10 July 2014

Ms. Alicia Van Atta
Assistant Regional Administrator
Protected Resources Division
Pacific Region, NMFS
1845 Wasp Blvd, Building 176
Honolulu, HI 86818

Dear Ms. Van Atta:

The Marine Mammal Commission (Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service (NMFS) *Federal Register* notice (79 FR 33727) requesting comments on a proposed Endangered Species Act incidental harassment authorization (IHA) to allow the negligible take of Hawaiian sperm whales, central North Pacific humpback whales, and main Hawaiian Islands (MHI) insular false killer whales incidental to fishing by the Hawaii deep-set and shallow-set longline fisheries. The Commission offers the following comments and recommendations.

BACKGROUND

The *Federal Register* notice indicates that NMFS has determined that the expected incidental take from the Hawaiian population of sperm whales, the central North Pacific population of humpback whales, and MHI insular population of false killer whales in the Hawaiian deep-set and shallow-set longline fisheries meets criteria for issuing an IHA under provisions of the Endangered Species Act. To issue an IHA for commercial fisheries known to take endangered species, NMFS must determine that (1) a recovery plan has been or is being prepared for the species or population under the Endangered Species Act, (2) a take reduction plan and monitoring program have been implemented according to provisions of the Marine Mammal Protection Act, and (3) incidental take will cause no more than a negligible impact on the population. A recovery plan, a take reduction plan, and monitoring programs have been or are being developed for all three populations.

To determine if the take is negligible, NMFS must find that the take level meets one of four criteria. The notice states that the sperm whale population meets Criterion 1 (i.e., total mortality and serious injury or "M&SI" from all human-related activities is less than 10 percent of the population's Potential Biological Removal level or "PBR"); whereas the humpback whale and false killer whale populations meet Criterion 3 (i.e., M&SI in the relevant fisheries is more than 10 percent of PBR but less than PBR and the population is stable or increasing).

ANALYSES AND RECOMMENDATIONS

Hawaiian Sperm Whales: The *Federal Register* notice indicates that the most recent estimate of PBR for the Hawaiian sperm whale is 10.2 whales per year and that M&SI for this population from all human-related causes is estimated at 0.7 whales per year. This is 6.89 percent of PBR and therefore below 10 percent of PBR. The Commission has no reason to believe that human-related

M&SI for this population of sperm whales exceeds 10 percent of PBR and therefore agrees with the NMFS that, according to Criterion 1, a negligible impact determination is warranted for Hawaiian sperm whales.

Central North Pacific Humpback Whales: The *Federal Register* notice indicates that the incidental take of central North Pacific humpback whale in commercial fisheries is more than 10 percent of PBR but less than PBR and this population is increasing. Specifically NMFS notes that PBR currently is calculated to be 61.2 whales per year and that M&SI due to commercial fisheries is 9.35 whales per year or 15.3 percent of PBR. The most recent analyses of population trends indicate that the population is increasing at 7 percent per year. Although the Commission believes that the total fisheries-related M&SI may exceed 9.35 whales per year, it has no reason to believe that it would exceed PBR. It also believes there is strong evidence that this population is increasing. The Commission therefore agrees with NMFS that according to Criterion 3, a negligible impact determination is warranted for the central North Pacific population of humpback whales.

Main Hawaiian Islands False Killer Whales: The *Federal Register* notice states that the best available estimate of total commercial fisheries-related M&SI for the MHI insular population of false killer whales is 0.1 whales per year, which is more than 10 percent of PBR but below the calculated PBR of 0.3 whales per year. With regard to population trend, the notice states that the current trajectory is unknown. Various uncertainties in estimating M&SI (e.g., an overlapping range with the Hawaiian pelagic population of false killer whales and the observed take of "blackfish" that could have been either false killer whales or pilot whales) are reviewed in the notice. The notice also states that results of a recent modeling exercise by McCracken (2014) predict future M&SI for this population will remain below PBR based on expected levels of fishing effort. Based on that information, the notice advised that NMFS has concluded that available information on the MHI population of false killer whales meets the standards under Criterion 3.

The Commission does not believe that the referenced information is adequate to conclude that the MHI insular population of false killer whales meets Criterion 3. First, it does not appear that NMFS has considered recent information indicating that interactions between fisheries and this population may be higher than the 0.1 rate cited in the notice and current stock assessment reports (Carretta et al. 2013). In particular, information presented earlier this year by Dr. Robin Baird to the Pacific Scientific Review Group at its annual meeting (PSRG document PSRG-2014-15) indicates that interactions between fisheries and MHI insular false killer whales may be substantially higher than available observer data indicate and are significantly higher than interactions with other Hawaiian false killer whale populations. Five fish hooks, including at least three that did not originate from the longline fishery, were recovered from a dead stranded MHI insular false killer whale in October 2013 (PSRG-2014-15), indicating that interactions with non-longline fisheries are occurring. Baird reported that more than seven percent of distinctively identified MHI insular false killer whales had dorsal fin disfigurements consistent with fisheries interactions as opposed to approximately one percent of individuals showing such marks in the pelagic population. Although such disfigurements would not be considered M&SI by themselves, and it is not clear precisely which fisheries were involved, their greater occurrence suggests that interactions that could cause M&SI also occur more frequently in the MHI insular population. For a negligible impact determination under Criterion 3, NMFS must consider the uncertainties in such factors as fisheries-related mortalities. For a population whose PBR is less than one per year and where a single take would result in exceeding PBR, the Commission believes that this level of uncertainty with regard to

potential M&SI should be grounds for withholding approval of an IHA. Baird also found that all individuals of known sex with injuries consistent with fishery interactions were females. If M&SI of false killer whales due to fishing also disproportionally affects reproductive females, effects on population growth could be greater than has been considered to date. It is not clear whether this information was considered in the negligible impact determination and referenced modeling study by McCracken.

In addition, the Commission is concerned that the necessary finding under Criterion 3 with regard to population trend (i.e., that the population is stable or increasing) is not supported. The notice states that based on available information, the population trend for MHI insular false killer whales is currently unknown. The current Stock Assessment Report for MHI false killer whales also states that the population may have been declining between 1989 and 2007 (Baird 2009) and that a more recent population analysis (Oleson et al. 2010) concluded that there was a 20 percent chance that the population could decline to a quasi-extinction level of 20 animals over the next 75 years. No information is provided in the notice or most recent population assessment report to indicate that the current population size is "stable or increasing" as required under Criterion 3.

Based on information reviewed in the *Federal Register* notice stating that the trend in the MHI insular population is unknown and the recent findings cited above indicating that interactions with unknown fisheries possibly including longline fisheries may be occurring more frequently than previously thought, the Marine Mammal Commission recommends that NMFS revise the draft negligible impact determination for the proposed Incidental Harassment Authorization to note that information is not sufficient to conclude with reasonable certainty that mortality and serious injury of main Hawaiian Island insular false killer whales in the Hawaiian deep-set and shallow-set longline fisheries, combined with other human sources of M&SI, will have a negligible impact on that population. The Commission also recommends that NMFS consult with the State of Hawaii to determine whether and how an observer program might be initiated to begin collecting data on interactions with those fisheries in State waters that are most likely to kill or seriously injure false killer whales in the main Hawaiian Islands insular population

If you or your staff have any questions on the Commission's comments and recommendations, please let me know. Thank you for the opportunity to review this incidental harassment authorization.

Sincerely,

Rebecca J. Lent, Ph.D.
Executive Director

References:

Baird, R.W., S.D. Mahaffy, A.M. Gorgone, T. Cullins, D.J. McSweeney, and D.L. Webster. 2014. False killer whales and fisheries interactions in Hawaiian waters: variation between populations and social groups. PSRG-2014-15.

Baird, R.W. 2009. A review of false killer whales in Hawaiian waters: biology, status, and risk factors. Report prepared for the U.S. Marine Mammal Commission under Order No. E40475499, December 23, 2009. 40p.

Carretta, J.V., E. Oleson, D.W. Weller, A.R. Lang, K.A. Forney, J. Baker, B. Hanson, K. Martien, M.M. Muto, M.S. Lowry, J. Barlow, D. Lynch, L. Carswell, R. L. Brownell Jr., D. K. Mattila, and M.C. Hill. 2013. U.S. Pacific Marine Mammal Stock Assessments: 2012. U.S. Department of Commerce, NOAA Technical Memorandum, NMFS-SWFSC-504. 378 p.

Oleson, E.M., C.H. Boggs, K.A. Forney, M.B. Hanson, D.R. Kobayashi, B.L. Taylor, P.R. Wade, and G.M. Ylitalo. 2010. Status Review of Hawaiian Insular False Killer Whales (Pseudorca crassidens) under the Endangered Species Act. U.S Department of Commerce, NOAA Tech. Memo., NOAA-TM-NMFS-PIFSC-22. 140 p.+ Appendices.