31 December 2009

Mr. P. Michael Payne, Chief Permits, Conservation, and Education Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910

Re: Permit Application Nos. 14682 (Whitlow Au, Ph.D.); 13846 (Jim Darling, Ph.D.);

14451 (Joseph Mobley, Jr.); 14585 (Adam Pack, Ph.D.); 14599 (Fred A. Sharpe, Ph.D.); 14122 (Janice Straley); 14296 (Briana Witteveen, Ph.D.); 14353 (Ann Zoidis);

Request for Amendment, Permit No. 10018 (Rachel Cartwright, Ph.D.)

### Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit applications with reference to the goals, policies, and requirements of the Marine Mammal Protection Act. The applicants request authorization to take North Pacific humpback whales and various other species of cetaceans for purposes of scientific research. The Commission provides the following recommendations and rationale.

#### RECOMMENDATIONS

<u>The Marine Mammal Commission recommends</u> that the National Marine Fisheries Service—

- defer issuing the requested permits until it has completed an environmental assessment or an
  environmental impact statement under the National Environmental Policy Act and after
  providing the Commission and the public an opportunity to review and comment on the
  draft document;
- defer issuing the requested authorizations to conduct research on North Pacific right whales
  until it has completed the necessary analysis under the National Environmental Policy Act or
  has provided an adequate justification for not doing so; and
- ensure that the proposed research has been reviewed and approved by each applicant's Institutional Animal Care and Use Committee.

Upon resolution of those issues, <u>the Marine Mammal Commission recommends</u> that the National Marine Fisheries Service issue the requested permits provided that the Service—

- is satisfied that the applicant has provided sufficient justification for tagging humpback whale calves and mothers accompanied by calves on the breeding grounds;
- take steps to ensure that the applicants consistently use the correct approach for describing the numbers of animals for which taking authority is being sought under the permits,

- including clearly specifying the numbers of animals to be taken and the number and kinds of "takes" being requested per animal; and
- take steps to ensure that activities to be conducted under these permits and those of other permit holders who might be carrying out research on the same species in the same areas are coordinated and, as possible, data and samples are shared, to avoid unnecessarily duplicative research and unnecessary disturbance.

#### **RATIONALE**

#### **General Permit Issues**

#### National Environmental Policy Act

In its Federal Register notice (74 Fed. Reg. 58243), the Service states that it is preparing an environmental assessment to examine whether significant environmental impacts could result from issuance of the proposed scientific research permits and permit amendment (e.g., whether the proposed research, in combination with other factors, could result in adverse cumulative impacts on humpback whales and other cetacean species such as beaked whales, sperm whales, killer whales, etc.). Section 216.33(d)(iv) of the Service's permit regulations states that "the notice of receipt of an application in the Federal Register will include a statement that an initial determination has been made that the activity proposed is categorically excluded from the requirement to prepare an EA or EIS, that an EA was prepared resulting in a finding of no significant impact, or that a final EIS has been prepared and is available for review." [Emphasis added.] By publishing the notice of availability for these permit applications prior to preparing an environmental assessment or environmental impact statement, the Service risks running afoul of the explicit timing requirements for reviewing and taking action on permit applications set forth in section 104(d)(5) of the Marine Mammal Protection Act and its implementing regulations. The court, in *Jones* v. *Gordon*, also provided guidance on reconciling the timing requirements under the two Acts. In accordance with those regulations and that guidance, the Marine Mammal Commission recommends that the National Marine Fisheries Service defer issuing the requested permits and permit amendment until it has completed an environmental assessment or an environmental impact statement under the National Environmental Policy Act and after providing the Commission and the public an opportunity to review and comment on the draft document.

# North Pacific Right Whale

Several of the applicants propose to conduct research on the North Pacific right whale. The Service has previously recognized the need for an analysis under the National Environmental Policy Act of the cumulative effects of research on the right whale, including what are now recognized as two separate species, one in the North Atlantic and one in the North Pacific. The lack of such an analysis has become a significant impediment to research on the North Atlantic right whale and could become an impediment to research on the North Pacific right whale as well. If the Service does not resolve this problem soon, the likely result will be a major disruption of research for both

species. To avoid such a situation, it is imperative that the Service complete its analysis for the North Atlantic right whale. It is also essential that the Service either complete the planned analysis for the North Pacific right whale or explain on the record why doing so is not necessary. In the interim, the Marine Mammal Commission must recommend that the National Marine Fisheries Service defer issuing the requested authorizations to conduct research on North Pacific right whales until it has completed the necessary analysis under the National Environmental Policy Act or has provided an adequate justification for not doing so.

#### Institutional Animal Care and Use Committees

In numerous letters in the recent past, the Commission has emphasized the importance of ensuring compliance with the Institutional Animal Care and Use Committee requirements of the Animal Welfare Act and its implementing regulations. The Service has concurred with the need to do so and has indicated that, effective 1 January 2010, it will consider as incomplete any application for a research permit that fails to provide evidence of the required review. The Commission supports this approach. However, the same requirements should apply to those applications currently under consideration by the Service. With that in mind, the Marine Mammal Commission recommends that before issuing the requested permits, the National Marine Fisheries Service ensure that any proposed research that involves invasive procedures or that could harm or materially alter the behavior of the animals being studied has been reviewed and approved by each applicant's Institutional Animal Care and Use Committee.

#### Activities Involving Mother/Calf Pairs

As noted in the past, the Commission believes that tagging calves and mothers with calves can be justified for certain purposes. However, such activities pose potentially significant risks that must be weighed against the likely benefits of the information to be gained. With respect to endangered and threatened species, researchers should provide a well-defined experimental design and a detailed discussion of how data obtained from proposed tagging activities would be used in the development of conservation and management strategies. Such information is particularly important if applicants are requesting authorization to biopsy sample or tag young calves and/or mothers accompanied by young calves, such as humpback whales on the breeding grounds in Hawaii. Therefore, the Marine Mammal Commission recommends that, prior to issuing any such authorization, the National Marine Fisheries Service is satisfied that the applicant has provided sufficient justification for tagging calves and/or mothers accompanied by young calves. Specifically, the Service should ensure that the applicant has (1) evaluated the potential value of the information that might be obtained, (2) demonstrated the necessity of tagging to answer relevant scientific and management questions, (3) developed measures to minimize or prevent any unintended and adverse long-term impacts, and (4) taken measures to investigate potential impacts, both short- and longterm, resulting from the activities. This information is needed to evaluate permit applications, is relevant for management purposes (i.e., for determining if the research is reasonably justified), and is essential for scientific purposes (i.e., for interpreting the data collected).

Some applicants are seeking authorization to tag calves as young as two weeks of age and/or females accompanied by such calves. The Service should review these requests carefully to ensure that the applicant has provided adequate justification for tagging these animals. Further, if authorization to tag young calves and mothers of young calves is issued, the Service should establish clear criteria for making the applicable age determinations (e.g., if the tagging of calves older than one month is authorized, how will researchers in the field determine that the calves they approach are in fact that old). In addition, the Service should specify the type(s) of post-tagging monitoring that permit holders will be expected to conduct to determine the impact of such tagging. The Commission also believes that the Service should consider whether the proposed tagging might compromise the investigations that would be conducted (e.g., might interfere with the interactions being studied or affect the animals' responses to acoustic or other stimuli to which they are exposed).

### Takes of Individual Animals versus Takes per Individual Animal

Some applications are not sufficiently explicit in describing the levels of take that may be involved in the proposed research activities. For example, an application may request permission to tag 30 animals, but it is not clear if that 30 includes unsuccessful attempts at tagging. If not, then considerably more than 30 animals could be taken during the course of a study involving tagging. When that is the case, the number of animals that could be taken during unsuccessful tagging efforts should be included in the application as a separate category. The Marine Mammal Commission recommends that the National Marine Fisheries Service take steps to ensure that the applicants consistently use the correct approach for describing the numbers of animals for which taking authority is being sought under the permits. To that end, the Service should take steps to ensure that these and future applications clearly specify the numbers of animals to be taken and the manner in which they will be taken, including the number and kinds of "takes" being requested per animal.

#### Coordination of Research

The Commission notes that several researchers, including the current applicants, are authorized to conduct research on North Pacific humpback whales in waters around Hawaii and Alaska. The Marine Mammal Commission recommends that the National Marine Fisheries Service take steps to ensure that activities to be conducted under these permits and those of other permit holders who might be carrying out research on the same species in the same areas are coordinated and, as possible, data and samples shared, to avoid unnecessarily duplicative research and unnecessary disturbance. In the past, the Service convened annual coordination meetings for permit holders carrying out research on humpback whales and other cetacean species in Hawaiian waters. It is unclear whether the Service's Pacific Islands Regional Office has continued this practice. If not, the Commission encourages the Service to resume holding such meetings in order to facilitate research coordination, data sharing, etc., among the research community, the Navy, and the National Marine Fisheries Service.

#### Publication of Research Results

The Marine Mammal Protection Act recognizes the value of not just collecting information about marine mammals, but of conducting peer review on and publishing the results of such studies. In fact, one criterion for determining whether scientific research on marine mammals is "bona fide" is linked to publication in a refereed scientific journal. The Commission notes that these applications request authorizations for five-year periods, which is appropriate given the long-term nature of these studies. The Commission is concerned, however, that the results of much of the past research on humpback whales has yet to be published in peer-reviewed journals, thereby undercutting the value of the research. The Commission therefore urges the National Marine Fisheries Service to strongly encourage these applicants and similarly situated permit holders to publish the results of their research in a timely manner and to consider withholding future authorizations for those researchers who fail to do so.

### **Comments on Individual Permit Applications**

Provided that the recommendations and matters noted above and the issues noted in the discussion of individual applications that follow are satisfactorily addressed, the Commission has no objection to the Service issuing the requested permits and amendment request.

### Permit Application No. 14682 (Whitlow W. L. Au, Ph.D.)

The applicant is requesting authorization to take by harassment various numbers of several cetacean species during three research projects. The permit is requested for a five-year period.

Project 1 is a continuation of research on the population dynamics and behavior of odontocete cetaceans, particularly pantropical spotted dolphins and short-finned pilot whales. Animals of both sexes and all ages would be approached for photo-identification and behavioral research, sampling (swab or biopsy), and suction-cup tagging (time-depth recorders with velocity sensors and VHF radio transmitters). Calves and females attending calves would not be sampled or tagged. The proposed research would be conducted year-round in Hawaii and international waters.

Project 2 is a continuation of research on the acoustic environment in Hawaii and the use of sound by whales, focusing on humpback whales and two species of beaked whales. Animals of both sexes and all ages would be approached for photo-identification and behavioral research, acoustic recording, and suction-cup tagging. Female humpback whales with calves more than two weeks of age would be tagged, as would calves older than one month of age. Research on humpback whales would be conducted from November through April annually, and research on beaked whales would be conducted year-round.

Project 3 involves research on the effects of noise on the behavior of a variety of cetacean species in the area. Animals of both sexes and all ages would be approached for photo-identification, acoustic playback, and behavioral observation. Activities would take place throughout the year, except during December through April when humpback whales would be present. The proposed

playback studies would involve known adverse sounds, natural sounds, anthropogenic sounds, and electronically produced disharmonic sounds and would take place two miles off the leeward coasts of Oahu and the Island of Hawaii.

Neither the permit application nor the accompanying take table provides a clear breakdown of the estimated numbers of animals and species for which taking authority is being requested for each project. Such a breakdown should be provided, and the Service should resolve any discrepancies prior to issuing the permit (e.g., the apparent discrepancy in the text of the application and the take table regarding the age of calves to be tagged).

The application states that females accompanied by calves more than two weeks of age would be tagged, as would calves one month of age or older. Consistent with our earlier comment concerning the tagging of calves and mothers accompanied by calves, the Service should (1) ask the applicant to provide information on how he will reliably determine the age of calves, and (2) be satisfied that the applicant has provided adequate justification for tagging the mothers of very young calves and calves as young as one month of age.

## Permit Application No. 13846 (Jim Darling, Ph.D.)

The applicant requests authorization to take by harassment various numbers of several species of cetaceans in waters off Hawaii, Alaska, and Washington during the study of humpback whale social organization and behavior in Hawaii and Alaska, and, secondarily, the study of gray and humpback whale abundance and behavior in the Pacific Northwest. The proposed research is a continuation of that authorized under Permit No. 753-1599 and is requested for a five-year period.

Up to 5,000 humpback whales of both sexes and all age classes (2,500 in Hawaii waters and 1,500 in Alaska waters, and up to 1,000 during aerial surveys in both locations) would be taken by harassment annually during close approaches for photo-identification and observations, including underwater video, aerial observation, and collection of sloughed skin. Additionally, up to 300 whales (150 in Hawaii and 150 in Alaska) would be biopsy sampled, and up to 20 whales would be tagged annually (up to 10 with suction-cup tags and 10 with implanted tags [VHF or satellite tags]). After analysis, tissue samples from humpback whales would be exported to Sweden for storage at Stockholm University. An additional 300 whales would be exposed to playbacks of humpback whale songs. Spinner dolphins, pantropical spotted dolphins, bottlenose dolphins, and false killer whales could be incidentally harassed during the proposed research in Hawaii waters.

Up to 200 gray whales in Washington state waters would be harassed annually during close approaches for photo-identification, video filming, observations, and collection of sloughed skin. Killer whales and Steller sea lions would be incidentally harassed in Washington or Alaska waters during the proposed research. Various numbers of non-target species (spinner, spotted, and bottlenose dolphins and false killer whales) that on occasion swim with humpback whales in Hawaii or killer whales and sea lions that may interact with gray or humpback whales in the Pacific Northwest or Alaska would be harassed incidental to the proposed research.

The application is not clear as to whether the 20 whales to be tagged include only animals that are successfully tagged or whether authorization for tagging attempts on additional animals would be needed to achieve the successful tagging of 20 whales. This should be clarified prior to permit issuance, and the clarifications should be reflected in the permit.

Also, the Service should consult with the applicant to clarify whether females accompanied by calves would be biopsy sampled or tagged and if so, ensure that adequate justification has been provided for the proposed activity.

## Permit Application No. 14451 (Joseph Mobley, Jr.)

The applicant requests authorization to take by harassment various numbers of several cetacean species, including blue whales, fin whales, humpback whales, sei whales, and sperm whales, off the eastern and western coasts of the United States, Hawaii, Alaska, Guam, and the Mariana Islands to investigate the short- and long-term impact of anthropogenic sound on population size, habitat use, and behavior. Particular emphasis would be given to assessing the impact of noise generated by U.S. Navy and Marine Corps operations on the distribution and abundance of marine mammals in Navy operational areas and adjacent waters. The proposed research activities would include aerial and vessel surveys, passive acoustic recording, photo-identification, photography/videography (including in-water photography and videography), and behavioral observations. The research would be conducted over a five-year period.

The Service should consult the applicant as needed to enable it to specify clearly in the permit, if issued, the authorized numbers of animals, the species, and the manner of taking of marine mammals for each proposed research location and activity.

## Permit Application No. 14585 (Adam Pack, Ph.D.)

The applicant requests authorization to take by harassment humpback whales and several other cetacean species in the eastern, western, and central North Pacific Ocean, primarily Hawaii and Alaska. The proposed research is a continuation of long-term studies of the behavior and biology of North Pacific humpback whales.

Up to 1,400 humpback whales in all regions of the North Pacific would be taken by harassment annually during behavioral observations, photo-identification, underwater behavioral recording and videogrammetry, and acoustic recording using both single hydrophones and hydrophone arrays. Additionally, up to 300 whales of both sexes and all age classes (including females and calves) would be biopsy sampled (skin and blubber), and up to 50 adult male animals would be instrumented with crittercams (using suction cup attachment). Authorization also is requested to take by harassment, on an opportunistic basis, various numbers of several species of cetaceans by close approach for behavioral observations, photo-identification, and audio recordings. In addition, the applicant requests authorization to approach other cetacean species (e.g., killer whales, sperm whales, beaked whales) in association with unusual behavioral events (e.g., mortality, stranding, birth).

The application (pages 4, 25, and 39) indicates that mother/calf pairs of humpback whales would be biopsy sampled. However, the application does not indicate the minimum age of calves that would be sampled or whether females with very young calves would be sampled. This information should be provided prior to issuance of a permit and, if such authorization is requested, the Service should be satisfied that the applicant has provided adequate justification.

### Permit Application No. 14599 (Fred A. Sharpe, Ph.D.)

The applicant requests authorization to take by harassment humpback whales in the waters of Southeast Alaska to study the social complexity of humpback whale bubble feeding. The proposed research is a continuation of long-term studies of the behavior and biology of North Pacific humpback whales. The applicant also requests authorization for close approaches to killer whales on an opportunistic basis for photo-identification purposes.

Up to 1,580 humpback whales would be taken by harassment annually during photo-identification, acoustic recordings, sonar use for prey mapping, behavioral observations (including pole cam observations), underwater photography and videography, scat collection, and incidental harassment. Additionally, up to 200 whales would be harassed during helicopter surveys to document feeding behavior, up to 300 whales would be exposed to acoustic playbacks, and up to 90 whales (including calves older than six months and lactating females with calves less than nine months of age) would be suction-cup tagged with time-depth recorders and/or VHF tags. Up to 150 killer whales from the eastern North Pacific northern resident stock would be harassed during approaches for photo-identification.

The application (page 5) states that up to 200 humpback whales would be approached annually for tagging in order to successfully tag up to 30 animals. However, the take table accompanying the application states that up to 90 whales annually would be approached in order to successfully tag 30 animals. This discrepancy should be resolved prior to issuance of the permit.

The application does not, but should, indicate how researchers would determine that only killer whales from the eastern North Pacific northern resident stock would be taken by harassment during photo-identification activities. If it is possible that killer whales from other stocks might also be taken, authorization for such taking should be requested.

The application also does not, but should, indicate the estimated numbers of humpback whales, killer whales, and any other species that would be taken by harassment incidental to the proposed research activities. The Service should consult with the applicant to obtain this information and authorization for such taking addressed in the permit, if issued.

### Permit Application No. 14122 (Janice Straley)

The applicant requests authorization to take by harassment humpback whales and several other cetacean species in Alaska waters. The proposed research is a continuation of long-term studies of the behavior and biology of large whales in Alaska waters.

The applicant is requesting to take by harassment annually up to 1,000 humpback whales, 500 sperm whales, and 500 killer whales during approaches for behavioral observations, photoidentification, video recordings, and collection of fecal material and sloughed skin. Additionally, up to 200 humpback whales and 200 killer whales would be approached for biopsy sampling (skin and blubber); up to 200 humpback, 200 sperm, and 200 killer whales would be approached for suctioncup tagging with bioacoustic tags and crittercams (up to twice annually); and up to 100 humpback, 100 sperm, and 100 killer whales would be approached for tagging in order to successfully implant 10 humpback, 10 sperm, and 10 killer whales with satellite tags up to twice annually. Humpback whale females and their calves less than six months old would not be suction-cup or satellite tagged, but calves between 4 and 12 months of age would be biopsy sampled. The applicant states that a biopsy sampling attempt would be stopped if the mother "shields the calf or is otherwise disturbed." An additional 100 humpback, 100 sperm, and 100 killer whales also would be exposed to acoustic playbacks. The purposes of the proposed research are to (1) develop long-term sighting histories of individual humpback whales to assess stock structure, life history parameters, feeding behaviors, social behavior of feeding populations, and population estimates; (2) study sperm whale movements, foraging behavior and depredation on longline fishing gear in an effort to reduce such interactions; and (3) study killer whale seasonal movements, foraging, migration patterns, and depredation. Up to 1,000 gray, 500 minke, 500 fin, 500 sei, 500 blue, and 100 North Pacific right whales would be biopsy sampled and tagged up to four times annually—but only once for right whales—to study the species' stock structure and current status. An unspecified number of sloughed skin and scat samples, up to 100 blow samples, and up to 100 samples from pinnipeds and cetaceans (humpback, gray, minke, sei, and fin whales, harbor porpoise, Dall's porpoise, Pacific white-sided dolphins, northern fur seals, Steller sea lions, and harbor seals) killed by killer whales would be collected annually for genetic analyses. Parts also could be exported to Canada for species and sex identification. Humpback whale blow samples would be exported to Dr. Tracey Rogers, University of New South Wales, Australia, for genetic analysis.

The table accompanying the application states that 200 humpback whales would be approached for biopsy sampling in order to successfully sample 200 animals. This appears to be an error, inasmuch as the number of animals successfully biopsy sampled should be less than the number of animals approached for sampling. The Service should correct this error before issuing the permit.

As recommended earlier in this letter, the Service should defer any authorizations for the taking of North Pacific right whales until it has resolved the National Environmental Policy Act issues concerning research on this species.

## Permit Application No. 14296 (Briana Witteveen, Ph.D.)

The applicant requests authorization to take by harassment several cetacean species in the Gulf of Alaska. The proposed research is a continuation of long-term studies of the diving and foraging behaviors of sympatric whale species on their feeding grounds and of the fine-scale responses of whales to point-source noise generated by acoustic deterrent devices.

Taking by harassment would occur from close approaches to collect photographs, recordings of vocalizations, biopsy samples, prey parts and sloughed skin; to attach suction-cup tags; and to document responses to acoustic deterrence devices. Up to 50 individuals of five species (sei, blue, minke, sperm, and right whales) would be closely approached for photo-identification, and 10 individuals of each species also would be biopsy sampled. Up to 900 gray whales and up to 800 killer whales would be closely approached for photo-identification, and an additional 100 gray and 200 killer whales (including calves) would be biopsy sampled. Up to 300 fin whales (including calves) would be approached for photo-identification, behavioral observations, and biopsy sampling, and an additional 60 individuals would be suction-cup tagged. Up to 640 humpback whales would be approached for photo-identification and behavioral observations, and an additional 300 animals (including calves) would be biopsy sampled or tagged (up to 60 with ADTD tags or 30 with Acousonde tags). No mother/calf pairs of any species would be tagged. In addition, various numbers of these and other species of marine mammals, including up to 50 northern fur seals and up to 50 Steller sea lions, would be harassed incidental to research activities. Up to 100 parts from unidentified marine mammal species (50 from cetaceans and 50 from pinnipeds) would be collected following killer whale predation events. These samples and biopsy and slough skin samples would be exported to Canada for analyses. The proposed research would be conducted over a five-year period in the coastal waters of the Gulf of Alaska, with a primary focus near the Kodiak Archipelago and the Shumagin Islands.

### Permit Application No. 14353 (Ann Zoidis)

The applicant requests authorization to take by harassment humpback and minke whales in Hawaii waters. The purposes of the proposed research on humpback whales are to identify and describe underwater activity budgets of mother, calf, and escort humpback whales; continue to identify and describe social interactions between mothers and calves and mothers and calves/escorts; and identify behavioral and acoustic reactions to vessel traffic. The proposed research is a continuation of that conducted under the applicant's previous permit (No. 1039-1699). The proposed photo-identification of minke whales is part of a study by Tom Norris, funded by the Office of Naval Research, on the ecology and acoustic behavior of minke whales in the Hawaiian and Pacific Islands.

Up to 1,110 humpback whales of both sexes and all ages would be closely approached for photo-identification, surface and underwater photography/videography, and passive acoustic recordings. An additional 390 animals (90 adult males, 150 females, and 150 calves) would be approached for suction-cup tagging with crittercams, VHF/time-depth recorders, MANTA tags, and/or bioacoustic probes, in order to successfully tag 30 males, 50 females, and 50 calves. Animals would be tagged to study activity budgets/diel patterns and the potential impact of vessel traffic on humpback whales. Up to 100 minke whales would be closely approached for photo-identification. Various numbers of several species of cetaceans would be harassed incidental to the research on humpback and minke whales.

The application states that "[o]ur tagging request (390 takes) can be broken down as follows: 90 *takes* on escorts (30 individual adults x 3 takes/individual) and 150 *takes* on mothers and 150 on

calves (50 individual mothers and 50 individual calves x 3 takes/individual). These numbers would account for potential unsuccessful attempts over a 3-4 week period." [Emphasis added.] This statement appears to be at odds with the Service's take table (in which the category of "Expected Take" refers to the expected number of animals to be taken), which indicates that 90 males, 150 females, and 150 calves would approached for tagging in order to successfully tag 30 males, 50 females, and 50 calves. This apparent discrepancy should be resolved and, as required by section 104(b)(2)(A) and (B) of the Marine Mammal Protection Act, the permit, if issued, should clearly specify the number of individual humpback whales authorized to be taken and the manner in which they may be taken. This and the other permits also should indicate the number of times an animal would be taken for a particular activity (e.g., the number of biopsy and tagging attempts per animal). Further, the Service should revise its take tables to indicate clearly that the category titled "Expected Take" refers to the estimated number of animals to be taken.

The applicant requests authorization to tag calves (excluding neonates) and females accompanied by calves. It is unclear, however, whether the applicant is proposing to tag females accompanied by neonate calves. As noted previously, the Commission believes that tagging mothers with calves is justified in certain instances, but that the applicant needs to demonstrate that the risks associated with such tagging are outweighed by the expected benefits of the information being sought. Before authorizing the tagging of calves and females accompanied by calves, the Service should determine that adequate justification has been provided.

The Service's take table indicates that up to 90 animals (males and females) would be approached for tagging in order to successfully tag up to 30 adult escorts annually. It is unclear why the proposed tagging of escorts (which are males) would involve attempted tagging of females. This should be clarified and the table revised as appropriate. The Commission assumes that the applicant means that females would be taken during the course of efforts to tag escort males. Nonetheless, the application should be revised to clarify such information and it and any resulting permit should clearly set forth the numbers of animals to be taken, the manner of taking, and the number and kinds of "takes" being authorized per animal and for each activity.

#### Permit No. 10018 (Rachel Cartwright, Ph.D.)

The applicant requests that Permit No. 10018 be amended to expand the currently authorized study location (i.e., Hawaii waters) to include Alaska waters.

Permit No. 10018 authorizes the permit holder to take by harassment up to 540 humpback whales (mothers, calves, and escorts) annually in the waters off Maui, Hawaii, to study the behavior and dynamics of humpback whale female/calf pairs. Research activities include closely approaching the animals by vessel for photo-identification, conducting above-water and underwater observations and filming, focal follows, and collecting sloughed skin. The permit holder also is authorized to harass up to 12 bottlenose dolphins, 48 spinner dolphins, 48 spotted dolphins, 24 false killer whales, and 24 pilot whales annually incidental to the research on humpback whales.

The proposed amendment, if issued, would authorize the taking by harassment of up to 108 humpback whale mother/calf pairs (54 females and 54 calves) annually by close approaches for photo-identification, behavioral observations, and passive acoustic recordings. Various individuals of several other cetacean species would be taken by harassment incidental to the research on humpback whales. Up to 49 killer whales (34 from the eastern North Pacific northern resident stock and up to 15 from the eastern North Pacific transient stock) would be approached annually for photo-identification. Activities would be conducted primarily in Chatham Straits and adjacent waterways, Frederick Sound, Sumner Strait, Lynn Canal, and the easternmost waters of Icy Strait over a three-year period.

The Commission believes that the activities for which it has recommended approval are consistent with the purposes and policies of the Marine Mammal Protection Act.

Please contact me if you have any questions concerning these recommendations.

Sincerely,
Michael L. Gorling for

Timothy J. Ragen, Ph.D. Executive Director