Jolie Harrison, Chief, Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
Submitted via: ITP.Laws@noaa.gov

Re: Request for Letters of Authorization for takes by the Pacific Islands Fishery Science Center

January 6, 2016

Dear Ms. Harrison,

On behalf of The Humane Society of the United States and Whale and Dolphin Conservation, we are submitting these comments on the Pacific Islands Fishery Science Center's (PIFSC or the Center's) application for Letters Of Authorization to take small numbers of marine mammals incidental to conducting their fisheries research, over the course of five years from the date of permit issuance (the LOA). 80 Fed. Reg. 75997 (Dec. 7, 2015). We have previously submitted comments on the Draft Programmatic Environmental Assessment (DPEA) for these activities. The DPEA contained an appendix, Appendix C, with almost identical information to that found in this application[1] and, while our comments here are more specific to the permit request, we incorporate those comments by reference and attached.

[1] *See* Appendix C in: "Request for Rulemaking and Letters of Authorization Under Section 101(a)(5)(A) of the Marine Mammal Protection Act for the Take of Marine Mammals Incidental to Fisheries and Ecosystem Research Activities conducted by Pacific Islands Fisheries Science Center Within the Hawaiian Archipelago, Mariana Archipelago, American Samoan Archipelago , and Western and Central Pacific Research Areas." November 2015. At: http://www.pifsc.noaa.gov/nepa/pifsc_fisheries_and_ecosystem_research_pea_with_appendices-nov_2015-public_draft.pdf

As did our comments on the DPEA, unless otherwise noted, we are confining the scope of our comments here to impacts of the proposed research on marine mammals. Some of our comments below reiterate our concerns with the request for an LOA that was submitted as part of the DPEA. In general, we find the Center has used the most recent information from National Marine Fisheries Service (NMFS) stock assessments. Much of the information that is contained in the LOA request is similar to information provided in the more lengthy DPEA analysis (e.g., species accounts, fishery descriptions, etc.).

We offer comments here in several broad areas of the PIFSC request.

Acoustic Impacts

With regard to acoustic impacts, the zone of responsiveness[2] may be larger than is considered, given that there are publications on observations of behavioral changes in humpback whales (including ceasing vocalizing—a clearly important component of mating and breeding in the Hawaiian Islands). In the Northeastern U.S., impacts from intense acoustic surveys for fish abundance and density were shown to have a greater range of impact on behaviors than had been considered by the agency.[3] While we understand from information provided in the DPEA and the LOA request that the sound sources that the PIFSC states are being (or will be) used are apparently outside of the hearing range of baleen whales, similar errors of impact analysis may be true for other species that *do* hear sounds within the frequency range being used. NMFS should be precautionary in the DPEA and LOA with regard to consideration of the size of the zones in which behavioral changes are projected to occur under the modelling used and the various tables projecting total Level B takes of marine mammals.

With regard to calculating density estimates (and thus impacts), this request acknowledges that a "primary limitation[ ] to traditional estimates of acoustic exposure is the assumption that animals are uniformly distributed in time and space across very large geographical areas, such as those being considered here," although NMFS goes on to state, on the other hand, many "marine species are highly heterogeneous in terms of their spatial distribution, largely as a result of species-typical utilization of heterogeneous ecosystem features."[4] We don't disagree with this statement, but the modeling may, for example, either over- or underestimate exposure depending on when and where the research is being conducted and in what part of the range around the islands in the Main Hawaiian Research Area a species may likely be more or less concentrated at that specific time. We note that, although Baird is repeatedly cited relating to the presence of species of marine mammals, we do not see mention that he

[2] *See* LOA, at 81.

[3] Risch D, Corkeron PJ, Ellison WT, Van Parijs SM (2012) Changes in Humpback Whale Song Occurrence in Response to an Acoustic Source 200 km Away. PLoS ONE 7(1). At: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0029741 (where the authors found that social and feeding-related vocalizations were significantly reduced concurrent with transmissions of an Ocean Acoustic Waveguide Remote Sensing (OAWRS) experiment approximately 200 km away during an 11 day period in autumn 2006).

[4] LOA, at 97.

also found seasonal variations in habitat use and use of some islands within the Archipelago.[5] This finding should be included and considered in analyzing the likely impacts that will vary depending on the scheduling of the proposed research activity, and any take authorization in the LOA should take this into account.

Non-precautionary Request for Authorization of Takes

With regard to requesting takes of humpback whales, PIFSC is requesting a single Level A take each for humpback and sperm whales as a result of its research-related longline fishing because these species have been seriously injured or killed in the past in this type of gear even though not as a result of the Center's research. Although this is a somewhat precautionary approach, we note that in the most recent final stock assessment report for Central North Pacific humpbacks—which winter in waters of the Hawaiian Islands— three humpbacks are documented to have been taken in trawl fisheries in their summer range off Alaska between 2008-2012.[6] Yet no similar takes are requested for research-related trawl gear in this permit application.[7] The PIFSC should either request takes for this gear type as well or it must explain why Level A takes for humpbacks are requested for longline gear but not in trawl gear.

Given the admitted uncertainties over bottlenose dolphin stock structure in the region and the acknowledgement that this species will interact with hook and line gear, it would be more precautionary for the PIFSC to request takes (as it did for spinner dolphins) even though none are anticipated rather than simply state it will "document potential depredation of its bottomfish research gear (catch loss) in the future, and increase monitoring efforts when catch loss becomes apparent, in an effort to better understand the potential risks of hooking to bottlenose dolphins and other marine mammals."[8] Indeed, the agency acknowledges "[b]ottlenose dolphins have been identified as the primary species associated with depredation of catch in the bottomfish fishery and they appear to be adept at pulling hooked fish from the gear without breaking the line or taking hooks off the line (Kobayashi and Kawamoto 1994). It is not known if these interactions result in injury, serious injury, or mortality of bottlenose dolphins (Caretta et al.2015)."[9] This lends further weight to the argument that, to be precautionary, the Center should request one or more takes for this species over the 5-year life of the permit.

Some of the references need to be updated. Even as the Center acknowledges in one species account that "gear types used in Hawai'i fisheries are responsible for marine mammal mortality and serious

[5] Baird, R.W., D.L. Webster, J.M. Aschettino, G.S. Schorr, and D.J. McSweeney. 2013. Odontocete Cetaceans Around the Main Hawaiian Islands: Habitat Use and Relative Abundance from Small-Boat Sighting Surveys. Aquatic Mammals 39(3): 253-269. At: http://www.cascadiaresearch.org/Hawaii/Bairdetal2013_AM.pdf.
[6] Allen, B and R. Angliss. 2015. Central North Pacific Humpback in U.S. Pacific Marine Mammal Stock Assessments: 2014. NOAA-TM-AFSC-301 At:
http://www.nmfs.noaa.gov/pr/sars/pdf/pacific_sars_2014_final_noaa_swfsc_tm_549.pdf.
[7] *See* LOA, Table 6 where no takes are projected/requested for this species in this gear type.
[8] LOA, at 4-39.
[9] LOA, at 87.

injury in other fisheries throughout U.S. waters," it also states "[n]o estimates of human-caused mortality or serious injury are currently available for nearshore hook and line or gillnet fisheries because these fisheries are not observed or monitored for protected species bycatch."[10] This verbiage is repeated in a number of the species accounts. Consideration should be given both to increased monitoring of these fisheries and to requesting takes by virtue of analogy to other similar fisheries in which takes are documented. Nitta and Henderson (1993) are cited in a number of species account for documentation of hook and line injuries. While this provides some justification for the argument that takes should be requested, we also must point out that this is a publication more than 20 years out of date. There are more recent indications that takes are occurring including the NMFS Stock Assessment Reports (SARs), observer logs and others,[11] not all of which appear captured in the LOA or DPEA discussions.

Mitigation Measures

We incorporate by reference our comments on the DPEA that raise concerns with the "Preferred Alternative" outlined in the DPEA and for which take authorization is being sought. The table in the LOA outlining "Requested number of potential M&SI/Level A marine mammal takes in PIFSC fisheries and ecosystem research (all areas combined)" (which is designated table 6.1 in the LOA) is similar to DPEA table 4.2-7, though the structure and information contained in the DPEA table is more complete since it provides information on proposed takes relative to the PBR. This information should be included in the LOA table as well.

We note, however, that DPEA table 4.2-7 sums proposed takes under the status quo rather than the preferred alternative. The identical level of take provided under the *status quo* alternative under DPEA is proposed in Table 6.1 of the LOA, essentially admitting that any newly suggested mitigation measures under the Preferred Alternative (the action for which an LOA is being sought) will have no ameliorating effect over the status quo. Indeed the number of takes requested in Table 6.1 of the LOA is identical. In fact, in the executive summary in the DPEA, the Center stipulates that the "Preferred Alternative includes the same suite of mitigation measures as the Status Quo Alternative to reduce the risk of adverse interactions with protected species."

In addition, under the Preferred Alternative, PIFSC would make changes to its gear configurations for instrument deployment, specifically altering the ratio of sinking and floating lines to reduce the risk of entanglements in lines at the surface of the water. PIFSC would also establish a new program for

[10] LOA, at 48.

[11] See for example, Forney and Antonelis, undated: "Current Methods for Determining Serious Injury: HAWAII. at http://www.nmfs.noaa.gov/pr/interactions/injury/pdfs/day1_1040_forney-antonelis.pdf which documents takes of monk seals in shorecasting, nearshore lay nets and also the hooking of a variety of cetaceans in longline gear with takes hrough 2004. See also. Caretta, et al., 2014. "Sources of human-related injury and mortality for U.S. Pacific west coast marine mammal stock assessments, 2008-2012." NOAA Technical Memorandum NMFS-NOAA-TM-NMFS-SWFSC-533. At: https://swfsc.noaa.gov/publications/TM/SWFSC/NOAA-TM-NMFS-SWFSC-533.pdf Which has an abbreviated listing in tables 1-6, with number of mortalities sorted by species or source, including research-related takes.

enhanced protected species training for its scientists and crew that would likely be involved in protected species monitoring or decisions related to avoidance of protected species interactions.[12] Again, we point out that, since the mitigation will apparently make no difference to the level of serious injury and mortality that will result from the Preferred Alternative, the agency has apparently added mitigation measures to this preferred suite of research (e.g., different gear configuration for instrument deployment, different hand ratios, etc.) that are of no use other than to stipulate on paper a few additional cosmetic measures so that the list appears different than the suite in the status quo. This leaves us with little confidence in the Center's analysis of impacts of takes and/or the seriousness of its consideration of the need for mitigation of its research using gear known to interact with marine mammals in commercial fisheries.

We also reiterate our concern that the suite of mitigation proposed in Alternative 3 in the DPEA (which is *not* proposed in the permit application) contained some "poison pill" measures designed to make it appear unfeasible (e.g., prohibiting night research). However, Alternative 3 also contained measures that might conceivably reduce the likelihood or severity of interactions, including using passive acoustic monitoring to detect marine mammals under conditions of limited visibility, use of night vision goggles, attaching "streamers" to longlines to deter bird predation, using protected species observers, requiring additional visual above-water or underwater monitoring to detect marine mammals, etc.; all of which are reasonable mitigation measures that would not halt or adversely impact the ability of the agency to conduct its research. These measures could be (and we believe should be) added to the suite of mitigation measures already in use to provide the added benefit of reducing interactions with marine mammals.

We note that the agency states in the DPEA that some of the rejected "mitigation measures would likely be considered during the MMPA rulemaking process and/or ESA section 7 consultation and are therefore considered in this DPEA under the Modified Research Alternative."[13] It is not clear whether this was intended to assure reviewers that these measures are likely to be adopted under separate review processes or that they would simply be included as possible mitigation in these other potential reviews along with non-preferred alternatives but again likely to be rejected under these separate review processes. If it is the former, we don't understand why the agency would not consider adopting them at this time; and if it is the latter then this is a rather disingenuous or cynical admission.

Conclusion

Until such time as the PIFSC includes additional mitigation and a more realistic assessment of impacts is

[12] DPEA at xvii. Available at: http://www.pifsc.noaa.gov/nepa/pifsc_fisheries_and_ecosystem_research_pea_with_appendices-nov_2015-public_draft.pdf

[13] DPEA, at xviii.

made, we recommend delay or denial of the permit application.

Sincerely,

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Attachment: Comments on DPEA submitted to PIFSC