



# MARINE MAMMAL COMMISSION

16 December 2015

Ms. Eileen Sobeck, Assistant Administrator  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

Dear Ms. Sobeck:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors, has reviewed the draft Ecosystem-based Fisheries Management (EBFM) policy of the National Marine Fisheries Service (NMFS) and offers the following comments and recommendations.

The Commission believes that EBFM needs to include full consideration of all fishery impacts on the ecosystem, including marine mammal bycatch and predator-prey concerns. As noted in its 10 July 2015 letter to NMFS regarding the revised National Bycatch Strategy, bycatch (including entanglement in fishing gear that is in use, discarded, or lost) is the greatest immediate and direct threat to marine mammals worldwide. A study using data from 1990 to 1999 estimated that annual global mortality from bycatch exceeds 650,000 marine mammals (Read et al. 2006). While there has been progress in reducing marine mammal bycatch in some U.S. fisheries, there is still considerable room for improvement, including through the implementation of the EBFM policy. The Commission's 30 June 2015 letter to NMFS regarding the National Standard 1 guidelines included several recommendations that are also relevant to EBFM. For example, the Commission noted that the factors considered in determining optimum yield for U.S. fisheries should include ecological features, with specific reference to responses to changes in other ecosystem components, such as protected species. The Commission also recommended that NMFS amend the guidelines to require that forage-fish stocks be managed to maintain biomass levels higher than the biomass that produces maximum sustainable yield ( $B_{msy}$ ) when necessary to provide for the needs of the ecosystem, including protected species such as marine mammals.

With regard to the draft policy on EBFM, the Commission is concerned about the perspective in the Policy Statement on "tradeoffs" between fisheries and protected species and their habitats (e.g., as indicated in the Policy Statement and the Benefits sections). Furthermore, in the section describing the Marine Mammal Protection Act (MMPA) on page 8, there is no discussion of the limits placed on fishery-caused mortality and serious injury that are imposed through the take reduction process. Similarly, the Endangered Species Act (ESA) requires federal agencies, including NMFS, to ensure that fishing activities they manage or authorize do not jeopardize listed species, whether through incidental mortality or other impacts. The EBFM policy also lacks criteria to be used for deciding which "tradeoffs" between promoting or accommodating fisheries and potential adverse impacts on other ecosystem components are acceptable and which are not. Therefore, the Commission recommends that NMFS provide in its EBFM policy a clear and complete description of the applicable provisions of the MMPA, ESA, and other mandated requirements that must be met prior to "optimizing" the benefits from marine fisheries.

Recent studies call into question whether tradeoffs between marine mammal conservation and fisheries are as simple as was once thought. It has been demonstrated that conservation of marine mammals, such as large whales, likely contributes to overall ecosystem productivity, and therefore, potentially, to the productivity of fisheries. For example, Roman et al. (2014) showed a correlation between the presence of growing populations of large whales and higher rates of overall ecosystem productivity, particularly in zones where those populations feed and breed. Whales have been characterized as “marine ecosystem engineers” because of their role in transferring nutrients and sequestering carbon to the deep sea. Lavery et al. (2014) highlighted how Southern Ocean blue whales, rather than competing with fisheries through consumption of harvestable marine resources, likely enhance ecosystem productivity through nutrient recycling.

Further to the concept of ecosystem services being generated through the recovery and conservation of marine mammals, the Commission calls NMFS’s attention to the 7 October 2015 Memorandum from the Office of Management and Budget, the Council on Environmental Quality, and the Office of Science and Technology Policy to Executive Departments and Agencies directing agencies to incorporate ecosystem services into federal decision making<sup>1</sup>. That memorandum underscores the “vital contributions to economic and social well-being that are often not traded in markets or fully considered in decisions.” The Directive section of the memorandum calls on agencies to develop policies to promote assessment of ecosystem services into agency planning and decision frameworks in accordance with their legislative mandates. In fact, the preparation of these EBFM policy guidelines is an excellent opportunity for NMFS to meet the “Implementation Process and Timelines”<sup>2</sup> laid out in the memorandum by incorporating ecosystem service assessments into the guidelines. The Commission recommends that NMFS include the directives in that memorandum in its final EBFM policy.

The Commission commends NMFS for underscoring the importance of the National Environmental Policy Act (NEPA) in formulating the agency’s EBFM policy. When conducted in a timely fashion, the NEPA process provides a useful framework for analyzing the potential impacts of a broad range of alternatives on the entire marine ecosystem and its various components. A well-prepared, concise NEPA document also promotes stakeholder and public participation in and understanding of the decision-making process since alternatives are clearly differentiated, their potential impacts on the human environment are assessed, and comments are solicited. The Commission recommends that the final EBFM policy (including concrete implementation plans) be built upon the NEPA framework to facilitate implementation using a somewhat “familiar” process.

Finally, the Commission believes that the draft EBFM policy lacks sufficient detail to enable NMFS’s fishery scientists and managers to implement it in a clear and consistent manner. For example, would the EBFM policy call for multispecies fish stock assessments rather than single species assessments as is now generally the case? Would the policy require the inclusion of ecosystem covariates and processes (e.g., competition between marine mammals and fisheries) in stock assessment models whenever possible? How might NMFS be able to evaluate the non-market value of ecosystem services provided by protected species (as suggested in the 7 October 2015

---

<sup>1</sup> <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-01.pdf>

<sup>2</sup> Agencies are required to submit description of current agency practice and workplans by 30 March 2016 and revised workplans within 120 days of release of the final implementation guidance.

Ms. Eileen Sobeck  
16 December 2015  
Page 3

memorandum referenced previously) and other marine resources? Also, what resources might be available to make it possible to implement the additional scientific and NEPA analyses required for this holistic approach to fishery management? In addition, the Commission wonders whether NMFS will consider the importance of the specific fishery management approach taken—e.g., top-down command and control versus rights-based management—and to do so within the structure of the EBFM policy.

The Commission hopes that NMFS finds these comments useful as it finalizes its EBFM policy. We look forward to supporting NMFS in these efforts.

Sincerely,



Rebecca J. Lent, Ph.D.  
Executive Director

## References

- Lavery, T.J., B. Roudnew, J. Seymour, J.G. Mitchell, V. Smetacek, and S. Nicol. 2014. Whales sustain fisheries: Blue whales stimulate primary production in the Southern Ocean. *Marine Mammal Science* 30(3):888–904.
- Read, A.J., P. Drinker, and S. Northridge. 2006. Bycatch of marine mammals in U.S. and global fisheries. *Conservation Biology* 20(1):163–169.
- Roman, J., J.A. Estes, L. Morissette, C. Smith, D. Costa, J. McCarthy, J.B. Nation, S. Nicol, A. Pershing, and V. Smetacek. 2014. Whales as marine ecosystem engineers. *Frontiers in Ecology and the Environment* 12: 377–385. <http://dx.doi.org/10.1890/130220>