



# MARINE MAMMAL COMMISSION

30 June 2017

Ms. Therese Conant  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

Dear Ms. Conant:

The Marine Mammal Commission (Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's (NMFS) *Federal Register* notice proposing to revise the sections of its 1990 Listing and Recovery Priority Guidelines pertaining to Recovery Plan Preparation and Implementation Priorities (Part B) and Recovery Plans (Part C) (82 Fed. Reg. 24944). The Commission is supportive of NMFS's effort to improve how it sets priorities for developing and implementing recovery plans under the Endangered Species Act (ESA). Clearly, considerable thought and effort has gone into this initiative. However, the Commission has several concerns with some of the elements of the proposed revisions.

## **Taxonomic Classification**

Section 4(f) of the ESA, which governs recovery plans, states that the "Secretary, in developing and implementing recovery plans, shall, to the maximum extent practicable, give priority to those endangered species or threatened species, without regard to taxonomic classification, that are most likely to benefit from such plans...." Thus, it is not entirely surprising that the Federal Register notice does not mention taxonomic classification as one of its criteria. The Commission notes, however, that omission of this criterion is at odds with much of the thinking of conservation biologists who have considered what priorities to give to endangered species if we cannot save them all. Generally, some taxonomic hierarchy is involved in an effort to save as much genetic diversity as possible. For example, a monotypic family or genus would be given priority over an endangered species with close relatives that are not at risk. Lower priority still would be given to subspecies or distinct population segments (DPS) of otherwise low-risk species.

We could find no relevant legislative history that explained the inclusion of the phrase "without regard to taxonomic classification" in section 4(f) and it may have been included merely to dissuade the management agencies from focusing recovery efforts exclusively on charismatic species that generated the most public interest. Thus, the Commission recommends that NMFS explore whether and to what extent it would be consistent with the statutory language to consider the evolutionary significance of the species when setting recovery priorities and adjust those priorities to incorporate that criterion to the extent possible.

In making this recommendation, the Commission notes that, by not addressing evolutionary significance in the ranking criteria, NMFS may actually have come down on the wrong side of the issue. That is, if all listed taxa are treated equally, this may have the unintended consequence of

elevating the significance of DPSs or subspecies merely because of the way that they were listed. For instance, the Cook Inlet beluga whale or the southern resident killer whale, which are parts of larger, non-listed species, might get a higher ranking than the Hawaiian monk seal or the North Atlantic right whale, even though beluga whales and killer whales, as a whole, are not threatened or endangered. Often distinct population segments and subspecies occupy more restricted ranges than full species and, as a result, might face threats that are more localized and easier to identify or remedy. If that were the case, they likely would be given elevated priority over more wide-ranging, but equally at-risk species under the proposed recovery criteria or perhaps even over species that face higher demographic risks. A similar example might arise if multiple DPSs of a species are listed separately, rather than listing the species as a whole. Looking at DPSs separately might give each one elevated priority ranking compared to considering them as a single species. Setting recovery priorities should not be influenced by how petitioners sought a listing (which might influence how they are listed) or agency choices as to whether a species is split into multiple listings. Our goal here is not to suggest that listing DPSs or subspecies is an inappropriate practice or that NMFS should strive to lump DPSs into a single listing whenever possible. It is merely to point out that listing practices across species are inconsistent and that that inconsistency may have implications when it comes to setting recovery priorities. This is something that NMFS needs to be aware of and factor into its guidelines.

Although not a taxonomic criterion per se, life histories of species vary by taxonomic group, and that may affect their priority ranking under the proposed criteria. For example, a so-called r-selected species might be able to recover quickly once threats to its survival have been removed. On the other hand, K-selected species, such as marine mammals, that have lower reproductive potential but higher survival, may take decades or even centuries to recover. Also, because of their body sizes and life histories, recovery options for some marine mammal species may be limited. For example, although captive breeding programs for some birds, fishes, and small mammals have proven to be successful recovery strategies, that option is impractical for certain marine mammals, most notably large whales. The Commission does not believe, however, that those differences should translate into setting lower recovery priority for larger, long-lived species. That is, fish and marine invertebrates should not be given higher priority than marine mammals simply because they are amenable to hatchery programs or produce higher numbers of offspring. This is a possibility under the proposed criteria and something that NMFS should address.

On a related point, NMFS specifies that, in applying the demographic risk criteria, it will use “a minimum of 3 or more abundance estimates for key population(s) over [a] ten year period or, depending on the taxa (e.g., sea turtles), all available data years (>3 data points) for trend estimation.” As noted above, the reproductive potential and breeding interval can vary considerably among species. Thus, it would be more appropriate for trend estimates to be considered not only across a set number of years, but also within the context of a set number of generations (e.g., three generations) to account for these differences among species.

### **Lack of Information or Knowledge/Perceived Effectiveness of Recovery Actions**

In general, the proposed criteria set forth in Table 2 assign lower priority to species merely because information to assess the threats they face and their recovery potential is lacking. In essence, NMFS is equating ignorance with a lack of recovery potential and discounting innovative or novel approaches to pursuing recovery. On the other hand, NMFS identifies “research actions to fill

knowledge gaps and identify management actions necessary to prevent extinction” as “priority 1 actions,” when and if a plan is developed. There is a certain amount of inconsistency between these two approaches. Essential research to understand and address threats may be foregone or delayed simply because of the lack of that information to begin with, which makes no sense. While we can understand why NMFS might want to defer development and implementation of a full-fledged recovery plan until more is known, it should be a high priority to prepare and implement a research plan to obtain the necessary information to understand the threats a species faces and identify what may be done to alleviate these threats. This would be consistent with how NMFS has approached situations where population trends are unknown, for which it has assigned high demographic risk. The Commission therefore recommends that NMFS revise Table 2 accordingly by giving high recovery priority to carrying out research needed to understand major threats and design effective recovery strategies for species with a high or moderate demographic risk but for which threats are not well understood (low or moderate in the first column under recovery potential) or for which information on the likely effectiveness of management actions is lacking or incomplete (low or moderate in the third column under recovery potential).

### **Endangered vs. Threatened Species**

Under the guidelines, highest recovery priority would be given to species facing an immediate extinction risk. The demographic risk to other endangered species would be ranked as medium or low depending on the magnitude and immediacy of the extinction risk they face. In general, the Commission agrees with this approach—priority attention should be given to those species closest to extinction. However, there is a semantic problem with NMFS’s characterization that should be addressed in the final guidelines. By definition, an endangered species is one that “is in danger of extinction throughout all or a significant portion of its range.” Thus, it might create misunderstanding by the public of the status of species listed as endangered if their risk of extinction is characterized as being low under the recovery guidelines. Perhaps some other categorization would be more appropriate such as “extremely critical, critical, and stable or increasing.”

The guidelines also place higher priority on endangered species than on threatened species. Again, this seems appropriate as a general rule. However, this may mean that recovery plans never get developed or that recovery actions for threatened species are seldom taken. This undermines much of the rationale for including threatened species under the ESA. The point of listing threatened species (those that are “likely to become endangered...within the foreseeable future...”) is so that something can be done at an earlier stage to see that they do not become endangered. By deferring recovery actions for threatened species, perhaps until the species becomes endangered, we forego the opportunity to solve problems before they become crises and at potentially much less cost or societal or economic impact. As such, the Commission recommends that the guidelines include flexibility that encourages early recovery actions to be taken for threatened species when it makes sense from an economic or other perspective.

The case of climate change warrants specific mention. Several marine mammals species have been listed as threatened by NMFS or the Fish and Wildlife Service (FWS), or are being considered for listing, due primarily to threats related to climate change (e.g., loss of sea ice and associated prey base). Because predicted impacts are expected to increase in severity over the next several decades, these species are not yet considered endangered. However, human actions that contribute to climate change may not have an immediately detectable effect but likely will have an effect that persists for

decades. Thus, if actions to address climate change are deferred until these species are listed as endangered, it likely will be too late to prevent extinctions or precipitous population declines.

In the discussion of recovery potential component 2, NMFS places climate change in the “high” category, meaning that the United States has jurisdiction over actions that would help offset the impacts. The Commission believes that climate change abatement also should be given a high ranking under the other factors. Actions to prevent or reduce additional sea ice loss have a high likelihood of being effective in the recovery of certain Arctic species. It also is a threat that is fairly well understood. What is lacking, though, is an appreciation of the lag between the time when actions to address the threat are taken and when results are achieved. The Commission recommends that the guidelines be expanded to include a temporal component for addressing climate change and similar threats, such that recovery actions that may take a long time to bear fruit, but that nevertheless are important to species recovery, be given high priority regardless of whether they are directed at endangered or threatened species.

### **Species versus Ecosystem Approaches**

The guidelines appear to be written from the perspective that priorities will be set based on the status and recovery potential of individual species (including listed subspecies and DPSs). However, the [Interim Endangered and Threatened Species Recovery Planning Guidance](#) published jointly by NMFS and FWS specifies that, in addition to single species plans, it may be appropriate in some cases to prepare and implement multispecies or ecosystem plans. It is not clear whether or how priorities would be set in these latter cases. Presumably, there should be some additive value given to a plan that addresses several species or an entire ecosystem that may include multiple listed species. The Commission therefore recommends that NMFS expand the proposed guidelines to explain whether and, if so how, the priority for developing and implementing a recovery plan to conserve multiple species would be different than if plans were developed and implemented separately for those species. It may be that NMFS intends to capture these types of plans under its “Priority 0” category, which would include actions not needed for ESA recovery, but that “would advance broader goals beyond delisting.” If so, such an approach is off base. While an ecosystem plan presumably would advance goals beyond delisting, its central goal would be to promote actions needed for species recovery and delisting. As such, those actions should be accorded priority rankings similar to those contained in other types of plans (e.g., Priority 1-3).

### **U.S. Jurisdiction, Authority, or Influence**

The second criterion for assessing recovery potential is based on the extent to which the United States has jurisdiction, authority, or influence over the species and its habitat or actions that may alleviate the identified threats. To some extent, this criterion parallels the NMFS and FWS recovery plan guidance concerning species that occur exclusively in foreign countries. Section 2.2.1 of the guidance document notes that “[g]enerally the U.S. has little authority to implement actions needed to recover foreign species, and therefore, a recovery plan would not promote the conservation of the species [and need not be prepared].” If, as a general rule, NMFS would not prepare a recovery plan for a foreign species, it is unclear exactly what this criterion is intended to accomplish. Is it to identify situations when a plan for a foreign species should be prepared notwithstanding the general exemption; to set priorities for transboundary species that occur within

areas subject to the jurisdiction of both the United States and other countries; to set priorities for species that occur on the high seas; or some combination of these? This should be clarified.

It is fairly clear what areas, species, and individuals over which the United States has jurisdiction, but somewhat less clear what additional authority the United States might possess, and even less clear what the United States can or might be able to influence, with respect to extra-jurisdictional species. To the extent possible, NMFS should provide additional guidance concerning these terms. For example, is the term “influence” intended to apply exclusively to the U.S. Government, or would it also apply to influence exerted by U.S. businesses or non-governmental organizations?

The one example given is the authority the United States has to influence abatement of threats “through *existing* international mechanisms, (e.g., treaties, conventions, and agreements)” (emphasis added). The Commission notes that this component is couched in terms of existing international mechanisms. Section 8 of the ESA directs the Secretary, along with the Secretary of State, to encourage foreign countries to provide for the conservation of listed species and to enter into bilateral or multilateral agreements to provide for such conservation. That section also sets forth mechanisms for providing funds and personnel to assist foreign conservation efforts. For listed marine mammals, the Marine Mammal Protection Act also includes a directive for the Secretary to initiate negotiations for the development of bilateral or multinational agreements with other nations for the protection and conservation of marine mammals. In light of these statutory provisions, it is not appropriate for NMFS to limit its consideration of U.S. authority or influence to existing mechanisms, but rather it should also consider whether additional agreements or other mechanisms could be concluded and would be effective in abating the risk to the species. For some species, one of the key recovery actions could be to conclude an agreement between the United States and another country to place a formal obligation on that country to undertake conservation actions and on the United States to assist in such efforts.

## **Terminology**

NMFS provides several definitions at the end of the proposed guidelines. Although useful, it would be helpful if definitions were provided for additional terms used in the guidelines. “Productivity” is a key factor in assessing demographic risk, but is not defined. NMFS should define the term and explain whether and how it differs from population trend or population growth rate. Another term that should be defined is “key population.” It is not clear how a key population is identified or how it differs from the population as a whole. In discussing the demographic risk criteria NMFS uses the term “measurably” to describe either higher or lower numbers between assessments. Either that term should be defined, or a more precise term (statistically significant?) should be used.

In addition, it would be useful if the definitions of some of the defined terms were revised or expanded. Although the term “depensation” is defined, it is a fairly rudimentary definition that does not illuminate its use in the proposed guidelines. For example, it should be clarified whether the term is intended to refer to depensatory density dependence (i.e., Allee effects). The definition of “demographic risk” lists several factors including “diversity” that are indicators of persistence. However, it is not clear to what type of diversity NMFS is referring. Specifically, is it meant to refer

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only to genetic diversity or would it encompass other types of diversity, e.g., sex and age diversity or behavioral diversity within the population?

The Commission appreciates the opportunity to comment on the proposed guidelines. Please contact me if you have any questions concerning the points raised in this letter.

Sincerely,



Rebecca J. Lent, Ph.D.  
Executive Director