acoustic_guidance_tech_memo.pdf.

¹⁴ SRR, page 56, at http://sero.nmfs.noaa.gov/protected_resources/listing_petitions/documents/brydes_whale_status_review_final.pdf.

¹⁵ SRR, page 53, at http://sero.nmfs.noaa.gov/protected_resources/listing_petitions/documents/brydes_whale_status_review_final.pdf.

¹⁶ SRR, page 31, at http://sero.nmfs.noaa.gov/protected_resources/listing_petitions/documents/brydes_whale_status_review_final.pdf.

This DWH estimate is not based on actual observations of Bryde’s whales killed or otherwise harmed. It is based on extrapolations from observed injuries to Barataria Bay and Mississippi Sound Bottlenose dolphins. The NRD Trustees then used models to extrapolate the actual dolphin injuries to all other GOM marine mammals, without any actual evidence of harm.¹⁷ For the following and other reasons, NMFS should not rely on these DWH NRD assessments in NMFS’ Bryde’s whale assessment.

First, the DWH assessments have nothing to do with the oil and gas G & G noise assessments in the SRR. They do not assess any noise risks.

Second, the DWH assessments use models that have not been validated. They have not been shown to be accurate and reliable in accordance with the principles discussed above.

The discussion of risk in the proposed Bryde’s Whale Listing Rule also fails to account adequately for the protection given the whale and other marine mammals by existing regulatory mechanisms like OCSLA and the MMPA.

In *Oceana v. BOEM*, Oceana and other environmental groups challenged two oil and gas lease sales in the Gulf of Mexico, including seismic airgun operations authorized by the leases.¹⁸ The plaintiffs claimed that seismic and other aspects of the leases violated the National Environmental Policy Act (“NEPA”) and the ESA. The court rejected the plaintiffs’ claims and granted summary judgment motions filed by the Government and industry interveners. The court explained that with regard to seismic:

“BOEM took efforts to insure that Lease Sale 216/222 itself would not jeopardize any listed species, while it awaited (awaits) NMFS’s Biological Opinion....And with respect to endangered species generally, BOEM included a list of six actions lessees must take to insure that its lease activities ‘prevent or minimize harm to the environment,’ including ‘maintain[ing] a distance of 90 meters or greater from whales,’ and ‘employ[ing] mitigation measures . . . for all seismic surveys.’ Such lease stipulations show that BOEM set out to minimize harm to the endangered species in the Gulf of Mexico, and therefore insure no jeopardy.”

¹⁷ *E.g.*, Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement, pages 4-13 and 4-618, at http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-4_Injury_to_Natural_Resources_508.pdf.

¹⁸ The court’s opinion is at <http://thecre.com/pdf/mmdcopinion.pdf>.

“[W]ith respect to ancillary activities, BOEM issued certain Notices to Lessees (“NTL”) to insure that protective measures are taken when engaging in ancillary activity. ...Such measures include seismic survey mitigation measures and protected species observer programs. See JOINT NTL No. 2012-G02, January 1, 2012. Thus, BOEM has taken steps to insure that its actions do not cause harm to endangered species while it engages in interim consultation with NMFS on the updated Biological Opinion. It has therefore independently insured no-jeopardy and satisfied the requirements of section 7(a) of the ESA.”¹⁹

The court’s opinion reinforces BOEM and NMFS’ repeated statements that oil and gas seismic under current, long-standing regulation does not injure marine mammals or anything else. For example, BOEM recently stated:

“NTL 2012-JOINT-G02, ‘Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program,’ minimizes the potential of harm from seismic operations to marine mammals. These mitigations include onboard observers, airgun shut-downs for whales in the exclusion zone, ramp-up procedures, and the use of a minimum sound source. Therefore, no significant cumulative impacts to marine mammals would be expected as a result of the proposed exploration activities when added to the impacts of past, present, or reasonably foreseeable oil and gas development in the area, as well as other ongoing activities in the area.

Within the [Gulf of Mexico Central Planning Area], which is directly adjacent to the [GOM Eastern Planning Area], there is a long-standing and well developed OCS Program (more than 50 years); there are no data to suggest that activities from the preexisting OCS Program are significantly impacting marine mammal populations.”²⁰

There is no basis for assuming that ESA listing of the Bryde’s whale is necessary given current regulatory protections. The current regulatory protections, and the absence of harm, are discussed in detail in the joint industry comments filed on NMFS’ 90-Day Finding.²¹ These joint industry comments are incorporated by reference into CRE’s comments in their entirety as if fully set forth herein.

¹⁹ *Id.*, at pages 51 and 54 (footnotes omitted).

²⁰ Volume I, page 2-22 of its Final Environmental Impact Statement for GOM Oil and Gas Lease Sales for the Eastern Planning Area Lease Sales 225 and 226, at <http://www.boem.gov/BOEM-2013-200-v1/>.

²¹ API, IAGC, IPAA and National Oceans Industries Association comments, filed June 5, 2015, pages 40-56, at <https://www.regulations.gov/document?D=NOAA-NMFS-2014-0157-0008>.

III. Violations of OMB Peer Review Bulletin

NMFS agrees that its proposed Bryde's Whale Listing Rule is subject to OMB's Peer Review Bulletin. NMFS does not say whether the proposed rule is "influential" or "highly influential" (HISA) under the Bulletin.²²

Because it is subject to OMB's Peer Review Bulletin, the proposed Bryde's Whale Listing Rule must at least be "influential." The rule is also HISA because it is "novel, controversial, or precedent-setting, or has significant interagency interest."²³

NMFS incorrectly states in its Federal Register notice of the proposed Bryde's Whale Listing Rule that the Rule and the SRR comply with IQA Guidelines :

"To satisfy our requirements under the OMB Bulletin, we received peer reviews from three **independent** peer reviewers on the Status Review report (Rosel et al., 2016). All peer reviewer comments were addressed prior to dissemination of the final Status Review report and publication of this final [sic] rule. **We conclude that these experts' reviews satisfy the requirements for 'adequate [prior] peer review' contained in the Bulletin (sec. II.2).**"²⁴

This statement is incorrect.

If NMFS' proposed Bryde's Whale Listing Rule is only "influential," then it violates the OMB Peer Review Bulletin requirements because:

1) Peer Reviewers were never "informed of applicable access, objectivity, reproducibility and other quality standards under the federal laws governing information access and quality."²⁵

2) There is no NMFS response to the Reviewers' comments.²⁶

²² 81 FR 88639, 88655 (Dec. 8, 2016), at <https://www.gpo.gov/fdsys/pkg/FR-2016-12-08/pdf/2016-29412.pdf>.

²³ OMB Peer Review Bulletin, page 23, at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf.

²⁴ 81 FR 88639, 88655 (December 8, 2016), at <https://www.gpo.gov/fdsys/pkg/FR-2016-12-08/pdf/2016-29412.pdf> (emphasis added).

²⁵ See OMB Peer Review Bulletin pages 37 and 25, at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf.

²⁶ See OMB Peer Review Bulletin, pages 21-22, at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf.

3) The Peer Reviewers lack balance (no industry experts).²⁷

4) The Peer Reviewers lack independence: one of the Reviewers (Waples) works for NMFS.²⁸

If the proposed Bryde's Whale Listing Rule is HISA, then, in addition to the influential violations listed above, the rule also violates the OMB Peer Review Bulletin requirement that NMFS provide opportunity for public comment to the Peer Reviewers, and provide public comments submitted to NMFS to the Peer Reviewers also.²⁹

IV. IQA Guidelines Violations

The SRR and the proposed Bryde's Whale Listing Rule violate the IQA for the following and other reasons.

First, the SRR record does not include the pre-dissemination review certification and documentation required by the IQA.³⁰

Second, the SRR relies on models that are unvalidated, inaccurate and unreliable.³¹

Third, NMFS states that the SRR complies with the OMB Peer Review Bulletin, when in fact it does not.³²

[5-03.pdf](#). Also, NMFS has not responded to public comment on NMFS' first notice of NRDC's petition for ESA listing.

²⁷ See OMB Peer Review Bulletin, page 17, at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf.

²⁸ See OMB Peer Review Bulletin, pages 17, 24, at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf, and Peer Review Report at http://www.cio.noaa.gov/services_programs/prplans/pdfs/ID337_BrydesWhale_PeerReviewReport.pdf.

²⁹ See OMB Peer Review Bulletin, pages 25-26, at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf.

³⁰ See, *e.g.*, NOAA FISHERIES SECTION 515 PRE-DISSEMINATION REVIEW & DOCUMENTATION GUIDELINES, at <http://www.nefsc.noaa.gov/publications/crd/crd0301/pdfs/dqacertguide.pdf>

³¹ See NOAA/NMFS IQA Guidelines, Objectivity requirements, at http://www.cio.noaa.gov/services_programs/IQ_Guidelines_103014.html.

³² See *id.*

Fourth, the SRR statement that “anthropogenic noise associated with seismic surveys” is a “‘high’ severity threat with ‘moderate’ certainty” is inaccurate, unreliable and misleading.³³

V. Recommended Actions

NMFS should withdraw its proposed Bryde’s Whale Listing Rule. NMFS should next propose new action on the NRDC listing petition that is consistent with the comments above, after allowing additional external peer review that complies with OMB’s Peer Review Bulletin. The public should be allowed to comment to the peer reviewers, and the reviewers should be given all submitted public comments.

NMFS should publicly respond to CRE’s and all other comments submitted on NMFS’ proposed Bryde’s Whale Listing Rule.

Respectfully submitted,

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³³ See *id.*