18 April 2016

Ms. Marta Nammack
National Marine Fisheries Service
1315 East-West Highway, Rm. 13536
Silver Spring, MD 20910

Dear Ms. Nammack:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed and offers the following comments and recommendations on the National Marine Fisheries Service's (NMFS) 18 March 2016 *Federal Register* notice (81 Fed. Reg. 14820) and "Draft Post-Delisting Monitoring Plan for Nine Distinct Population Segments of the Humpback Whale (*Megaptera novaeangliae*)."

Background

On 21 April 2015, NMFS requested comments on a proposed action to reclassify humpback whales under the Endangered Species Act (ESA). Humpback whales are currently listed as endangered throughout their worldwide range. NMFS proposed recognizing 14 distinct population segments (DPSs) of the species. Two of these would be listed as endangered (the western North Atlantic and Arabian Sea DPSs), two as threatened (the western North Pacific and eastern North Pacific DPSs), and ten would no longer be considered as either endangered or threatened. The Marine Mammal Commission (the Commission) provided comments in support of the proposed action on 20 July 2015 (see attached letter).

To ensure that actions to remove species (including DPSs) from protection under the ESA are appropriate, section 4g(1) of the Act requires implementation of a five-year post-removal monitoring plan to assess population trends, distribution, and threats. In the current notice NMFS requests comments on a draft five-year plan for monitoring humpback whale DPSs that would no longer be considered as endangered or threatened under the ESA. The draft plan states that, in view of the broad goals for post-delisting monitoring, the humpback whale recovery plan, and issues that were raised in the status review, humpback whale monitoring studies will address three objectives:

1. Monitoring the DPSs to detect changes in trends in production of calves and adult/juvenile abundance and population growth rates, and determining whether any changes that are detected represent a threat to a DPS, or signify that the DPS is approaching or has surpassed its carrying capacity;
2. Monitoring the DPSs to detect changes in spatial and temporal distribution of different age classes, and

3. Monitoring residual or emerging threats, and identifying new threats that could affect the viability of recovery of the humpback whale DPSs.

The draft plan briefly identifies methods that would be used to monitor growth rates, distribution, and threats for the ten humpback whale DPSs.

Comments and Recommendations

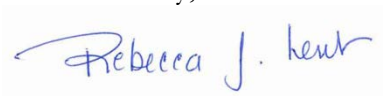
The title of the five-year monitoring plan, as noted above, indicates that the focus of the plan will be on monitoring the status of "nine" humpback whale DPSs. However, we note that the proposed rule for reclassifying humpback whales (80 Fed. Reg. 22304), as well as the list of relevant DPSs on pages 14 to 16 of the draft five-year plan, identifies ten humpback whale DPSs that would no longer be considered as endangered or threatened under the ESA. Therefore, it appears that ten DPSs will require monitoring and that the title of the document should be changed to indicate the intent to monitor ten DPSs, rather than nine.

The Commission believes that the objectives and methods identified for monitoring humpback whale growth rates, distribution, and threats are appropriate. However, a few of the issues that were raised during the status review are not reflected in the delisting monitoring plan. First, as noted in the Commission's July 2015 comments on the proposed action, new information from Stevick et al. (2015) on the "West Indies" DPS that was not considered by the Biological Review Team or NMFS may indicate there are two separate DPSs rather than just one in the West Indies (i.e. Caribbean region). Stevick et al. (2015) suggest there may be one DPS centered in winter and spring in the Greater Antilles that tends to travel to feeding grounds off North America, and a second centered in the southeastern Caribbean that tends to travel to European feeding grounds. Second, the Commission's July comments noted that, based on markedly different population growth rates and other demographic parameters across the geographically widespread calving grounds of the "Oceania" DPS in the South Pacific, it seems possible that this DPS also consists of multiple DPSs. Overall, the Commission noted that it believes the global population structure of humpback whales could be more complex than what is indicated by the 14 or 15 DPSs identified in the status review.

The proposed monitoring plan does not include either an objective or a discussion concerning verification that additional DPSs are not "hidden" within the ten identified DPSs that would no longer be considered as endangered or threatened under the proposed reclassification. Further work in this regard is most important for the "West Indies" and "Oceania" DPSs. Therefore, the Commission recommends that the five-year monitoring plan be expanded to include (1) an objective to determine whether additional DPSs merit consideration as endangered or threatened under the ESA, and (2) a description of the methods, including further collections of tissue samples and genetic analyses, that will be used to assess population structure further within the ten DPSs.

I hope these comments and recommendations are helpful. If you have any questions, please let me know.

Sincerely,



Rebecca J. Lent, Ph.D
Executive Director

Enclosure

Reference

Stevick, P.T., L. Bouveret, N. Gandilhon, C. Rinaldi, R. Rinaldi, F. Broms, C. Carlson, A. Kennedy, N. Ward, and F. Wenzel. 2015. Humpback whales in the southeast Caribbean are behaviorally distinct from those in the Dominican Republic. Unpublished paper number SC/66a/AWMP/2 submitted to the Scientific Committee of the International Whaling Commission. 7p.

20 July 2015

Ms. Marta Nammack
National Marine Fisheries Service
1315 East-West Highway, Rm. 13536
Silver Spring, MD 20910

Dear Ms. Nammack:

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) 21 April 2015 *Federal Register* Notice (80 Fed. Reg. 22304) proposing to revise the global listing of humpback whales as endangered under the Endangered Species Act (ESA). We also reviewed the accompanying March 2015 background document entitled "Status Review of Humpback Whales (*Megaptera novaeangliae*) under the Endangered Species Act." The Commission commends NMFS for recognizing the significant recovery made by this species in many parts of its range since its initial listing and for proposing to update the list of Endangered and Threatened Species accordingly. The Commission offers the following comments and recommendations.

Background

The humpback whale is currently listed as endangered under the ESA throughout its range worldwide. The species was first listed in 1970 due primarily to its worldwide depletion by commercial whaling. Since the International Whaling Commission (IWC) prohibited commercial whaling for humpback whales in 1955 in the North Atlantic and in 1966 elsewhere in the world, the abundance of humpback whales has increased significantly in many parts of their range. The species recently has been divided into three subspecies: the North Pacific (*M. n. kuzira*), the North Atlantic (*M. n. novaeangliae*), and the Southern Hemisphere (*M. n. australis*) humpback whales on the basis of genetic information and analysis of movements and distribution. Each subspecies can in turn be divided into largely discrete breeding groups or populations that use different geographic calving grounds at low latitudes in winter, and disperse with overlapping feeding ranges to higher latitudes in summer. Based on this and other information, NMFS proposes to divide humpback whales into 14 discrete population segments (DPSs). Two of these would continue to be listed as endangered (the proposed DPS with calving grounds in the Cape Verde Islands in the North Atlantic and the Arabian Sea DPS which resides year round in the northern Indian Ocean) and two would be listed as threatened (the proposed DPS that calves in the western North Pacific off Asia and another that calves off Central America in the eastern North Pacific). The other DPSs would be delisted, removing them from the endangered and threatened species list.

The definition of a species under the ESA includes "…any distinct population segment of any vertebrate fish or wildlife which interbreeds when mature." Thus, to support the proposed

changes for humpback whales, NMFS must first identify breeding groups that constitute DPSs, and second, identify DPSs that either merit listing as endangered or threatened or that no longer meet the listing criteria. According to a policy adopted jointly by NMFS and the Fish and Wildlife Service in 1996, to be considered a DPS, a breeding group must be (1) a discrete group of animals, and (2) biologically and ecologically significant to the species. The policy defines a "discrete" group of animals as one that either (a) differs markedly based on physical, physiological, ecological, or behavioral factors, or (b) is delimited by international governmental boundaries with different management measures. To be biologically or ecologically significant, a discrete breeding group must be one that (a) occupies an unusual or unique ecological setting for the species, (b) if lost would leave a significant gap in the species range, (c) represents the only surviving natural occurrence of the taxon, or (d) differs markedly in genetic characteristics. To be listed under the ESA, NMFS must then decide whether a DPS qualifies as being endangered (i.e., presently in danger of extinction) or threatened (i.e., likely to become endangered in the foreseeable future). This assessment requires consideration of information on the abundance and trend of each DPS relative to five ESA listing factors: (1) destruction, modification or curtailment of their habitat or range; (2) over utilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequate regulatory mechanisms, or (5) other natural or manmade factors affecting their existence.

Identification of DPSs

The analyses used by NMFS to identify the 14 DPSs are based largely on information compiled in a comprehensive review of the scientific literature on humpback whales worldwide (Fleming and Jackson 2011) and the report of a Biological Review Team (Bettridge et al. 2015) convened by NMFS in 2010. The Commission believes that the report writers and the Review Team did an excellent job of sorting through the enormous amount of information available at the time of its review to identify the proposed DPSs and evaluate the risks to each under the five ESA listing factors. The Commission commends the report writers, the Review Team, and NMFS for their efforts in this regard. For purposes of the proposed rulemaking, the Commission agrees with the NMFS conclusion that humpback whales worldwide can be divided into the 14 proposed DPSs. As new scientific information becomes available, however, we believe it is quite possible that additional DPSs will be identified and that some may merit consideration for separate listing.

In this regard, we note that the Biological Review Team's report identified 15 DPSs, but only 14 are considered in the proposed rule. The difference concerns a breeding group identified in the *Federal Register* notice as the "Western North Pacific DPS", but which the Review Team identified as two DPSs: one using calving grounds around Okinawa and the Philippines, and another using an unknown calving ground. The Review Team inferred the existence of the latter DPS based on data from whales found feeding along parts of the Aleutian Islands that could not be linked to any other known breeding group because of significant genetic differences. The Review Team concluded that this likely represented a discrete group of animals with very low rates of interbreeding with other identified DPSs. The Review Team also concluded that this putative DPS was significant because its feeding range in the Aleutians spanned an area little used by other North Pacific DPSs and therefore its loss would represent a gap in the species range. Nevertheless, because its breeding grounds have not yet been identified and because at least some animals in this group are known to follow part of the migratory route used by the Okinawa-Philippines DPS (i.e., both groups are known to pass the Ogasawara Islands southeast of Japan), NMFS chose to combine the two groups into a single Western North Pacific DPS that is proposed for listing as threatened. Pending further information

on the range, movements, geographic overlap, and genetics of the inferred DPS and the Okinawa-Philippines DPS, this seems like a practical approach. However, if the Western North Pacific DPS does in fact consist of two DPSs and their combined population estimate is as few as perhaps 1,100 animals, we are concerned that the status of at least one of these populations may merit listing as endangered. Further, we note that humpback whales are now routinely seen in the southern Chukchi Sea (Clarke et al. 2013), although not yet assigned to a DPS for lack of fluke photographs. Based on the methods of the Review Team, these whales could come from one of three DPS; Western North Pacific, Hawaii and/or Mexico. The Commission therefore recommends that, if NMFS proceeds with the proposed downlisting of the Western North Pacific DPS to threatened, it make a commitment to collect additional information on the discreteness of the two putative DPSs identified by the Biological Review Team and to revise any listing decision if warranted by such information.

A similar case may exist in the Caribbean where the identified "West Indies" DPS may actually consist of two separate DPSs: one in the Greater Antilles and the other in the southeastern Caribbean. Recent information not considered by the Review Team or NMFS (Stevick et al. 2015) suggests that humpback whales calving along the southeastern Caribbean from Antigua to Venezuela may be distinctly different from those calving in the Dominican Republic (Greater Antilles). This assessment is based on photo-identification matches and the relative presence of scars left by killer whales on tail flukes that suggest whales using the southeastern Caribbean tend to disperse to feeding grounds off Norway and Iceland in the eastern North Atlantic, whereas whales overwintering in the Greater Antilles tend to use feeding grounds off Greenland and North America in the western North Atlantic. At present, the Commission believes this information is suggestive, but not sufficient to confirm that whales in the southeastern Caribbean constitute a discrete group of animals.

Based on markedly differing population growth rates and demographic parameters across geographically dispersed calving grounds in the South Pacific, it also seems possible that multiple DPSs occur within the large geographic range of the Oceania DPS identified by the Biological Review Team. Given the limited information on humpback whale movements and abundance in different parts of this composite DPS, the Commission believes that further research in this region will be necessary to confirm whether the whales there comprise a single DPS or multiple DPSs.

Overall, the Commission believes that the population structure of humpback whales may be more complex than indicated by the 14 or 15 DPSs currently identified and that, as populations continue to recover and new information becomes available, NMFS should continue to monitor the discreteness and significance of humpback whale breeding groups, particularly those that calve in the western North Pacific, Caribbean, Cape Verde/eastern North Atlantic, and Oceania/South Pacific to determine if additional DPSs merit recognition and listing. However, for purposes of this rulemaking, we believe that NMFS has conducted a generally thorough review of information and we support the conclusions regarding the identification of DPSs. Accordingly, for purposes of the present rulemaking, the Commission recommends that NMFS base its ESA reclassification proposal on the assumption that there are 14 humpback whale DPSs worldwide as discussed in the proposed rule, but that it also note that further changes may be needed in the future based on new information.

In response to several recent listing petitions (e.g., the Baltic Sea population of harbor porpoise, the eastern Taiwan Strait population of Indo-Pacific humpback dolphins, and the New Zealand Fjordland population of bottlenose dolphins), NMFS has determined that listing was not warranted because the population at issue did not constitute a DPS. In each case, NMFS determined that the population at issue met the "discreteness" criterion of the DPS policy but not the "significance" criterion. In this case, NMFS determined that all of the 14 DPSs met both criteria. Because the significance criterion is somewhat subjective, it is not clear that it is being applied consistently. As such, it would be helpful if NMFS provided additional discussion explaining why it thinks that the application of the DPS policy in the case of the humpback listing rule is consistent with its application in other recent listing actions for marine mammals.

Assessment of Abundance and Trends

The Commission finds it encouraging that at least some information is available on the abundance, if not trends, of humpback whale populations in nearly all parts of the world and that some DPSs are increasing at moderate to strong rates within each of the three subspecies. The assessments of available information by the Biological Review Team and NMFS appear to be thorough and the Commission is not aware of any information that would suggest population estimates and trends differ from those set forth in the NMFS analyses.

Assessment of Threats

The assessment of threats in the proposed rule under the five ESA listing factors provides a generally thorough identification of possible threats that could interfere with or impede the recovery of each humpback whale DPS. We are concerned, however, that assessments of some factors may underestimate risks for at least some DPSs.

Effects of oil spills: The Commission is concerned that the assessment of impacts from catastrophic oil spills associated with energy exploration and development may underestimate the potential for destroying, modifying, or curtailing vital habitats for some DPSs. For example, the analyses state (80 Fed. Reg. 22321) that "[a]lthough the risk posed by operational oil rigs is likely low, failures and catastrophic events that may result from the presence of rigs pose high risks…[and] the level of impact that such a catastrophic event may have on a population was considered in evaluations." Except for the Arabian Sea DPS, where these risks are considered high, and off West Australia and Okinawa/Philippines where risks to DPSs are rated moderate, NMFS and the Biological Review Team consider these risks to be low but increasing (see Bettridge et al 2015, table 9).

The Commission agrees that catastrophic oil spills similar to the Deep Water Horizon spill, which discharged large quantities of oil over a period of months, could significantly affect humpback whales in key habitats. The Commission also believes that such events are far more likely to occur in areas where drilling is now pushing the limits of experience and technological capability, such as drilling in increasingly deep waters or seasonally ice-covered seas. Where drilling and the transportation of oil and chemicals is occurring or planned, such as off Brazil, in the Gulf of Guinea off Africa and in the Chukchi Sea, we believe the risks to regional DPSs from catastrophic spills over the next 20 years justifies a rating higher than the assigned "low but increasing" level. The Commission therefore recommends that the Service re-examine the risks of catastrophic oil spills,

whether from oil and gas drilling or transportation, that could affect DPSs in areas such as Brazil, the Gulf of Guinea and the Chukchi Sea, where exploration and development plans involve technologies or capabilities for which there is limited experience.

Effects of Whaling: The *Federal Register* notice states that NMFS has concluded that the risks of whaling on the West Indies DPS are low. In this regard, the *Federal Register* notice indicates that St. Vincent and the Grenadines currently has an aboriginal subsistence whaling quota not to exceed 24 whales total for the six-year period from 2013 to 2018 (80 Fed. Reg. 22330). In addition, Greenland, a self-governed territory of Denmark, is authorized to strike up to 10 humpback whales per year between 2015 and 2018 as part of the quota for its aboriginal subsistence whaling. The NMFS assessment of low risk from this whaling is consistent with that of recent assessments by the IWC Scientific Committee (reference 2014 Scientific Committee Report). However, as noted above, recent information raises the possibility that whales calving in the southeastern Caribbean constitute a discrete, relatively small group of whales compared to those calving in the Greater Antilles. If humpback whales calving in the southeastern Caribbean prove to be a DPS, whaling in its winter calving and possibly in its summer feeding range could affect its recovery. The referenced IWC Scientific Committee report notes that genetic samples have been collected from harvested animals in both Greenland and St. Vincent and the Grenadines which should help resolve uncertainties about both stock discreteness and whaling effects. The Commission recommends that NMFS closely monitor any new information that may come to light supporting existence of a discrete group of humpback whales in the southeastern Caribbean and possible effects of subsistence whaling on this putative population.

Effects of Climate Change: The analysis of threats notes that large whales are likely able to adapt to the effects of climate change and cites as an example the discovery of bones from bowhead whales killed by Basque whalers in the Strait of Belle Isle, Canada, which indicates that the species' range shifted south during the Little Ice Age in the 1500s (80 Fed. Reg. 22328). The Commission agrees that a change in distribution may be a likely response of humpback whales to climate change, but notes that such a response could diminish the effectiveness of many of the geography-based protection measures cited elsewhere in the analysis. If major shifts in habitat characteristics cause humpback whales to abandon, reduce, or expand their use of existing marine protected areas or other time-area management zones discussed in the analysis, the effectiveness of protection provisions could be significantly reduced. The Commission recommends that the NMFS analysis recognize and note that shifts in humpback whale distribution due to climate change could reduce the effectiveness of some existing area-based protection measures. Also, it is important to recognize that at least one humpback whale population, the Arabian Sea DPS, faces a situation where there is no option of relocating northward to cooler waters because its distribution is, in effect, a cul-de-sac.

Effects of Whale-Watching: With respect to the Hawaii DPS, the analysis notes that vessel approach regulations for the Hawaiian Island Humpback Whale Sanctuary are similar to a more general 100-yard approach regulation adopted by NMFS for humpback whales throughout Hawaiian waters under the Endangered Species Act. However, if the Hawaii DPS is delisted as currently proposed, authority for regional approach regulations throughout Hawaiian waters would lapse leaving only the approach regulations under the more geographically limited sanctuary authority. Accordingly, the *Federal Register* notice advises that "because these (Sanctuary) regulations

apply only within the sanctuary, we (i.e. NMFS) seek public comments on whether the sanctuary protections would be sufficient for the protection of humpback whales from vessel interactions throughout the Hawaiian Islands" (80 Fed. Reg. 22334).

The Hawaii Sanctuary boundary includes many, but not all, areas heavily used by humpback whales in Hawaii. The sanctuary includes relatively small areas around the islands of Kauai, Oahu, and Hawaii and humpback whales are increasingly using areas outside of the sanctuary's boundaries as the population grows. These areas are also often used by whale-watching vessels. The Commission believes that approach regulations are particularly important for minimizing impacts of whale watching. While the assessment of whale-watching impacts in the NMFS analysis of threats considers the potential for disturbing whales and disrupting their normal behavior, it does not recognize the potential for whale-watching vessels to hit and injure whales. Yet whale-watching vessels are one of the vessel types with the highest number of reported ship strikes on whales (Laist et al. 2001, Jensen and Silber 2004). Although there are few cases in which whales are known to have been killed, the high number of reports involving minor injuries should be noted in the analysis as they provide justification for vessel approach regulations. We therefore do not believe that sanctuary regulations alone will be adequate and the Commission therefore recommends that, if NMFS delists the Hawaii DPS as currently proposed, it proceed with a parallel rulemaking under the authority of the Marine Mammal Protection Act to reestablish vessel approach limits for humpback whales throughout Hawaii.

As a related matter, we recently provided comments to the National Marine Sanctuary Program on its proposed revision of the Hawaii Sanctuary's Management Plan (see enclosed letter). In that letter we recommended that the Sanctuary Office consult with NMFS on the development of new language that would expand the sanctuary's vessel approach regulations to include provisions specifying vessel operations applicable when vessel operators find themselves closer than 100 yards to a whale because of whales approaching them. In such cases, the Commission believes that existing whale-watching guidelines that recommend either cutting engines or veering away from whales at a slow steady speed (e.g., 7-10 knots) should be included as mandatory regulatory measures. Accordingly, the Commission also recommends that NMFS consult with the Hawaii Sanctuary staff to develop regulatory language for approach requirements that could apply both within boundaries of the Hawaii Sanctuary and elsewhere in Hawaii specifying the need to maintain a safe approach distance (i.e., 100 yards) and follow appropriate operating procedures when vessel operators find themselves closer than 100 yards from a humpback whale.

Monitoring Plan

Section 4(g)(1) of the ESA requires that when a species is removed from the list of endangered and threatened species, a system must be put in place to monitor its status for not less than five years. In this regard, the *Federal Register* notice advises that NMFS will work with states and countries within the range of the DPSs removed from the endangered and threatened species list to develop a plan for continued monitoring of their status. The Commission fully supports this effort. Also, as noted above, the Commission believes that the population structure of humpback whales may be more complex than current information indicates and that some additional unidentified DPSs may exist that could merit listing as either endangered or threatened. NMFS should recognize this possibility and be prepared to modify its list of endangered and threatened species as new information warrants.

To help address this possibility, the Commission believes that NMFS's monitoring effort over at least the next five years should include a component to reexamine conclusions concerning humpback whale population structure and the existence of DPSs based on new information. For this purpose, the Commission believes that particular attention should be given to genetic sampling and other studies that would help resolve any uncertainties about possible unidentified DPSs in the western North Pacific, Oceania, West Indies, and Cape Verde/Northwest Africa regions. To help develop the monitoring plan and organize assessments of new research results, the Commission recommends that, as soon as possible after final action on the listing proposal is taken, NMFS reconvene the Biological Review Team to seek advice on humpback whale research and monitoring priorities and that its advice be shared with states and countries in the species' range. In addition, the Commission recommends that NMFS announce its intent to reconvene the Biological Review Team after the five-year monitoring period to update its assessment of humpback whale DPSs and threats taking into account all new information. The Review Team's report should include recommendations on whether any changes are warranted regarding the inclusion of humpback whale DPSs on the endangered and threatened species lists (i.e., further removals, reclassifications, or additions).

Effects of This Rulemaking

The *Federal Register* notice notes that humpback whales are currently listed as depleted under the MMPA by virtue of their listing as endangered under the ESA. It also notes that removal of any DPSs from the list of endangered and threatened species would result in their no longer automatically being considered depleted under section 3(1) of the MMPA. As the proposed rule explains, depleted species receive additional protection under the MMPA that could be lost through delisting. For species not listed under the ESA, depleted species are defined as those that are below their optimum sustainable population (OSP) level. The notice therefore requests comments on whether the provisions of the MMPA continue to confer depleted status on delisted populations absent additional action under section 115(a) or instead affirmative action is needed to designate delisted populations as depleted if they are below their OSP.

The Commission believes that, consistent with the ruling in *In re Polar Bear Endangered Species Act Listing and Section 4(d) Rule Litigation,* 720 F.3d 354 (D.C. Cir. 2013), automatic depleted status terminates with delisting absent separate action under section 115(a). However, the Commission notes that, when Congress revisited the MMPA's definition of the term "depleted" in 1981, it "recognized that species that are listed under the Endangered Species Act are, *a fortiori*, not at their optimum sustainable population and, therefore, should be considered depleted."[1] Thus, the Commission believes that, at a minimum, there is a heightened responsibility on the part of NMFS to undertake a timely review of the status of any delisted marine mammal species or stock relative to its OSP, and to undertake any needed rulemaking to preserve or reinstate depleted status as quickly as possible. Further, the Commission recommends that, if similar situations arise in the future, NMFS should consider rulemaking approaches that would avoid any lapse in depleted status for stocks that are below their OSP. For instance, NMFS could propose a joint rulemaking under both the ESA and the MMPA or conduct concurrent, separate rulemakings under the two Acts, such that the effective dates of the delisting action and the designation of a stock as depleted would coincide.

[1] H.R. REP. NO. 228, 97th Cong.. 1st Sess., at 16.

In this case, the Commission recommends that NMFS ask the Biological Review Team to convene as soon as possible to review historical whaling records for humpback whales and all other relevant information to determine if any of the DPSs proposed to be delisted are below their optimum sustainable population. If so, NMFS should initiate a rulemaking to designate those stocks as depleted as quickly as possible.

I hope these comments and recommendations are helpful. Please let me know if you or your staff has any questions.

Sincerely,

Rebecca J. Lent

Rebecca J. Lent, Ph.D.
Executive Director

Enclosure (19 June 2015 letter to Malia Chow)

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MARINE MAMMAL COMMISSION

19 June 2015

Malia Chow, Superintendent
Hawaiian Islands Humpback Whale National Marine Sanctuary
National Oceanic and Atmospheric Administration
Daniel K. Inouye Regional Center
1845 Wasp Boulevard, Building 176
Honolulu, HI 96818

Dear Ms. Chow:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Hawaiian Island Humpback Whale National Marine Sanctuary's (the Sanctuary) Draft Management Plan and Draft Environmental Impact Statement and offers the following comments and recommendations. The Commission supports expansion of the Sanctuary's scope to include an ecosystem-based management focus and believes that this would significantly improve efforts to conserve marine mammals and their habitat in the Main Hawaiian Islands (MHI). The Commission urges that your Office also devote particular attention to promoting the recovery of Hawaiian monk seals.

Background

The Draft Management Plan is the product of a six-year review of the Sanctuary's management program. In part it proposes an expansion of (1) the scope of Sanctuary management, (2) Sanctuary boundaries, and (3) regulatory provisions. The proposed management scope would be expanded from a largely single-species focus on humpback whales to an ecosystem-based management focus that would include all major ecosystem components including marine mammals. According to a newly proposed mission statement for the Sanctuary, management would seek to promote a holistic and adaptable management approach that perpetuates the natural health of the environment, supports sustainable use, fosters local stewardship and community involvement, and perpetuates the cultural heritage of Hawaii. To reflect the new scope, the name of the Sanctuary would be changed to the Hawaiian Island National Marine Sanctuary–Nā Kai 'Ewalu.

Boundaries for the five current Sanctuary segments would be expanded from their current size of 1,370 mi^2 by adding 218 mi^2, most of which would comprise a sixth Sanctuary segment including all waters within the 100-fathom bathymetric contour around Niihau and Lehua Rock. Other smaller additions would be made to Sanctuary segments on the north shores of Kauai and Oahu and the southern margins of Penguin Bank. Most waters around Kauai, Oahu, Maui, and Hawaii would not be included in the Sanctuary, and all waters around Kahoolawe would be excluded. Regulatory measures would address the following activities: vessel approaches of less than 100 yards to humpback whales, overflights of less than 1,000 feet above humpback whales, taking or possession of certain marine species, material discharges or disposal, altering submerged lands, use

of explosives, introducing alien species, and removing or damaging historical or cultural resources. Depending on the alternatives, restrictions on these activities would apply to all Sanctuary waters, or only to all or a subset of three special management areas within the Sanctuary. The three special management areas include (1) Penguin Bank, (2) Maui Nui, (i.e., a portion of the shallow waters between Molokai, Maui, and Lanai), and (3) Maunalua Bay (i.e., a bay off southeastern Oahu). To achieve its mission, Sanctuary management also would promote local community stewardship of Hawaii's ocean resources both within and around Sanctuary boundaries, as well as research to improve understanding of the status and interrelationships of those resources.

Boundaries

The proposed boundaries include habitat for many marine mammal species facing various conservation issues. Although the amount and significance of marine mammal habitats contained in Sanctuary boundaries varies greatly by species, the Commission believes the most pressing need with regard to marine mammals in the proposed boundaries is the recovery of Hawaiian monk seals. In this regard, the Draft Management Plan indicates that boundaries for the Sanctuary would be expanded to include all waters within 3 nmi of Niihau and Lehua Rock. This includes some of the most important habitat for Hawaiian monk seals, and with its existing boundaries and other proposed additions, the Sanctuary would include important monk seal habitat off all of MHI except that at Kahoolawe.

The MHI monk seal population currently numbers approximately 150 seals and is increasing. A 2014 survey of Niihau recorded over 60 seals (Lopez et al. 2014), suggesting that perhaps half of all MHI seals currently occur on that island and in waters around it. In general, the Commission believes that the proposed additions to the Sanctuary boundaries, in combination with its current extent, would include an important portion of the monk seal habitat around all of the MHI except Kahoolawe. Indeed, NMFS is currently considering designation of much of this area as critical habitat for Hawaiian monk seals. This should help provide a solid basis for Sanctuary managers to assist with monk seal recovery on all inhabited islands in the MHI. The Commission supports the proposed boundary expansion and recommends that the Sanctuary incorporate all proposed boundary additions to the Hawaiian Islands National Marine Sanctuary.

Management scope

Section 4.2 of the Draft Management Plan notes that Sanctuary management would be expanded from its current focus on conservation of humpback whales to embrace a broader ecosystem-based perspective guided by traditional native Hawaiian principles of resource management. The Commission was one of many commenters that urged a broader ecosystem-based approach in its 15 October 2010 letter (see enclosure) during the scoping phase of the management plan review and is pleased to see that approach is being proposed. The Commission fully supports the Sanctuary's plans in this regard and recommends that the Sanctuary implement the ecosystem-based management approach to protect marine resources in the Sanctuary as proposed and described in the Draft Management Plan. While an ecosystem-based approach embodies a broad perspective able to account for complex interrelationships between physical and biological components of the environment, it also must take into account the need for special attention to ecosystem components that are in poor shape. In this regard, the Commission believes the restoration of a healthy monk seal population is currently the most important priority with regard to

ensuring that the marine mammal components of Hawaii's marine ecosystems are able to properly meet their functional roles in maintaining the health of the Sanctuary ecosystem as envisioned in the Sanctuary's mission statement.

Regulations

Section 5.2.2.2 of the approach regulations describes revised regulations governing vessel approaches to humpback whales that would apply to all designation alternatives. Those proposed regulations are consistent with current regulatory language adopted by the National Marine Fisheries Service (NMFS) establishing a 100-yard approach limit to humpback whales in Hawaii (50 CFR §224/103). The Commission notes, however, that the Sanctuary's website also lists whale-watching guidelines[1] that recommend additional measures prudent vessel operators should follow, including procedures for maneuvering vessels away from whales after whale-watching interludes. The proposed regulations do not contain any provisions for when a vessel finds itself within 100 yards of a whale or for how to safely move away in such instances.

Whale-watching vessel operators who follow approach restrictions and stop beyond 100 yards may still find themselves closer than 100 yards if whales happen to move closer to them after the vessel stops. Accordingly, the Commission believes that whale approach regulations should include operational standards for vessel operators who find themselves closer than 100 yards. In such cases, to minimize chances of disturbing or injuring the whale, the Commission believes that vessel operators should either disengage their engines until the whale moves away or veer away from the whale at a slow speed (e.g., less than 7 mi/hr) without sudden changes in course or speed until they are well beyond 100 yards of the whale (e.g., 0.5 mi) recognizing that other unseen whales may be nearby. Therefore, the Commission recommends that the Sanctuary either (1) consult with NMFS to develop additional provisions for the proposed humpback whale approach regulations that set forth actions vessel operators should take when whales approach closer than 100 yards or (2) if such regulatory language cannot be developed before a decision is made on the proposed regulations, that the Sanctuary's Draft Management Plan and the terms of designation be revised to authorize the modification of approach regulations to include such provisions at a later date.

The revised regulations for approaching humpback whales and a new regulation prohibiting the disturbance of cultural and historical resources would apply Sanctuary-wide, under Alternative 3 (the Preferred Alternative). Other new Sanctuary regulations would apply only in selected "special management areas" within the Sanctuary (i.e., Penguin Bank, Maui Nui, and Maunalua Bay) under Alternative 3. Regulations in those areas would prohibit (1) taking and possessing protected marine species (including marine mammals, sea turtles, and seabirds), (2) discharging or depositing materials other than certain specified exceptions (e.g., fish parts, routine vessel discharges, and engine exhaust), (3) altering the seabed except in certain specified situations (e.g., anchoring, maintaining docks or seawalls, installing navigation aids, maintaining harbors, and conducting state or federally permitted aquaculture projects), (4) possessing or using explosives, and (5) introducing exotic species. All of those prohibitions, however, would be included throughout the Sanctuary under Alternative 4. According to the summary comparison of alternatives provided in Table 40 (pages 221 to 225) Sanctuary-wide application would increase protection for Sanctuary resources while generally causing no more than "minimal inconvenience" to Sanctuary users.

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[1] http://hawaiihumpbackwhale.noaa.gov/explore/whale_guidelines.html

In the Commission's view the draft document does not provide an adequate discussion comparing the advantages and disadvantages of Alternatives 3 (the Preferred Alternative) and 4 (Sanctuary-wide application of all considered regulations). In particular, it does not provide a compelling reason or adequate discussion as to why the above measures for special management areas should not be applied Sanctuary-wide given the proposed holistic ecosystem-based management approach. In the case of exotic species, for example, organisms that are introduced and establish themselves outside a special management area could easily spread into those areas. Thus, limiting the restriction for introducing such species only to special management areas does not appear to be an effective management strategy. The Commission recommends that, unless the Draft Management Plan is revised to explain why regulatory measures proposed for special areas should not apply Sanctuary-wide, the Sanctuary adopt Alternative 4 and apply all regulations now proposed only for special management areas (i.e., regulations on taking or possessing protected marine species, discharging materials, altering the seabed, using explosives, and introducing exotic species) throughout the Sanctuary.

Non-regulatory actions and Action Plans

The Draft Management Plan describes 15 Action Plans containing over 250 specific activities to help achieve the Sanctuary's ecosystem-based management goals and objectives. All of those plans and activities are thoughtful, constructive, and well justified. However, they also reflect an ambitious program that will require extensive coordination, prioritization, and funding. To oversee the identified tasks, the Plan indicates that Sanctuary managers will rely on the Sanctuary Advisory Council, formal arrangements for Sanctuary co-management with the state, and collaboration with various Native, volunteer, and educational groups and government agencies. However, mechanisms for coordinating involved groups, particularly federal and state partners retaining authority over programs vital for achieving the Sanctuary's goals, are less clear. Although the Draft Management Plan clearly notes the need for many partnerships and cooperation, it does not seem to include an overarching mechanism for sharing information on ongoing activities, plans, and perspectives and for discussing how Sanctuary efforts and capabilities could be applied most effectively.

To meet this need, the Commission recommends that the Sanctuary expand the Draft Management Plan to include, in either the "Understanding and Managing Species and Habitat" or the "Operational Foundation" Action Plan, provisions for establishing an interagency coordinating committee that would be chaired by the Sanctuary's co-superintendents and include key representatives of other agencies and groups. Participants in such a committee, in addition to the co-chairs, should include, *inter alia,* NMFS, the Fish and Wildlife Service, Coast Guard, Navy, Western Pacific Regional Fishery Management Council, relevant offices of state government, Native Hawaiian community, and University of Hawaii. Such a committee should meet regularly (perhaps twice a year) to review ongoing and planned research and management activities by the various agencies and groups that engage in the conservation of marine life and marine habitats within the Sanctuary and surrounding areas. Such a committee also can serve to identify opportunities for cooperation and partnerships for carrying out relevant research and management initiatives.

The Commission welcomes the opportunity to comment on the Draft Management Plan and Draft Environmental Impact Statement. The Marine Mammal Commission commends the

Sanctuary for its efforts to expand the scope of the Sanctuary's management to improve protection of all ecosystem components. If you or your staff has questions, please let me know.

Sincerely,

Rebecca J. Lent

Rebecca J. Lent, Ph.D.
Executive Director

Enclosure

Reference

Lopez, J., T. Wurth, and C. Littnan. 2015. Report on Hawaiian monk seal survey on Niihau Island, 2014. PIFSC Data Report DR–14–017. National Marine Fisheries Service, Pacific Island Fisheries Science Center, Honolulu, Hawaii. 9 pages.

MARINE MAMMAL COMMISSION

15 October 2010

Ms. Malia Chow
Management Plan Review Coordinator
Hawaiian Islands Humpback Whale National Marine Sanctuary
National Ocean Service
6600 Kalanianaole Highway, Suite 301
Honolulu, HI 96825

Dear Ms. Chow:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Office of National Marine Sanctuaries' 14 July 2010 *Federal Register* notice (75 Fed. Reg. 40759) announcing its intent to review the management plan for the Hawaiian Islands Humpback Whale National Marine Sanctuary. The Marine Mammal Commission commends the Office for initiating this process and offers the following recommendations and comments.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Office of National Marine Sanctuaries develop a new management plan for the Hawaiian Islands Humpback Whale National Marine Sanctuary that expands its purpose and scope from one currently focused on conservation of a single species (i.e., humpback whales) to one with an ecosystem perspective. Specifically, the Commission recommends that the Office of National Marine Sanctuaries modify the new sanctuary management plan to—

- expand its scope to include protecting, conserving, and where possible restoring significant biological components and marine habitats occurring between the shoreline and a seaward boundary generally defined by either the 200-m or 100-fathom bathymetric contour (whichever is judged easier for seafarers using the sanctuary to identify) around all eight main Hawaiian Islands;
- adopt a new name for the sanctuary, such as the Main Hawaiian Islands National Marine Sanctuary, and new vision and mission statements that encompasses an ecosystem-based management approach to protect, conserve, and restore marine life, marine habitat, and ecosystem health using management strategies that balance conflicting or competing uses while complementing existing management programs and measures;
- include a clear statement of intent to develop and implement all sanctuary management actions in close consultation with related programs carried out by federal and state agencies and Native Hawaiian organizations with shared responsibilities for conserving living marine resources in the sanctuary boundaries;
- include provisions for establishing an interagency coordinating committee chaired by the Sanctuary's co-superintendents (from the Office of National Marine Sanctuaries and the Hawaii Department of Land and Natural Resources) and having representatives from the National Marine Fisheries Service, the Coast Guard, the Navy, the Western Pacific Regional

Fishery Management Council, key offices of state government, and the Native Hawaiian community;

- following consultation with the National Marine Fisheries Service, direct particular attention to the need for (1) protecting and promoting the reoccupation of the main Hawaiian Islands by Hawaiian monk seals, (2) reducing risks to humpback whales from entanglement in fishing gear and collisions with vessels, (3) minimizing harassment of spinner dolphins by tourboats, private dolphin-watching vessels, swimmers, and divers, (4) monitoring and assisting with the recovery of the insular stock of false killer whales, and (5) responding to stranded or distressed marine mammals; and
- reserve authority to regulate future activities and development including, but not necessarily limited to, vessel traffic, commercial and recreational fishing, sources of acoustic impact that could injure or kill marine life, and installation of structures whose presence or operation could adversely affect features or resources that the sanctuary is established to protect, including marine mammals.

RATIONALE

The Commission offers the following rationale for its recommendations.

The Sanctuary's Management Scope, Vision, and Goals

The Hawaiian Islands Humpback Whale National Marine Sanctuary was established in 1992 to protect humpback whales and their calving and nursing habitat in waters surrounding the main Hawaiian Islands. Its boundaries include waters from the shoreline out to the 100-fathom (183-m) isobath around the island of Lanai and parts of five other islands (Kauai, Oahu, Molokai, Maui, and Hawaii). The principal sanctuary actions taken to protect humpback whales and their habitat have involved efforts to disentangle whales, support research, and educate the public. The actions taken by the sanctuary over the years have been well placed and have created circumstances allowing growth of Hawaii's humpback whale population since the sanctuary's designation.

Presentations and publications prepared by the sanctuary to solicit comments on the sanctuary's future have discussed the possibility of expanding the sanctuary's management scope. A broader scope might include Hawaiian monk seals, other whales and dolphins, sea turtles, corals, significant habitats, and/or submerged cultural resources. These resources currently face a variety of threats that responsible agencies and parties have not been able to address fully. Broadening the sanctuary's scope to an ecosystem level could increase protection for these resources, is consistent with the purposes and policies of the National Marine Sanctuaries Act, and is entirely consistent with the Administration's new national ocean policy.

Therefore, the Marine Mammal Commission recommends that, in revising the management plan for this sanctuary, the Office of National Marine Sanctuaries expand its scope to include protecting, conserving, and where possible restoring significant biological components and marine habitats occurring between the shoreline and a seaward boundary generally defined by either the

200-m or 100-fathom bathymetric contour (whichever is judged easier for seafarers using the sanctuary to identify) around all of the eight main Hawaiian Islands. In some areas, boundaries might include deeper waters so as to protect representative habitats or species assemblages such as deep-water coral beds. In other areas, a shallower depth contour might be warranted to exclude areas zoned, used, or otherwise set aside for particular purposes, such as commercial harbors or areas used by Native Hawaiians (e.g., nearshore waters off Niihau).

To reflect the broader scope recommended here, the Marine Mammal Commission also recommends that the Office of National Marine Sanctuaries take such steps as needed to rename the sanctuary (e.g., the Main Hawaiian Islands National Marine Sanctuary) and create new vision and mission statements that encompasse an ecosystem-based management approach to protect, conserve, and restore marine life, marine habitat, and ecosystem health using management strategies that balance conflicting or competing uses while complementing existing management programs and measures. For example, the Office may wish to consider statements reading something like the following:

> Vision: To protect, conserve, and, where appropriate and possible, restore the marine life, marine habitat, ecological health, and significant historical relics of the ocean ecosystem that endow the main Hawaiian Islands with a bounty of intrinsic, cultural, economic, recreational, educational, and scientific values.
>
> Mission: Manage the sanctuary in a sustainable manner that respects and balances the needs and rights of all who now enjoy, use, and rely on the sanctuary's benefits; that recognizes and promotes the essential role of partnerships and shared responsibilities of Native Hawaiians, the public, private organizations, and governmental entities with vested interests in their perpetuation; and that preserves undiminished rights and opportunities for all future generations to benefit from and enjoy its blessings.
>
> Specific sanctuary goals might include something such as the following:

- Restore, maintain, and conserve species of endangered, threatened, depleted, and protected wildlife and the biological communities on which they depend
- Restore, maintain, and conserve the ecological health of biological communities and marine habitats
- Promote public awareness, understanding, and support for marine life, marine ecosystems, and related conservation measures
- Where appropriate and possible, involve the public, volunteers, and sanctuary user groups in sanctuary management actions
- Support Native Hawaiian practices consistent with sustainable, long-term protection of marine life and biological communities
- Conduct a seamless management program that coordinates with, complements, and fills gaps in existing federal, state, Native Hawaiian, and private marine conservation programs and initiatives

- Support research and monitoring studies to assess the status of marine species, ecosystem health, and historical relics within the sanctuary and to guide management actions

Interagency Cooperation and Coordination

Currently, virtually all living marine resources within nearshore waters of Hawaii are subject to management authority and conservation measures by various federal, state, local, and Native Hawaiian agencies and organizations. Despite their efforts, significant conservation issues remain unresolved. For example, coral reefs in many areas are dying or being degraded; populations of fish important for commercial and recreational use are being depleted by overfishing; recovery of endangered and threatened species is being impeded by entanglement in fishing gear, collisions with boats, disturbance by vessel traffic and beach-users, ingestion of and entanglement in marine debris, and exposure to diseases introduced by feral and domestic animals; and the integrity of marine habitats is being threatened by various forms of development and use such as the installation of aquaculture facilities, offshore wind farms, and coastal development projects. Often the effectiveness of existing programs to address such issues is limited by staff and funding constraints to conduct research, pursue public outreach, and implement regulatory and enforcement measures. Recognizing the national and international significance of Hawaii's nearshore marine ecosystem, its many endemic species, and its unique position as the world's most remote and isolated tropical reef system, a sanctuary program with an enhanced scope could contribute added resources toward shared conservation objectives.

To be successful, sanctuary managers must ensure that their actions complement and supplement ongoing programs through close partnerships and coordination with other entities. Of particular importance in this regard will be partnerships with the Pacific Islands Regional Office and the Pacific Islands Fisheries Science Center of the National Marine Fisheries Service, the Hawaii Department of Land and Natural Resources, the District Office of the U.S. Coast Guard, and the Native Hawaiian community. The managers of the humpback whale sanctuary have a demonstrated the ability to form effective partnerships with those agencies and groups. The new management plan must emphasize the importance of such partnerships and of conducting all sanctuary management actions using a cooperative, coordinated approach.

Accordingly, the Marine Mammal Commission recommends that the Office of National Marine Sanctuaries revise the new sanctuary management plan to include a clear statement of intent to develop and implement all sanctuary management actions in close consultation with related programs carried out by federal, state, local, and Native Hawaiian agencies and organizations with shared responsibilities for conserving living marine resources within the sanctuary boundaries. To that end, the Marine Mammal Commission also recommends that the Office of National Marine Sanctuaries revise the plan to include provisions for establishing an interagency coordinating committee chaired by the Sanctuary's co-superintendents (from the Office of National Marine Sanctuaries and the Hawaii Department of Land and Natural Resources) and including representatives from the National Marine Fisheries Service, the Coast Guard, the Navy, the Western Pacific Regional Fishery Management Council, key offices of state government, and the Native

Hawaiian community. Such a committee could meet regularly (perhaps quarterly) to review ongoing and planned research and management activities within their respective agencies that bear on the conservation of marine life within sanctuary boundaries and identify or refine agency roles and partnerships for carrying out management initiatives.

Management Activities

The Commission's understanding is that the sanctuary management plan calls for developing a series of action plans to identify those activities that will form the core of sanctuary work over the next 5 to 10 years, or prior to the next management plan review. To reflect the broad management scope recommended here, the Commission believes that it would be appropriate to include separate action plans for major species groups, such as marine mammals, sea turtles, seabirds, and corals, as well as action plans for overarching initiatives relating to multiple species or species groups. Action plans for species groups could then identify strategies and measures to help conserve species of special management concern, while overarching topics, such as assisting with responses to stranded or distressed marine mammals or sea turtles, developing broad public outreach and education activities, and promoting and maintaining cooperation among key agency and group partners, also might be addressed under separate action plans. With regard to marine mammals, the Marine Mammal Commission recommends that the Office of National Marine Sanctuaries consult with the National Marine Fisheries Service and, based on that consultation, revise the management plan to direct particular attention to the need for (1) protecting and promoting the reoccupation of the main Hawaiian Islands by Hawaiian monk seals, (2) reducing risks to humpback whales from entanglement in fishing gear and collisions with vessels, (3) minimizing harassment of spinner dolphins by tour boats, private vessels used for dolphin-watching, swimmers, and divers, (4) monitoring and assisting with the recovery of the insular stock of false killer whales, and (5) responding to stranded or distressed marine mammals. For the individual marine mammal species of concern, the Commission suggests that marine sanctuary staff consult with the National Marine Fisheries Service on proposed efforts to assist with or assume a lead role in the following research and management areas.

Hawaiian monk seals: Develop new programs to (a) fund or support studies to assess and monitor population trends, prey preferences and foraging habitats, and/or at-sea habitat-use patterns; (b) carry out public outreach and education programs targeting grade school children, recreational fishermen, swimmers and divers, beach-goers, and tourists; (c) coordinate volunteer networks on one or more islands to respond to seals that haul out on crowded beaches and need protection from disturbance by people; and (d) respond to distressed seals, such as abandoned pups, or seals that are sick, injured, hooked, or entangled in fishing nets or debris.

Humpback whales: Continue ongoing sanctuary programs to (a) support research on the status of the population, (b) disentangle whales caught in fishing gear, (c) promote international collaboration on protecting whales in different portions of their range; and (d) implement public outreach and education programs on whales and measures to minimize impacts associated with whale watching and vessel traffic. In addition, the sanctuary should develop regulations limiting

vessel speeds in specific areas where collision risks with whales, particularly cow-calf pairs, are greatest.

Spinner dolphins: Develop new programs to (a) fund or support research and monitoring studies to assess the abundance and trends of spinner dolphin populations and the impact of dolphin-watching tour vessels, private boats, and divers on spinner dolphin habitat-use patterns, (b) conduct public outreach and education programs on spinner dolphins and needed protection measures, (c) develop a mandatory permit program with rules of conduct for guided dolphin-watching tour operators, and (d) if ongoing studies demonstrate that closing areas of bays is a useful approach for reducing sources of disturbance for resting dolphins, develop regulations to establish safe, undisturbed spinner dolphin resting areas.

False killer whales: Monitoring the distribution, abundance, and trend of the Hawaii insular population of false killer whales and interactions between members of that population and near-shore fisheries, such as the shoreline and kaka line fisheries.

The Commission also believes that new regulations are needed to limit vessel speeds, both to protect whales and to ensure human safety. Such limits are justified by the significant increase in vessel/whale collisions and the fact that this is one of the world's largest concentrations of breeding and calving humpback whales. Speed restrictions may not be necessary throughout the sanctuary but could be focused on areas where collision risks are greatest and affect the most vulnerable whales. Mothers and calves are most vulnerable to vessel collisions because they spend greater amounts of time at or close to the surface. Mothers and calves also are arguably the most crucial component of the population, given their essential role in reproduction and population growth. Available information suggests that mother-calf pairs occur most often relatively close to shore in areas protected from wind and wave action (Smultea 1994, Ersts and Rosenbaum 2003). Nearshore areas also have higher collision risks due to higher levels of vessel traffic. For those reasons, speed regulations would be most appropriate in waters within two or three miles of shore or the 100-fathom contour, whichever is closest, along much of the southern coast of Maui and the northwestern coast of the island of Hawaii.

With regard to spinner dolphins, the Commission understands that the National Marine Fisheries Service is proceeding with a study to determine the effects of no-entry areas in certain coastal bays of Hawaii on spinner dolphin habitat-use patterns and abundance. If the results conclude that closing portions of bays to vessel traffic and swimmers is useful for preventing harassment or improving spinner dolphin survivorship or reproduction rates, then the sanctuary may be able to play a role in protecting them under a new management plan. For example, the sanctuary could consider permanent closure of areas deemed important for spinner dolphins or approach limits for boats, divers, and swimmers.

Finally, the sanctuary may be able to play an important role in addressing certain activities that have a clear potential for adversely affecting marine species and biological communities in waters surrounding the main Hawaiian Islands. For example, commercial and recreational fishing

can incidentally take protected species, vessel traffic can kill, injure, or disturb individual animals, powerful sonar devices may injure or kill marine mammals and other marine species, and the installation of facilities or structures such as aquaculture pens or waste outfalls can preempt or modify habitat for marine life or introduce sources of pollution or disturbance to marine life. In many cases, the need or justification for regulatory measures may not be immediately apparent or may arise only after some future development proposal is made. In other cases, a need may be apparent, but further study is required to determine the most effective measures. For such activities where specific regulatory provisions may be needed in the foreseeable future but cannot be identified or developed as part of the ongoing management plan review, sanctuary managers should have authority to implement regulations as new information develops.

The Commission's understanding is that sanctuary management policies require that all activities that may be subject to sanctuary regulation under an adopted plan, including those for which no regulatory action may be contemplated or planned at the time a revised management plan is adopted, must be identified in a "sanctuary designation document" developed as part of the sanctuary management plan. Recognizing that sanctuary management plans may remain in effect for five or more years, the Commission believes that the management plan and associated sanctuary designation document for this sanctuary should preserve an ability to adopt timely regulatory measures for activities that reasonably could be anticipated to pose a significant risk to sanctuary resources. In this regard, the Marine Mammal Commission recommends that the Office of National Marine Sanctuaries revise the management plan and associated designation document to reserve authority to regulate future activities and development including, but not necessarily limited to, vessel traffic, commercial and recreational fishing, sources of acoustic impact that could injure or kill marine life, and installation of structures whose presence or operation could adversely affect features or resources that the sanctuary is established to protect, including marine mammals.

I hope these recommendations and comments are helpful. Please contact me if you have any questions about them.

Sincerely,

Timothy J. Ragen

Timothy J. Ragen, Ph.D.
Executive Director

Literature Cited

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