



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
POLICY PLAN AND INTERACTION
Bureau of Ocean Energy Management

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act (NEPA), an environmental review has been performed on the following action.

TITLE: Supplemental Environmental Assessment on the Effects of Increasing Take by Level B Harassment of Humpback Whales during Vessel-based Research

LOCATION: Worldwide

SUMMARY: NMFS proposes to issue an amendment to a scientific research permit for takes of marine mammals during vessel-based research activities. The purpose of the research is to determine the migration routes and movement patterns, habitat use, diving behavior, vocal patterns, and acoustic environment of cetaceans worldwide. Impacts from these activities would be short-term and minimal to individual animals and negligible to the species. A biological opinion concluded that the proposed action would not likely jeopardize the continued existence of the species and would not likely destroy or adversely modify designated critical habitat. The permit would remain valid through December 31, 2018.

RESPONSIBLE OFFICIAL:

Donna S. Wieting
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The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact (FONSI) including the supporting supplemental environmental assessment (SEA) is enclosed for your information.



Although NOAA is not soliciting comments on this completed SEA/FONSI we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the responsible official named above.

Sincerely,
TRONVIG.KRISTEN
A.1365886012

Digitally signed by
TRONVIG.KRISTEN.A.1365886012
DN: c=US, o=U.S. Government, ou=DoD, ou=FR,
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Kristen A. Tronvig
Acting NOAA NEPA Coordinator

Enclosure



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

**Supplemental Environmental Assessment
on the Effects of Increasing Take by Level B Harassment
of Humpback Whales during Vessel-based Research**

October 2015

Lead Agency: USDOC National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Protected Resources

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Location: Worldwide

Document Being Supplemented: Environmental Assessment on the Effects of Issuing
Marine Mammal Scientific Research Permit No. 14856

Abstract: The National Marine Fisheries Service (NMFS) proposes to issue an amendment to Scientific Research Permit No. 14856-03, for takes of marine mammals in the wild, pursuant to the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 *et seq.*), and the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*). The permit authorizes take of 12 species of pinnipeds, 66 species of cetaceans, and unidentified mesoplodon species worldwide. The permit authorizes vessel surveys, aerial surveys, photo-identification, acoustic recording, biopsy collection, and implantable and suction cup tagging. Import/export of biopsy samples is also permitted. The permit amendment would increase 1) the number of humpback whales (*Megaptera novaeangliae*) that may be taken during surveys for activities that result in Level B harassment, and 2) the number of times an animal could be taken daily when implantably tagging large whales.



1.0 PURPOSE OF AND NEED FOR ACTION

Proposed Action

In response to receipt of a request from Bruce Mate, Ph.D., Hatfield Marine Science Center, Oregon State University, Newport, OR, NMFS proposes to amend Scientific Research Permit No. 14856-03, pursuant to the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 et seq.), and the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 et seq.) for “takes” of endangered and protected whales. The permit would exempt the holder from the ESA and MMPA’s prohibition against “takes”¹ of marine mammals during conduct of authorized research.

Permit No. 14856, issued on December 18, 2013, authorizes the take of 66 species of cetaceans and 12 species of pinnipeds in U.S. and international waters worldwide. The purposes of the research are to: (1) Identify migration routes; (2) identify specific feeding and breeding grounds for each species; (3) characterize local movements and dive habits in both feeding and breeding grounds, and during migration; (4) examine the relationships between movements/dive habits and prey distribution, time of day, geographic location, or physical and biological oceanographic conditions; (5) characterize whale vocalizations; and (6) characterize sound pressure levels to which whales are exposed. Researchers are authorized to conduct aerial and vessel surveys to perform a suite of research activities including: observations, biopsy sampling, implantable and suction-cup tagging, photo-identification, behavioral observation, passive acoustic recording, post-tag monitoring, and/or import, receive or export parts. The NMFS Permits and Conservation Division prepared an environmental assessment (EA; NMFS 2013) for issuance of Permit No. 14856. See below for details about the EA.

The permit has been amended on three occasions:

- Permit No. 14856-01 was issued on August 8, 2014 and replaced Permit No. 14856-00. This minor amendment added a co-investigator for tagging efforts and authorized the use of another model design of implantable tag during authorized tagging of cetaceans.
- Permit No. 14856-02 was issued on August 13, 2014 and replaced Permit No. 14856-01. This minor amendment clarified language in the take table about authorized re-approaches of tagged whales for post-monitoring efforts.
- Permit No. 14856-03 was issued on May 15, 2015 and replaced Permit No. 14856-02. This amendment added new research objectives, clarified the combination of tag attachments that may be attached to an animal at one time, and clarified that animals may be biopsy sampled for post-tag monitoring efforts to identify tagged whales.

The impacts of the issuance of these minor amendments fall within the scope of the 2013 EA prepared for Permit No. 14856.

¹ Under the MMPA, “take” is defined as to “harass, hunt, capture, kill or collect, or attempt to harass, hunt, capture, kill or collect.” [16 U.S.C. 1362(18)(A)] Under the ESA, a “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to do any of the preceding.

Permit No. 14856-03 is valid through December 31, 2018. The permit holder requests a major amendment (File No. 14856-04) to increase 1) the number of humpback whales that may be taken during surveys for activities that result in Level B harassment, and 2) the number of times an animal could be taken daily when tagging large whales. No other changes to the permit would be authorized: manner of take, species, location or duration.

Purpose of and Need for Action

As described in the original EA for Permit No. 14856, the primary purpose of the permit is to provide an exception to the moratorium and prohibitions under the MMPA and ESA to allow takes of marine mammals for bona fide scientific research. The purpose of Dr. Mate conducting the proposed research is detailed above under the Proposed Action and would not change with the proposed amendment. The purpose of the proposed amendment is to ensure that Dr. Mate has sufficient takes to achieve the permitted objectives. Based on his current encounter rates with humpback whales, he may run out of takes before the end of the permit year.

This supplemental EA (SEA) evaluates the potential effects of amending the permit to increase the takes as described above.

Other NEPA Documents that Influence Scope of this SEA

An EA was prepared for the original permit to allow a thorough evaluation of cumulative impacts to the target species from research activities (NMFS 2013). The EA evaluated three alternatives: 1) take no action, 2) issue the permit for all activities requested, and 3) issue the permit for all activities except implantable tagging of minke (*Balaenoptera bonaerensis* and *B. acutorostrata*) and killer (*Orcinus orca*) whales. Alternative 3 was the selected alternative to issue the permit while minimizing impacts to minke and killer whales. Based on the analysis of this alternative, NMFS found that aerial and vessel surveys of cetaceans and pinnipeds and biopsy and tagging of cetaceans may result in short-term minor disruptions in behavioral patterns or harm but that these impacts are not life-threatening or otherwise biologically significant to the individual, stock, population, or species. The activities are not likely to result in serious injury or mortality of animals nor are the permitted activities likely to result in cumulative effects to the stocks and species when taking into account other human activities. A Finding of No Significant Impact (FONSI) documented for this EA documented that the authorized research on marine mammals does not have a potential for significant adverse impacts on marine mammal populations or any other component of the environment. Therefore this SEA does not re-evaluate effects of the authorized research methods (vessel and aerial approaches and tagging of large whales) because there is no new information to suggest such an analysis is warranted.

Scoping Summary

Scoping identifies issues to be addressed related to the proposed action and identify and eliminate from detailed study issues that are not significant or that have been covered by prior environmental review. An additional purpose of scoping is to identify concerns of the affected public and Federal agencies, states, and Indian tribes. Comments were received from the Marine Mammal Commission during a 30-day public comment period (80 FR 17721) for the permit amendment application. The MMC recommended issuing the amendment as requested.

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

Alternative 1 - No Action

Under the No Action alternative, the permit amendment would not be issued to increase takes as proposed by Dr. Mate. The existing permit with all mitigating conditions would remain in effect as currently authorized. However, research activities on humpback whales would have to stop when Dr. Mate reaches the annual limit of currently authorized take levels, thereby preventing him from achieving his research objectives that would aid conservation and recovery of the species. The additional takes are essential to complying with existing permit requirements for post-tag approaches for observations to monitor the impacts of implantable tag attachments to tagged whales.

Alternative 2 – Preferred Alternative: Proposed Permit Amendment

Under this alternative, the permit amendment would be issued to increase: 1) the number of annual takes from 1,000 to 2,000 for humpback whales that may be approached during aerial and vessel surveys for photo-identification, observation, passive acoustics, and/or incidental harassment, and 2) the number of takes per day from three to six when tagging the following species with fully implantable tags: humpback, fin (*B. physalus*), Bryde's (*B. edeni*), North Pacific right (*Eubalaena japonica*), Southern right (*E. australus*), sei (*B. borealis*), sperm (*Physeter macrocephalus*), Western and Eastern gray (*Eschrichtius robustus*), and bowhead (*Balaena mysticetus*) whales. The specific research methods for these activities are described in the original application (NMFS permit application File No. 14856) and would not change for this request. The level of effort would not change from that proposed for the original permit as described in the permit application. Dr. Mate is not looking to intentionally approach whales multiple times per day. Rather, he wants to ensure he selects only suitable whales for tagging. To determine tagging suitability, researchers must approach within the 100 yard limit defining take by vessel approach under the permit. On average, researchers need to be at least within 75 yards, sometimes as close as 30 yds, to identify the whale or determine that it has already been tagged. As soon as researchers determine that the whale has been tagged or identified as already taken, the encounter would be terminated and researchers would leave the whale/group beyond 100 yards. The condition limiting take per day of the target species in the permit would be revised to allow Dr. Mate to take whales up to six times per day for tagging operations. The three times per day take restriction would remain in effect for other research activities. No other changes to the permit would be authorized.

The permit amendment would be issued for activities as proposed by the permit holder, with the permit terms and conditions standard to such permits as issued by NMFS. These include conditions required by the MMPA, ESA, and NMFS regulations for research permits, and special conditions common to permits for research on marine mammals. The special conditions related to research on marine mammals are intended to mitigate (avoid or minimize) potential adverse effects on animals due to the specific research methods. The condition for the daily take limit would be revised to acknowledge that for tagging efforts only, the target whales may be taken up to six times per day. All other permit conditions would remain in effect.

3.0 AFFECTED ENVIRONMENT

Location

The location of the action would not change. Research is authorized to occur on all U.S. EEZ, state, territorial, and international waters worldwide.

Biological Environment: Large Whales

The biological environment for this action is limited to the target large whale species listed in the Preferred Alternative. All life stages of humpback whales as currently authorized could be taken to increase take numbers for the species. For the increase in takes per day, juvenile and adults of each target whale species would be affected.

The status of the target large whale species has not changed and remains as described in the original EA prepared for the permit. All of them remain protected under the MMPA and all species but Bryde's and Eastern gray whales are listed as endangered under the ESA. All listed whales are also considered depleted under the MMPA. Though currently listed as endangered, the following update on the status of humpback whales is provided here since the writing of the EA. Based on a global status review of the species, NMFS is proposing to revise the ESA listing of humpback whales to identify 14 distinct population segments (DPS), list two as threatened (Central America and Western North Pacific), two as endangered (the Arabian Sea and Cape Verde Islands/Northwest Africa), and 10 as not warranted for listing (80 FR 22304). Most populations are estimated to have over 2,000 whales and the species is increasing throughout the majority of its range (Bettridge et al. 2015). Threats to the species vary by ocean basin but continue to include ship strike, entanglement in fishing gear, habitat degradation, energy development, and harvest.

Other Portions of the Environment

Other portions of the physical, biological and socio-economic environment have not changed from their description in the 2013 EA. There have been no major changes in protected areas or resources since 2013. The 2013 EA determined that 1) the action would not interfere with benthic productivity, predator-prey interactions or other biodiversity or ecosystem functions, 2) the permitted activities do not involve alteration of physical habitat, including protected areas and essential fish habitat, or affect scientific, cultural, or historic resources, and 3) the permitted activities do not result in significant economic or social impacts to resources.

For the proposed permit amendment, impacts to these portions of the environment would remain unchanged from the analysis in the 2013 EA. Increasing take of large whales would not cause impacts to other protected species or non-target species in the area in a manner or extent not previously considered in the 2013 EA. As noted in the EA, impacts to non-target species in the area would be no more than short-term disturbance and negligible at the species/stock level and for which take is already authorized in Permit No. 14856-03. Takes would remain authorized for other marine mammal species found in the area. Therefore, effects on these resources will not be considered further in this SEA.

4.0 ENVIRONMENTAL CONSEQUENCES

Effects of the No Action Alternative

Not issuing the permit amendment, i.e., denial, would avoid the potential adverse direct effects of increasing take numbers for the target species. Denial of the request also would eliminate any indirect beneficial effects on conservation of the target species that might derive from the results of the research as discussed in Ch.2. This alternative only involves denial of the single permit amendment in question. The populations would likely continue along the same growth trends as currently observed; however, NMFS would not gain valuable data on long-term impacts of implantable tagging that can only be gathered during post-tag monitoring. Dr. Mate's permitted activities as currently authorized and other activities, including other permitted research that affect marine mammals, would continue to occur. All existing permit conditions would remain in effect.

Effects of the Proposed Permit Alternative: Large Whales

Effects would occur at the time when Dr. Mate's research results in takes of the target large whales identified in Alternative 2 in Ch.2. As required by the MMPA, the permit would continue to specify the number of marine mammals that could be affected by the research activities. As discussed in the 2013 EA, approaches during aerial and vessel surveys for humpback whales have the potential to result in Level B harassment under the MMPA. Animals have the potential to be temporarily disturbed during approaches but such harassment is not likely to result in serious injury or mortality. Target whales are expected to recover within minutes of the encounter and resume their previous behaviors. Because Dr. Mate's level of effort is not increasing, although the number of 'takes' or animals exposed to approaches would increase in the permit, PR1 does not expect that it would result in an increased level of impacts to the target whales. Existing permit conditions intended to minimize harassment during surveys, such as restricting vessel maneuvers that could separate mom-calf pairs, would remain in effect and unchanged by this action. The number of humpback whales specified in the proposed permit amendment represents a small percentage, < 2%, of the overall population of the species. Likewise, repeated vessel approaches from three to six times per day are not expected to result in increased impacts to the target whale species. Given that the repeated approaches will be momentary and often abandoned before a whale is likely to react, NMFS does not expect that the additional approaches would result in actual harassment or disturbance in most cases. Even if the approach does disturb the whale, because the target whales are expected to recover from the approach within minutes, NMFS does not expect the additional approaches to translate into cumulative impacts to the target whales. In other words, increasing the daily take limit from three to six takes is not likely to translate into a greater impact than already analyzed in the 2013 EA. Further, NMFS does not expect that harassment of a single individual or a small group of animals would translate into an adverse effect on the population or species because it would not result in reduced reproduction or survival of the individual(s) that causes an appreciable reduction in the likelihood of survival or recovery for the species. In addition, a consultation under Section 7 of the ESA for this action determined that the Preferred Alternative would not likely jeopardize the continued existence of any ESA-listed species and would not likely destroy or adversely modify designated critical habitat. In summary, this type of take activities may result in short-term behavioral responses by individual whales, but would not be expected to

result in stock- or species-level effects. Therefore, the take increase for these methods is not expected to result in stock- or species- level impacts.

Cumulative Effects

Cumulative effects are defined as those that result from incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or non-federal) or person undertakes such actions. As a permit requirement, researchers must notify in advance the relevant NMFS Regional Office of their research plan, and the respective Regions are responsible for coordination of researchers in the area.

Cumulative impacts can result from individually minor but collectively significant actions that take place over a period of time. The proposed amendment would result in increased take for research activities that may disturb target humpback whales, which are also exposed to disturbance from other human activities in the action area including vessel traffic, fishing, and recreation/tourism. Whether this frequency of disturbance, by itself or in combination with disturbance from other human activities, would result in cumulative adverse effects depends on how long the effects of each disturbance last, whether the animals have sufficient time between disturbance events to resume or compensate for disrupted activities, and whether the effects of repeated disturbance are additive, synergistic or accumulate in some other way. As discussed above, the target whales are expected to resume previous behaviors within minutes of the approach encounter. Dr. Mate's work often occurs offshore, such as the Costa Rica dome in the Pacific Ocean, beyond coastal regions where other human activities are concentrated. In light of the whales' ability to recover quickly and lack of human activities around the target large whales, NMFS expects that the animals are likely to recover from the Level B harassment before they could be impacted by another human activity. Hence, NMFS does not expect the proposed amendment to result in cumulative impacts to the target species.

NMFS believes that the proposed action as discussed above is similar to that of actions previously analyzed in the 2013 EA, discussed in the *Other EA/EIS That Influence Scope of this Environmental Assessment* section. These prior analyses determined that the research directed at large whales and other species would not have a significant cumulative effect on either the human or marine environment. NMFS is not aware of any new information that affects these analyses or their findings. The analyses included examining other past, present and future activities affecting whales, such as whaling, ship strikes, entanglement, anthropogenic noise, whale watching, and habitat degradation. The proposed action would be focused on humpback whales and would similarly not be likely to have a significant cumulative effect on the other authorized species or non-target species. Furthermore, it is not expected that the proposed action will have a significant cumulative impact on the environment. Based on these determinations, it is highly unlikely that the increase in take for level B research activities under the proposed permit amendment would have significant cumulative impacts to humpback whales or other portions of the human environment.

5.0 MITIGATION MEASURES

There are no additional mitigation measures beyond those that are part of the current permit's protocols or conditions that would be required, as discussed in the description of Alternative 2. Dr. Mate's protocols include research during vessel and aerial surveys. The protocols are incorporated into the permit by reference and are summarized in the 2013 EA. These protocols include:

- Ensuring that close boat approaches do not unduly stress the animals by approaching whales from behind and to one side at the same or slower speed than the whale's speed.
- Terminating efforts if the animal exhibits an "acute behavioral response" (repeated, prolonged, or the activity is interfering with pair-bonding or nursing).

In summary, the permit conditions limit the level of take as described in the take tables and require notification, coordination, monitoring, and reporting. Although injury and mortality are not expected, if they occur due to the authorized actions, the permit contains measures requiring researchers to cease activities until protocols have been reviewed and revised with NMFS. Upon review NMFS may also revoke the permit. Review of monitoring reports of previous permits for the same or similar research protocols indicate that these types of mitigation measures are effective at minimizing stress, pain, injury, and mortality associated with takes.

6.0 LIST OF PREPARERS AND AGENCIES CONSULTED

This document was prepared by the Permits and Conservation Division of NMFS' Office of Protected Resources in Silver Spring, Maryland.

7.0 LITERATURE CITED

Bettridge, S., C.S. Baker, J. Barlow, P.J. Clapham, M. Ford, D. Gouveia, D.K. Mattila, R.M. Pace III, P.E. Rosel, G.K. Silber, and P.R. Wade. 2015. Status Review of the Humpback Whale (*Megaptera novaeangliae*) Under the Endangered Species Act. NOAA-TM-NMFS-SWFSC-540. 241 p.

NMFS 2013. Environmental Assessment on the Effects of Issuing Marine Mammal Scientific Research Permit No. 14856. Silver Spring, MD.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
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Finding of No Significant Impact for Issuance of Amended Marine Mammal Scientific Research Permit No. 14856-04

Background

In January 2010, the National Marine Fisheries Service (NMFS) received an application for a permit (File No. 14856) from Bruce Mate, Ph.D., Oregon State University, Hatfield Marine Science Center, Newport, Oregon, to take marine mammals during research in U.S. and international waters worldwide. In accordance with the National Environmental Policy Act, NMFS prepared an Environmental Assessment (EA) in 2013 analyzing the impacts on the human environment associated with permit issuance (Environmental Assessment on the Effects of the Issuance of Marine Mammal Scientific Research Permit No. 14856). The EA contained three alternatives: No Action, Proposed Permit, and the Preferred Alternative. The Preferred Alternative was selected and does not authorize tagging of killer or minke whales; in all other ways the Preferred and Proposed Permit alternatives were the same. NMFS issued Permit No. 14856 based on a Finding of No Significant Impact (FONSI) of the Preferred Alternative. NMFS is seeking to amend the permit and has prepared a Supplemental EA for the action (the Preferred Alternative). In addition, a Biological Opinion (BO) was prepared under the Endangered Species Act summarizing the results of re-initiating the intra-agency consultation for this permit. The analyses in the EA, SEA, as informed by the BO, support the findings and determination below.

Analysis

National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a Proposed Action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the Preferred Alternative reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans?

Response: Issuance of the permit amendment is not expected to affect any other resources but the target large whales, including ocean and coastal habitats or designated Essential Fish Habitat (EFH). Although EFH is present in the action area, issuance of the permit amendment would not result in impacts to habitat. Vessel surveys would involve routine vessel movements at the water surface and activities would be directed at large whales. None of the activities would alter or damage habitat, involve alteration of



substrate, movement of water or air masses, or other interactions with physical features of ocean and coastal habitat. Therefore, no EFH consultation was required.

2) Can the Preferred Alternative be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: The effects of the action on the target species, including ESA-listed species and their habitat, EFH, marine sanctuaries, and non-target species were all considered in the SEA and the accompanying BO. The Preferred Alternative would target marine mammals for research activities that are expected to result in no more than short-term minimal disturbance or harm to individual large whales. This work is not expected to interfere with benthic productivity, an animal's susceptibility to predation, alter dietary preferences or foraging behavior, or change distribution or abundance of predators or prey. Therefore, the Preferred Alternative is not expected to have a substantial impact on biodiversity or ecosystem function.

3) Can the Preferred Alternative reasonably be expected to have a substantial adverse impact on public health or safety?

Response: No, the Preferred Alternative is not expected to impact public health or safety. The Preferred Alternative involves issuance of a permit to take marine mammals via vessel and aerial surveys. Research activities for this action include approaches for monitoring, photo-identification, behavioral observations, and passive acoustic recordings. Thus, the proposed activities do not involve hazardous methods, toxic agents or pathogens, or other materials that would have a substantial adverse impact on public health and safety.

4) Can the Preferred Alternative reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: As determined in the accompanying BO, the Preferred Alternative would only affect the target large whales in the action area. However, the BO concluded that the effects of the Preferred Alternative would be short-term in nature and limited to individual animals. The Preferred Alternative would not likely jeopardize the continued existence of any ESA-listed species and would not likely destroy or adversely modify designated critical habitat. The Preferred Alternative would also disturb non-ESA listed marine mammals in the area. The effects are expected to be short-term and recoverable, and to not result in impacts on populations, stocks or species.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: Effects of the Preferred Alternative would be limited to the short-term harassment of target large whales. Take is already authorized for any non-target marine mammals that could be in their vicinity. Impacts to these portions of the environment

would remain unchanged from the analysis in the 2013 EA. These impacts are not interrelated with any natural or physical impacts. The Preferred Alternative would not result in inequitable distributions of environmental burdens or affect access (short-or long-term use) to any natural or depletable resources in the action area.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: NMFS does not consider the Preferred Alternative controversial nor have similar research actions been considered controversial in the past. The proposed research activities are standard research activities that have been conducted on these species by the scientific community, and by the applicant, for decades. In addition, past submitted monitoring reports that include information on the effects of research are in agreement with published scientific literature on the effects of the types of proposed research activities. No other portion of the marine environment beyond marine mammals would be impacted by the Preferred Alternative.

7) Can the Preferred Alternative reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: Increasing take of large whales would not cause impacts to these resources. Essential fish habitat and critical habitat would not be impacted by the taking of marine mammals by harassment (see Question 1 and 4 responses).

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The effects of permit issuance on the environment are not uncertain and the takes of marine mammals do not involve unique or unknown risks. The potential for harassment and mortality to the target marine mammals is known and has been considered. The proposed procedures have been used on multiple cetacean species, including by the applicant under previous permits. Short and long-term physical and behavioral reactions have been documented and were discussed in the SEA. Risks to other portions of the human environment as a result of the takes are not expected.

9) Is the Preferred Alternative related to other actions with individually insignificant, but cumulatively significant impacts?

Response: The Preferred Alternative is not related to other actions with individually insignificant, but cumulatively significant impacts. The incremental impact of the action when added to other past, present, and reasonably foreseeable future actions discussed above and in the SEA would be minimal and not significant.

10) Is the Preferred Alternative likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic

Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: The Preferred Alternative would not take place in any district, site, highway, structure, or object listed in or eligible for listing in the National Register of Historic Places, thus none would be impacted. As analyzed in the SEA, the Preferred Alternative would not cause the loss or destruction of significant scientific, cultural or historical resources. None of these resources are expected to be directly or indirectly impacted.

11) Can the Preferred Alternative reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: The Preferred Alternative would not be removing or introducing any species; therefore, it would not likely result in the introduction or spread of a non-indigenous species. Researchers would not be exchanging ballast water during the course of research.

12) Is the Preferred Alternative likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: The decision to issue the permit amendment would not be precedent-setting and would not affect any future decisions. Issuance of a permit to a specific individual or organization for a given research activity does not in any way guarantee or imply that NMFS will authorize other individuals or organizations to conduct the same research activity. Any future request received would be evaluated upon its own merits relative to the criteria established in the MMPA, ESA, and NMFS' implementing regulations.

13) Can the Preferred Alternative reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: Issuance of this permit is not expected to violate any Federal, State, or local laws or requirements related to environmental protection. NMFS has sole jurisdiction for issuance of such permit for marine mammals and has determined the proposed research to be consistent with all applicable provisions of the MMPA and ESA. The permit currently contains language stating that the permit does not relieve the Permit Holder of the responsibility to obtain any other permits, or the need to comply with any other Federal, State, local, or international laws or regulations.

14) Can the Preferred Alternative reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: As discussed in the SEA, the marine mammals that would be affected by the Preferred Alternative are already exposed to a variety of human activities, including subsistence hunting, entanglement in fishing gear, anthropogenic noise, vessel traffic, military and industrial activities, and scientific research. However, the incremental effect

of the Preferred Alternative would be insignificant. The proposed takes of marine mammals by harassment during the life of the permit are not likely to contribute to collectively significant adverse impacts on marine mammal stocks or species, including those listed as threatened or endangered. The effects of the takes would be transitory and recoverable, associated with only minor and short-term changes in the behavior of a limited number of individual marine mammals. The frequency and duration of the disturbance under the proposed permit would allow adequate time for animals to recover from any potential adverse effects, such that additive or cumulative effects of the action on its own are not expected. Therefore, the Preferred Alternative is not expected to result in cumulative adverse effects on target or non-target species.

DETERMINATION

In view of the information presented in this document, and the analyses contained in the SEA and BO prepared for issuance of Permit No. 14856-04, it is hereby determined that permit issuance will not significantly impact the quality of the human environment. In addition, all beneficial and adverse impacts of the Preferred Alternative have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement for this action is not necessary.

Donna S. Wieting

fw Donna S. Wieting
Director, Office of Protected Resources

OCT 27 2015

Date