



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

JUN 04 2012

**Memorandum For:** F/PR – Helen M. Golde  
Acting Director, Office of Protected Resources

**From:** F/PR1 – P. Michael Payne  
Chief, Permits and Conservation Division

**Subject:** Report on the Applications for Scientific Research Permits [File Nos. 16163, 16160 and 15569]: Recommendation for Issuance

I recommend the National Marine Fisheries Service (NMFS) issue the following permits for research activities on marine mammals pursuant to the Marine Mammal Protection Act of 1972 as amended (MMPA; 16 U.S.C. 1361 *et seq.*); the regulations governing the taking and importing of marine mammals (50 CFR Part 216); the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*); and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR Parts 222-226):

- Permit No. 16163 to Northwest Fisheries Science Center (NWFSC, Dr. M. Bradley Hanson, Responsible Party)
- Permit No. 16160 to The Whale Museum (Jenny Atkinson, Responsible Party)
- Permit No. 15569 to The Center for Whale Research (CWR; Kenneth C. Balcomb III, Responsible Party)

#### Summary of requested activities

Species: No. 16163: Forty-four species of cetaceans, pinnipeds, and unidentified mesoplodon and baleen whales, including ten species that are listed as threatened or endangered or have a stock listed as endangered under the Endangered Species Act (ESA).

No. 16160: Killer whales (*Orcinus orca*) from the Southern Resident stock, Pacific white-sided dolphins (*Lagenorhynchus obliquidens*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoises (*Phocoena phocoena*), eastern gray whales (*Eschrichtius robustus*), humpback whales (*Megaptera novaeangliae*), non-ESA listed killer whales, and minke whales (*Balaenoptera acutorostrata*)

No. 15569: Killer whales (*Orcinus orca*), including the ESA-listed Southern Resident stock. Other non-target species that may be opportunistically taken include 17 cetacean species (five ESA-listed) and four pinniped species (one ESA-listed).



Objectives: No. 16163: To evaluate the population size and structure, range and movement patterns, response to anthropogenic impacts, social organization, feeding ecology, and disease patterns of cetaceans over long periods of time for scientific and management purposes.

No. 16160: To monitor and record vessel activities around marine mammal species routinely encountered by commercial and recreational vessels in the inland waters of Washington State. This research would contribute to a long-term data set (Orca Master) that has provided critical information on characterizing annual vessel trends around Southern Resident killer whales and an evaluation of the effectiveness of federal, state and local marine wildlife guidelines and regulations through the Soundwatch program.

No. 15569: To determine the population size and structure of the ESA-listed Southern Resident killer whales and other ecotypes of killer whales throughout their range in the Eastern North Pacific Ocean.

Location: No. 16163: In all U.S. and international waters in the Pacific Ocean, including waters of Alaska, Washington, Oregon, California, and Hawaii.

No. 16160: The inland waters of Washington State.

No. 15569: The inland marine waters of Washington State, but may opportunistically include the wider area of the coastal eastern North Pacific from the southern boundary of California to Alaskan waters east of Kodiak Island, including all territorial waters up to 200 nautical miles offshore

Methods: No. 16163: Conduct vessel and aerial surveys, behavioral observations, photo-identification, opportunistic sampling (breath, sloughed skin, fecal material, and prey remains), import and export of marine mammal parts, ultrasound sampling, acoustic imaging with echosounders, active acoustic playback, biopsy, and dart and/or suction-cup tagging.

No. 16160: Conduct close vessel approach for photo-identification, behavioral observation, and monitoring.

No. 15569: Conduct close vessel approach for photo-identification, behavioral observations, fecal sampling and prey sampling in trail of whales, remote measuring (aerial and laser techniques), and passive acoustic recording.

Duration: All three permits would be valid for five years from the date of issuance.

## Chronology of processing

### File No. 16163

January 25, 2011	Date of application
July 6, 2011	Application determined complete
October 20, 2011	Draft batched Environmental Assessment complete
November 3, 2011	Application published in the <i>Federal Register</i>
November 3, 2011	Application distributed to internal and external reviewers
December 5, 2011	Close of public comment period
December 20, 2011	Marine Mammal Commission comments received
December 29, 2011	Received applicant's responses to reviewer comments
December 30, 2011	Requested Formal Initiation of Section 7 consultation with PR5

### File No. 16160

December 13, 2010	Date of application
July 19, 2011	Application determined complete
October 20, 2011	Draft batched Environmental Assessment complete
November 3, 2011	Application published in the <i>Federal Register</i>
November 3, 2011	Application distributed to internal and external reviewers
November 21, 2011	Marine Mammal Commission comments received
December 5, 2011	Close of public comment period
December 30, 2011	Requested Formal Initiation of Section 7 consultation with PR5
January 13, 2012	Applicant was sent Section 7 questions
January 30, 2012	Received applicant's responses to Section 7 questions
February 8, 2012	Responsible Party requested a change in PI
February 15, 2012	PR1 requested more information on PI's relevant experience
February 24, 2012	Received more information on PI's relevant experience
March 2, 2012	Amendment to change in PI published in the <i>Federal Register</i>
March 2, 2012	Amendment distributed to internal and external reviewers
March 19, 2012	Marine Mammal Commission comments received
April 2, 2012	Close of public comment period

### File No. 15569

January 4, 2011	Date of application
May 19, 2011	Application determined complete
October 20, 2011	Draft batched Environmental Assessment complete
November 3, 2011	Application published in the <i>Federal Register</i>
November 3, 2011	Application distributed to internal and external reviewers
December 5, 2011	Close of public comment period
December 30, 2011	Requested Formal Initiation of Section 7 consultation with PR5
January 31, 2012	Marine Mammal Commission comments received

## Summary of external comments and response

NMFS published a notice in the *Federal Register* announcing receipt of the applications, making them available for public review. The applications were also provided to the Marine Mammal Commission. The following external comments were received regarding the applications.

### The Marine Mammal Commission (MMC)

#### File No. 16163

In a letter dated December 20, 2011, the MMC recommended that NMFS issue the requested permit provided that NMFS:

- Ensure that activities to be conducted under this permit and those of other permit holders who might be conducting research on the same species in the same areas are coordinated and, as possible, data and samples shared to avoid duplicative research and unnecessary disturbance of animals.

**Response:** The permit contains standard conditions that are intended to minimize potential impacts of the research on marine mammals, including a condition for coordination.

- Advise the Center of the need to obtain Institutional Animal Care and Use Committee (IACUC) approval of the amended protocols prior to initiating the proposed activities;

**Response:** The applicant has obtained an IACUC for ongoing research and is seeking IACUC approval for the amended protocols.

- Advise the Center of the need to obtain permits under the Convention on International Trade in Endangered Species of Wild Fauna and Flora prior to importing or exporting parts from marine mammals listed in the Convention's appendices; and

**Response:** NMFS's permits do not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations. The NWFSC is aware of this as it is a standard permit condition.

- Advise the Center of the need to consult with the relevant entity (e.g., National Marine Sanctuary, National Ocean Service, Marine National Monument, U.S. Fish and Wildlife Service) and obtain any required permits prior to conducting the proposed activities in a sanctuary, monument, or refuge.

**Response:** NMFS's permits do not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations. The NWFSC is aware of this as it is a standard permit condition.

File No. 16160

In letters dated November 21, 2011 and March 19, 2012, the MMC recommended issuance of the permit, provided that the NMFS:

- Condition the permit to require The Whale Museum to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly mother/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with mother/calf behavior, feeding, or other vital functions.

**Response:** The permit contains standard conditions that are intended to minimize potential impacts of the research on marine mammals, including requiring the researchers to not approach any mother or calf while the calf is actively nursing and immediately cease research procedures if there is evidence that the activity may be interfering with pair-bonding or may be life-threatening. Other standard conditions in the permits require the researchers to not position the research vessel between the mother and calf and approach mothers and calves gradually to minimize or avoid any startle response.

- Advise The Whale Museum of the need to obtain additional permits from the U.S. Fish and Wildlife Service prior to conducting the proposed activities in a wildlife refuge.

**Response:** NMFS's permits do not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations. The Whale Museum is aware of this as it is a standard permit condition.

File No. 15569

In a letter dated January 31, 2012, the MMC recommended that NMFS issue the requested permit provided that the NMFS:

- Specifies within the take table the (1) total number of takes for each species or stock, (2) the total number of individuals within that species or stock that could be taken, and (3) the total number of times each individual within that species or stock could be taken.

**Response:** The SRKW population is estimated to be between 85-90 individuals. It is expected that Mr. Balcomb will encounter all individuals in the population over the course of each year. Given that there are 85-90 individuals and most individuals may be taken up to 100 times, the applicant has requested a total of 8,500 takes for SRKWs. In their last annual report, Mr. Balcomb identified a total of 88 individual SRKWs.

- Conditions the permit to require Mr. Balcomb to develop, implement, and annually report the results of an assessment method that would help him detect possible adverse effects of his research on the whales.

**Response:** All NMFS permits require the submission of annual, final and incident

reports. These reports contain a tabular and narrative component that address effects of the research. Mr. Balcomb routinely submits his reports on time and these reports contain further information on any whale responses as a result of the research activities.

- Conditions the permit to require Mr. Balcomb to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if any evidence indicates that the activity is interfering with female/calf behavior, feeding, or other vital functions.

**Response:** The permit contains standard conditions that are intended to minimize potential impacts of the research on marine mammals, including requiring the researchers to not approach any mother or calf while the calf is actively nursing and immediately cease research procedures if there is evidence that the activity may be interfering with pair-bonding or may be life-threatening. Other standard conditions in the permit require the researchers to not position the research vessel between the mother and calf and approach mothers and calves gradually to minimize or avoid any startle response.

- Advises Mr. Balcomb of the need to obtain additional permits from the relevant entities (e.g., the National Marine Sanctuary, the specific state, NOAA, or the U.S. Fish and Wildlife Service) prior to conducting the proposed activities in a sanctuary, marine protected area, or wildlife refuge.

**Response:** NMFS's permits do not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations. Mr. Balcomb has acknowledged this responsibility in his application and it is reiterated in the cover letter to the permit.

### The National Marine Sanctuary Program

The National Marine Sanctuary Program, operating under the National Marine Sanctuaries Act (32 U.S.C. 1431 *et seq.*) and administered by NOAA's National Ocean Service (NOS) has the authority to issue special use permits for research activities that would occur within a National Marine Sanctuary. Obtaining special use permits is the responsibility of individual researchers. As a courtesy, the Office of Protected Resources provided a copy of the application to NOS because the research would occur in or near:

- Olympic Coast National Marine Sanctuary
- Hawaiian Islands Humpback Whale National Marine Sanctuary
- Papahānaumokuākea Marine National Monument
- Palmyra Atoll National Wildlife Refuge
- Cordell Bank National Marine Sanctuary
- Gulf of the Farallones National Marine Sanctuary
- Channel Islands National Marine Sanctuary
- Monterey Bay National Marine Sanctuary

- San Juan Islands National Wildlife Refuge
- Protection Island National Wildlife Refuge

File No. 16163

In an email dated December 01, 2011, The Olympic Coast National Marine Sanctuary, Papahānaumokuākea Marine National Monument, Channel Islands National Marine Sanctuary, and Monterey Bay National Marine Sanctuary provided comments and requested that PR1 advise the applicant that a multi-sanctuary and monument permit may be required for research conducted in those waters. Papahānaumokuākea Marine National Monument added that the State of Hawaii may have additional requirements and that a Vessel Monitoring System approved by the Monument must be installed on all vessels operating in the Northwest Hawaiian Islands.

**PR1 Response:** In an emails dated December 05, 2011, this information was provided to the applicant who confirmed that he will be applying for the necessary permits as required by the National Marine Sanctuary Program.

File No. 16160

The Office of Protected Resources did not provide a copy of the application to the NOS National Marine Sanctuary Program because the proposed research would not take place in a National Marine Sanctuary.

File No. 15569

Mr. Balcomb indicated that his action area may include National Marine Sanctuaries, Wildlife Refuges, and Marine Protected areas, but reiterated that the proposed research activities would not impact the physical environment of any of these areas, and permission would be sought from the appropriate agency, as necessary, to conduct non-invasive research in such areas. As such, the determination was made that further consultation with these areas was unnecessary.

The National Park Service

The Office of Protected Resources provided a copy of the application to the Channel Islands National Park (CINP) because research may occur there.

No comments were received from CINP.

State Agencies Review and Comment

The Office of Protected Resources provided a copy of the application to the State of Hawaii Division of Aquatic Resources, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, and Alaska Department of Fish and Game for review.

No comments were received from these agencies.

## Public Comments

### File No. 16163

We received 8 comments opposing the action, which are summarized below. The comments were received from:

- USA Citizen 1, via an email dated November 4, 2011
- Meg McDonald, via an email dated December 5, 2011
- Jane Cogan, via an email dated December 6, 2011
- Peter Hamilton, Liferforce, via an email dated December 6, 2011
- Kathy Fletcher, via an email dated December 6, 2011
- Alisa Lemire Brooks, via an email dated December 6, 2011
- Fred Felleman, via an email dated December 6, 2011
- Donna Sandstrom, via an email dated December 6, 2011

An extension of the public comment period was requested but not granted. NMFS concluded that an extension was not warranted because the NMFS regional office and science center have an ongoing outreach program to interface with the public and address their concerns as stated in the 2008 recovery plan for SRKW's (<http://www.nwr.noaa.gov/Marine-Mammals/Whales-Dolphins-Porpoise/Killer-Whales/Recovery-Implement/educ-outr.cfm>). This includes specific information on ongoing research projects including tagging which can be found at the NWFSC: [http://www.nwfsc.noaa.gov/research/divisions/cbd/marine\\_mammal/marinemammal.cfm](http://www.nwfsc.noaa.gov/research/divisions/cbd/marine_mammal/marinemammal.cfm)

Public comments included seven main topics:

- **the physical risks of tagging (i.e. stress, infection, injury or mortality),**
- **benefit to the species,**
- **the information is already known about winter distribution, or can be determined by less invasive methods than the proposed tagging,**
- **the data will be of little value to regulators,**
- **there is too much research already occurring,**
- **anthropogenic impacts on the species need to be mitigated first, and**
- **animal rights and welfare concerns.**

**NMFS General Response:** For NWFSC's current Permit No. 781-1824-02, which authorized implantable tagging of SRKW's, the same comment topics were received during the comment period and were addressed in depth in the Recommendation Memo (dated November 22, 2011) for that permit. That memo has since been made publically available on the Office of Protected Resources webpage: <http://www.nmfs.noaa.gov/pr/permits/review.htm>.



In Addition specific public comments not addressed in the above mentioned Recommendation Memo for Permit No. 781-1824-02 were:

- **Biopsy sampling to assess paternity of SRKW is not bona-fide**

**NMFS Response:** The purpose for biopsy sampling is not to assess paternity of SRKW. As stated in the application, the primary purpose of biopsy sampling is to assess the diet of SRKWs over longer time frames. Once acquired, the skin and blubber samples can be used for a range of other analyses as well including paternity testing.

- **Biopsy sampling to assess contaminant loads is not bona-fide**

**NMFS Response:** The applicant provided information in the application demonstrating that the proposed collection of samples will further the understanding of marine mammals biology and ecology, and will contribute to resolving conservation issues.

- **Playbacks will be harmful to SRKW, and are not humane**

**NMFS Response:** Playbacks are considered humane and bona-fide. Only temporary changes in behavior are anticipated with no significant long-term harm expected. The received levels of playbacks will be less than 180dBrms and are not likely to exceed Level B harassment or result in injury or mortality and are not likely to jeopardize the species.

- **Playbacks may result in short or long-term hearing loss**

**NMFS Response:** Permanent or temporary hearing loss is not expected due to the low intensity and duration of the playbacks. The effects of the activities are expected to be short-term and recoverable with only moderate to minimal reactions, resulting in transitory and recoverable changes in behavior and physiological parameters of the affected animals and therefore are not likely to adversely affect the species.

- **Imaging prey fields with echosounders may cause harm to marine mammals**

**NMFS Response:** Prey field imaging is considered humane and bona-fide and is not likely to jeopardize species. Echosounders would be used to image prey fields in marine mammal habitat but only when marine mammals are likely to be absent, which would be determined by visually monitoring the area during data collection.

- **Overuse of playback will lead to habituation of whales to anthropogenic activities that may be of risk to them**

**NMFS Response:** The playback procedures outlined in the application are considered

humane and bona-fide and not likely to jeopardize species. Playbacks will be limited and the research will intentionally expose a targeted individual to a playback series only once per day and only five times total per year to avoid potential cumulative disturbance and also potential habituation effects to the playback exposures.

- **Experimental ultrasound may be harmful to the animals it is used on, is similar to military sonar use that has been linked to marine mammal strandings, and is not bona-fide since blubber layers can be determined visually.**

**NMFS Response:** Ultrasound is considered humane and bona-fide and is not likely to jeopardize species. The ultrasound equipment used to measure blubber thickness consists of a 0.5 MHz transducer that is well above the audible range of any marine mammal. An assessment of blubber thickness cannot be measured visually and would not be statistically robust. Ultrasound is used on other marine mammal species, and there are no known risks to its use aside from the vessel approach and application with a pole. The applicant has demonstrated that the researchers will take appropriate precautions (e.g., slow approach, retreat if avoidance behaviors noted) during an approach and while briefly touching the whale to avoid any injury or harm from the researchers and equipments physical proximity.

File Nos. 16160 and 15569

Two public comments were received supporting the applications from The Whale Museum and The Center for Whale Research:

- Fred Felleman, via an email dated December 6, 2011; and
- Kathy Fletcher, via an email dated December 6, 2011.

One comment was received in opposition to both applications from Peter Hamilton Lifeforce Society in an email dated December 6, 2011. This comments specifically addressed opposition to the applications, and did not include comments on the draft EA, the considered alternatives or the analysis made in the draft EA. Specific topic areas are summarized and NMFS' response directly follows the topic header.

- **There was an error in the Federal Register notice and should be corrected.**

**Response:** The typo in the Federal Register notice announcing receipt of the applications did not prevent the public from accessing and commenting on the proposed actions. Reference to File No. 16111 was inadvertently included in one section of the FR notice. This application had not been considered complete and was not under consideration for issuance. Notice of this application was made separately and the public had the opportunity to comment on that proposed action.

- **Applicants are subject to other US and Canadian laws besides the MMPA and ESA and proof of compliance should be provided.**

**Response:** Issuance of a MMPA/ESA permit does not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations. The applicants are aware that additional permits may be necessary in addition to authorization under the MMPA and ESA to conduct their proposed activities. Any resulting permits would not authorize activities in Canada.

- **Additional review and Public Hearings should be conducted.**

**Response:** The techniques and methodologies proposed are given a thorough review through the permit process. The applications have been made available for public comment and the applications have been forwarded to the Marine Mammal Commission for further review. Information and comments were submitted in writing on these applications; therefore, there was no need for a public hearing.

- **Non-Invasive Procedures should be used.**

**Response:** The MMPA and ESA provide for an exemption to the prohibition of take and harassment for purposes of scientific research. The applications outline and justify their use of both non-invasive and invasive procedures. The techniques and methods are considered in the context of the impact on the human environment (NEPA) and the biological environment (ESA section 7 consultation).

- **Animal Rights should be considered.**

The MMPA and ESA contain exceptions to the prohibitions against take, for scientific research purposes. The applications are evaluated under the MMPA and ESA permit issuance criteria, including a determination of humaneness.

### **Applicable federal permits and consultations**

Marine Mammal Protection Act (MMPA) permit: Permits for scientific research on marine mammals are issued under section 104 of the MMPA and NMFS's implementing regulations at 50 CFR Part 216. These permits exempt *bona fide* scientific research and enhancement activities on marine mammals from the MMPA's take prohibition. MMPA section 104 permits are required for the research described because they will result in level A and B harassment.

Endangered Species Act (ESA) permit. Permits for scientific purposes are issued under Section 10(a)(1)(A) of the ESA, and must be consistent with Section 10(d) of the ESA. These permits provide an exception for research and enhancement activities on threatened and endangered species from the ESA's take prohibitions. ESA section 10 permits are required for the research described because they will result in takes of endangered species by harassment, harm, pursuit, wounding, or collection.

ESA Section 7 Consultation(s). NMFS issuance of permits is a federal action subject to the

interagency cooperation requirements of Section 7 of the ESA. NMFS is required to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any threatened or endangered species or result in destruction or adverse modification of habitat for such species.

The Permits Division determined that issuance of these permits is likely to adversely affect NMFS threatened or endangered species that are the subject of the permits. The Permits Division consulted with NMFS Endangered Species Act Interagency Coordination Division, which determined in its Biological Opinion (BO) that issuance of the permits are not likely to jeopardize the continued existence of NMFS ESA-listed species or to result in the destruction or adverse modification of designated critical habitat.

The BO contained the following conservation recommendations:

- *Determination of take numbers.* The Endangered Species Act Interagency Cooperation Division recommends that the Permits Division should examine its methodologies for determining take numbers and coordinate with the Endangered Species Act Interagency Cooperation Division to ensure that the take numbers better reflect a level of exposure which has occurred in the past under similar or identical researcher actions as evidenced by annual reports.

**Response:** Since January 2010, PR1 has been coordinating with PR5 Section 7 biologists on applications as part of the informal consultation process per the PR1-PR5 agreement. Thus, PR1 provided the assigned Section 7 biologist the opportunity to comment on any aspect of the application during the public comment period. PR1 will continue this process for future requests. During the review of applications, PR1 analysts consider past annual reports to help determine if the requested takes are *bona fide*. However, PR1 does not rely solely on past reports to determine new take numbers because past performance is not an indication of future performance. Regardless of how similar the action is to the past permitted research, multiple factors influence take numbers and must also be considered, including: proposed objectives, past vs. future effort, bad weather, resources, and funding. In addition, PR1 recently has changed how permit holders are required to report takes. The new reporting of takes is more conservative, requiring researchers to count and report as takes all animals that are approached versus only reporting observations of animals' reactions to an approach or research activity.

- *Identify responses by listed individuals to permitted actions.* The Endangered Species Act Interagency Cooperation Division recommends that annual reports submitted to the Permits Division require detail on the response of listed individuals to permitted activities. A minimum of general comments on response can be informative regarding methodological, population, researcher-based responses in future consultations. The number and types of responses observed should be summarized and include responses of both target and non-target individuals. This will greatly aid in analyses of likely impacts

of future activities.

**Response:** This information is requested on the Permit Holder's annual report form.

Magnuson-Stevens Fishery Conservation and Management Act (MSA) consultation: Section 305(b)(2) of the MSA requires NMFS to complete an Essential Fish Habitat (EFH) consultation for any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken by the agency that may adversely affect EFH. Consultation is required for renewals, reviews or substantial revisions of actions.

The Permits Division determined that the permitted activities will not affect designated EFH and did not initiate consultation with the NMFS Northwest, Southwest, Alaska, or Pacific Island's Office of Habitat Conservation.

Fur Seal Act (FSA): The FSA [16 U.S.C. § 1154] is applicable to research permit applications for takes of northern fur seals in the Pribilof Islands, Alaska. The FSA requires the Secretary to conduct research on North Pacific fur seal resources as necessary for the U.S. to meet its obligations under the Interim Convention on the Conservation of North Pacific Fur Seals. The Secretary must permit, subject to necessary terms and conditions, the taking of fur seals for educational, scientific or exhibition purposes.

### **National Environmental Policy Act (NEPA) documentation**

Scientific research permits are, in general, categorically excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (NOAA Administrative Order Series 216-6, May 20, 1999).

However, for these permits NMFS prepared a batched Environmental Assessment (EA) to facilitate a more thorough assessment of potential impacts on the eleven endangered species takes were requested for. Based on the analysis in the batched EA, NMFS determined that permit issuance will not have significant impacts on the quality of the human environment, and prepared a Finding of No Significant Impact documenting this decision.

### **Findings and Recommendation**

As required by the MMPA and NMFS regulations, the information provided by the applicants demonstrates that:

- the taking is required to further a *bona fide* scientific purpose
- the taking will be consistent with the purposes of the MMPA and applicable regulations
- the proposed research will not likely have significant adverse effects on any other component of the marine ecosystem of which the affected species or stock is a part

- for species or stocks designated or proposed to be designated as depleted, or listed or proposed to be listed as endangered or threatened:
  - the research cannot be accomplished using a surrogate species or stock
  - the research, by itself or in combination with other activities will not likely have a long-term direct or indirect adverse impact on the species or stock.

The Permits Division's review of the applications and other relevant information, including MMC and public comments, indicates that the research methods ("manner of taking") are consistent with the MMPA's definition of "humane." The results of the research are likely to directly benefit the targeted species or otherwise fulfill a critically important research need for these depleted stocks.

As required by the ESA, the Permits Division has determined that:

- the applicants applied for the permit in good faith
- the permitted research will contribute to recovery of the affected species
- the permitted research will not operate to the disadvantage of endangered species.

As required by the MMPA, the permits specify: (1) the effective date of the permit; (2) the number and kinds (species and stock) of marine mammals that may be taken; (3) the location and manner in which they may be taken; and (4) other terms and conditions deemed appropriate. Other terms and conditions deemed appropriate relate to minimizing potential adverse impacts of specific activities (e.g. sampling, tagging etc.), coordination among permit holders to reduce unnecessary duplication and harassment, monitoring of impacts of research, and reporting to ensure permit compliance. These terms and conditions are consistent with those in other permits NMFS has issued for research on cetaceans.

For these reasons, I recommend you sign the permits, with the terms and conditions as drafted by the Permits Division.