U.S. Fish and Wildlife Service Marine Mammals Management 1011 East Tudor Road, MS 341 Anchorage, Alaska 99503

20 April 2020

The Wildlife Society 425 Barlow Place, Suite 200 Bethesda, MD 20814

Re: Endangered Species; Marine Mammals; Seismic Survey Design and Impacts to Maternal Polar Bear Dens [Docket Numbers FWS-R7-ES-2019-N138; FF07CAMM00-FX-ES111607MRG01]

The Wildlife Society (wildlife.org), founded in 1937, represents over 11,000 wildlife professionals across the U.S. and Canada. Our mission is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and their habitat through science-based management and conservation.

The Wildlife Society (TWS) encourages, recognizes, and publicly advocates for the appropriate use of wildlife, ecological, and conservation science in policy determination and decision-making processes. Additionally, we are committed to identifying and supporting actions to correct inappropriate uses or abuses of science.

We applaud the U.S. Fish and Wildlife Service (FWS) for disseminating information that will improve public understanding of the benefits that may accrue from using science to inform land-management decisions. However, we must oppose the request for public comment on a published scientific manuscript:

Assessing the value of a single peer-reviewed scientific manuscript in the Federal Register is an inappropriate use of the public comment process. Doing so undermines the credibility and importance of peer-review in developing the best available scientific data and may lead to abuse of science by decision-makers. Permitting public comment directly on peer-reviewed scientific manuscripts enables, among other things, the promotion of alternative "hypotheses" that have no empirical or theoretical support in order to raise doubts about sound scientific information.

PUBLIC COMMENT DOES NOT EQUATE TO PEER-REVIEW

Peer-review provides a structured process through which several qualified scientists provide a candid assessment of a research paper, independent of social, economic, and political pressures. Though not infallible, the process is characterized by scientific integrity and designed to generate reliable knowledge that may then be used to inform resource management decisions. Public comment, on the other hand, plays an integral role in identifying unintended consequences and assessing perspectives and values of a diverse constituency regarding a regulatory proposal or

management determination. Public comment should not replace or otherwise detract from peerreviewed science due to the lack of systematic safeguards to ensure credibility and minimize subjectivity of the comments.

PEER-REVIEW IS A CORE PRECEPT OF BEST AVAILABLE SCIENCE

The scientific manuscript, *Seismic Survey Design and Impacts to Maternal Polar Bear Dens*, has been subjected to two levels of peer-review: internal review and approval in accordance to the U.S. Geological Survey Fundamental Science Practices and external review and publication in the TWS-sponsored *Journal of Wildlife Management*. The FWS request for public comment on the *value* of the manuscript conflates the important but distinct roles of peer-review and public comment in natural resource management. Peer-review has long served as a core precept in determining the best available scientific data. Rather than consider public comment on the highly technical methodology and model contained in the manuscript, TWS urges FWS to recognize the model as part of the current established body of scientific knowledge on seismic survey design and incorporate the results, as appropriate, into their comprehensive evaluation of the effects of seismic survey proposals on maternal polar bear (*Ursus maritimus*) dens. Until further scientific monitoring and evaluation on the effects of seismic survey design on polar bears becomes available, using an alternative model would be inconsistent with the current underlying science.

PUBLIC COMMENT ON SINGLE, PEER-REVIEWED MANUSCRIPT POLITICIZES SCIENCE

The Tax Cuts and Jobs Act of 2017 (PL 115-97) requires the Secretary of the Interior to establish and administer a competitive oil and gas program for the leasing, development, production, and transportation of oil and gas in and from the Coastal Plain area of the Arctic National Wildlife Refuge. Further, the law mandates that at least two lease sales be held by December 22, 2024, with each sale offering for lease at least 400,000 acres of the highest hydrocarbon potential lands within the Coastal Plain. This current policy prescribes an outcome with spatial–temporal restrictions that may pressure federal agencies to expedite oil and gas leasing and development at the expense of early cooperation and effective planning – components of resource management activities necessary to avoid, reduce, or mitigate the negative effects of energy development on wildlife.

The referenced manuscript provides a model for minimizing the effects of oil and gas exploration in Alaska through sufficient planning and effective mitigation measures. However, the methodology and model are highly technical and unlikely to be understood by the general public, even after participation in an educational webinar. Since most individuals lack the requisite experience and academic background to provide constructive scientific feedback, the request for public comment becomes susceptible to promotion of alternative "hypotheses" that have no empirical or theoretical support. Alternative "hypotheses" could then raise unfounded doubts about the sound scientific information presented in the manuscript or otherwise influence how the agency makes determinations when assessing seismic survey proposals.

The process of public comment on a single peer-reviewed manuscript creates opportunity for individuals to obfuscate well-reasoned conclusions outside the scope of peer-review while also giving the appearance of the politicization of science. Rather than defer to private parties on assessing

the value of the model, FWS should exercise sufficient independent judgment in the evaluation of seismic survey proposals based on the current best available scientific data.

THE CREDIBILITY OF SCIENCE IS NOT DETERMINED BY ITS POPULARITY

While value-based decisions are intrinsic in all human actions, the scientific process is designed to minimize the influence of human values on the resulting scientific information – something further assessed during the peer-review process. However, similar checks and balances do not exist when asking the public to assess the *value* of a particular manuscript.

Science inferring something contrary to the personal values or interests of an individual or industry are often labeled controversial. "Controversial" results that contradict a desired outcome are more likely to be opposed in the broader public forum. Public comment on a peer-reviewed manuscript merely blurs the line between sound science and opinion, which could undermine the credible basis upon which complex or controversial resource management decisions are made. While we are confident that FWS will make determinations based on sound scientific reasoning and not a majority of votes, allowing for public comment on a single peer-reviewed manuscript inappropriately injects values, and thus greater bias, into the scientific process. As a result, it increases the likelihood – whether inadvertently or intentionally – that a decision is based in political compromise as opposed to sound scientific reasoning.

JOURNALS PROVIDE THE BEST FORUM FOR OBJECTIVE SCIENTIFIC DEBATE

Uncertainty is inherent in science. Skepticism, dissent, and debate serve an important role in exploring that uncertainty and advancing our scientific knowledge. The process for scientific debate and dissent has traditionally gone through scientific literature. A comment or letter to the editor expressing dissent is submitted to the journal that published the original paper. It then undergoes internal review and if the comments are accepted, the journal offers the original author an opportunity to respond. This allows for a transparent debate on the methodologies or interpretation of scientific findings among technical experts that cannot be easily achieved through public comments. While FWS will have the opportunity to respond to comments submitted by the public, the process does not ensure the original authors of the paper in question will have a chance to further clarify or defend their methodology and analysis. By removing the opportunities for back and forth dialogue and for the most relevant party to respond to critique in the traditional forum for scientific debate, FWS may be limiting our ability to fully understand or assess the uncertainty inherent in the model or the risks associated with a particular management action. Further, the public comments can be construed as objective scientific debate by the general public, which again diminishes the heightened deference traditionally reserved for independently peer-reviewed science.

ROLE OF SCIENCE IS TO INFORM THE DECISION-MAKING PROCESS

Building a common understanding across all government agencies, private industry, and the general public is imperative to assessing comprehensive societal needs, making informed decisions, and managing expectations in regards to wildlife management. TWS supports and encourages FWS to continue making results of wildlife research publically available, but strongly opposes the solicitation

of public comments on a single peer-reviewed manuscript. The role of science in policy and decision-making is to inform the decision process.

The Wildlife Society understands that energy development is an integral aspect of modern society and that not all management determinations will provide maximum benefits or minimize impacts to wildlife and their habitat. However, such determinations are only appropriate if the best available science and likely consequences from a range of management options have been openly acknowledged and considered. Public comment on peer-reviewed science conflates the important roles of peer-review and public comment and obfuscates the best available science. Failure to insulate peer-review from political considerations will destroy the credibility and value of current and subsequent peer-reviews. As such, **TWS does not support** FWS' stated request for "public comments on the value of the model and the associated methodology described in the peer-viewed scientific manuscript in assisting in the evaluation of the effects of future seismic survey proposals for their potential impacts to maternal polar bear dens."

Thank you for considering the views of wildlife professionals. Please reach out to Cameron Kovach, JD, AWB®, Director of Operations, (301-897-9770 x 324; ckovach@wildlife.org), if you have any questions about the comments provided.

Sincerely,

Gary C. White, PhD, CWB®

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President