Appendix A

2010–2011 MARINE MAMMAL COMMISSION RECOMMENDATIONS AND AGENCY RESPONSES

2010

6 January 2010

To: National Marine Fisheries Service
Issue: Proposed changes to increase the transparency of regional fishery management councils, as intended by the Magnuson-Stevens Fishery Conservation and Management Act
Recommendation: The Commission recommended that the National Marine Fisheries Service require councils to make all background environmental and management-related documents available to the public in a timely fashion and provide the councils with any necessary technological assistance for posting all pertinent documents on the Internet.
Agency Response: The Service issued the final rule on 21 September 2010, consistent with the Commission's recommendation. The Service stated that the councils should not be technically constrained by posting documents on the Internet, but they will maintain copies of documents that are too large to be placed on their Web sites at the council offices for public viewing.

8 January 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Douglas Nowacek, Ph.D., to conduct behavioral observations, photo-identification, and suction-cup tagging on North Atlantic right whales during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service defer issuance of the permit until it has resolved National Environmental Policy Act issues concerning research on this species and has prepared the necessary environmental analyses.
Agency Response: The Service issued the permit on 6 July 2010, somewhat consistent with the Commission's recommendation. It prepared an environmental assessment that analyzed the impacts of issuing a permit to authorize the proposed activities on the human environment; subsequently a Finding of No Significant Impact was signed on 1 July 2010.

8 January 2010

To: National Marine Fisheries Service
Issue: Application to amend a research permit from James Harvey, Ph.D., to conduct pinniped research at The Marine Mammal Center, Sausalito, California
Recommendation: The Commission recommended approval, provided that the National Marine Fisheries Service verifies that the proposed research has been approved by the applicant's Institutional Animal Care and Use Committee (IACUC) and that the conditions contained in the current permit remain in effect.
Agency Response: The Service issued a permit amendment on 24 February 2010 for the applicant to increase the number of harbor seal pups taken annually in California but denied the request for temporary captivity of wild seals. It is unclear if the Service verified that the research was approved by the applicant's IACUC, which can occur only after the permit has

been modified.

11 January 2010

To: U.S. Fish and Wildlife Service
Issue: Application for a photography permit from John Downer, John Downer Productions, Ltd. to harass northern sea otters during filming activities in Kachemak Bay, Alaska
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service (1) issue the permit, provided that the permit specify the number of sea otters authorized to be harassed and (2) before issuing the permit, ask the applicant what additional species and numbers of marine mammals could be taken by harassment and either provide authorization for such species or refer the applicant to the National Marine Fisheries Service to obtain such authorization for species under that agency's jurisdiction.
Agency Response: The Service issued the permit on 23 February 2010, consistent with the Commission's recommendations. The Service also stipulated that the permit holder must ensure that other marine mammals are not in the area when he commences filming and that he must cease activities (including shutting down or landing any apparatus) if other marine mammals are encountered during filming.

11 January 2010

To: National Marine Fisheries Service
Issue: Application from the California Department of Transportation to take small numbers of harbor seals, California sea lions, and gray whales by harassment incidental to retrofitting the Dumbarton Bridge in southern San Francisco Bay
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that monitoring and mitigation activities proposed in the Service's *Federal Register* notice are implemented.
Agency Response: The Service issued the incidental harassment authorization on 12 March 2010, consistent with the Commission's recommendation.

14 January 2010

To: Florida Fish and Wildlife Conservation Commission
Issue: Revised Draft Final Endangered and Threatened Species Listing Process Rule regarding a framework for protecting Florida species needing special conservation attention
Recommendation: The Commission recommended, among other things, that the Florida Fish and Wildlife Conservation Commission further revise the Listing Process Rule to (1) ensure that the meaning of "harass" in the definition of take encompasses activities likely to disrupt normal behaviors in ways that could reduce survival or reproduction and therefore have population-level effects; (2) avoid ambiguities regarding the point at which a federally designated endangered or threatened species is "scheduled" for removal from the federal list and clarify whether provisions for biological reviews apply to removals of such species from the state list; and (3) add provisions to establish appropriate time limits for completing each phase of the listing review process.
Agency Response: The Florida Commission adopted a final state rule on September 1 2010, consistent with most of the Commission's recommendations. However, it did not indicate a time frame for the state to complete its evaluation of public requests to list or remove species from the state list.

15 January 2010

To: National Marine Fisheries Service
Issue: Proposed rule and environmental assessment regarding measures to protect killer whales in Washington's inland waters

Recommendation: The Commission recommended that the National Marine Fisheries Service implement all regulations described in its 29 July 2009 *Federal Register* notice to increase protection of killer whales, particularly the endangered southern resident stock, from vessel impacts in Washington's inland waters; analyze and include additional regulatory provisions to establish stand-by zones at some distance beyond the 200-yard approach limit and limit the number of vessels that can be present between that boundary and the 200-yard approach limit at any one time; consider and include safe operating procedures as part of any final rule governing vessel operations in the vicinity of killer whales in the inland waters of Washington State; adopt a regulatory speed limit of either 7 knots or, at a minimum, a "slow safe speed" requirement within 400 yards of killer whales; develop a monitoring plan to assess compliance with and evaluate the effectiveness of the vessel approach regulations included in the final rule and describe that plan in the associated preamble; include implementation of a "no-go" zone off the west coast of San Juan Island; and initiate discussions with Canada to develop comparable management strategies for killer whales throughout the inland waters of both Washington and British Columbia.

Agency Response: The Service issued a final rule on 16 May 2011, consistent with one of the Commission's recommendations. It prohibited most vessels from approaching killer whales closer than 200 yards in Puget Sound and other inland waters of Washington or from moving closer than 400 yards into the path of any killer whale. The Service rejected the Commission's recommendations to restrict speed within 400 yards of whales, establish a stand-by zone, and include safe operating procedures around whales due to administration and enforcement difficulties. It also deferred implementation of the no-go zone pending further analyses and did not address the recommendation to develop a plan for assessing compliance and effectiveness of the regulations.

15 January 2010

To: U.S. Fish and Wildlife Service
Issue: Application for a photography permit from Pontecorvo Productions, LLC. to take polar bears by harassment during filming activities in the Beaufort Sea area
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service defer further consideration of the permit until the following are clarified: time frame for setting up camp, location of the camp, distance from the den to the camp, how smells from the film crew will be minimized, and what, if any, protocols to respond to an aggressive bear will be implemented. In addition, the Commission noted that application does not, but should, discuss why the film crew could not establish its filming site close to a den but build its camp farther away and describe the methods and mitigation measures to be used when filming polar bears hunting seals.
Agency Response: The Service issued a permit on 26 February 2010, consistent with some of the Commission's recommendations. However, it is unclear if Pontecorvo Productions clarified the time frame for setting up camp and how they would respond to aggressive bears.

15 January 2010

To: U.S. Fish and Wildlife Service
Issue: Application for a research permit from Beth Shapiro to import from Canada blood and tissue samples taken from 125 polar bears between 1980 and 2008
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided the applicant obtains all necessary permits under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) before importing the samples.
Agency Response: The Service issued the permit on 5 March 2010, consistent with the Commission's recommendation.

15 January 2010

To: National Marine Fisheries Service
Issue: Application for a public display permit from Dolphin Quest Hawaii to import two captive-born adult male bottlenose dolphins from its sister facility, Dolphin Quest Bermuda, to its facility in Waikoloa, Hawaii
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service determine that the applicant's program for education or conservation is consistent with professionally recognized standards of the public display community and the applicant obtains all necessary permits under CITES before importing the animals.
Agency Response: The Service issued the permit on 23 February 2010, consistent with the Commission's recommendations.

20 January 2010

To: National Marine Fisheries Service
Issue: Application for a public display permit from SeaWorld, Inc., to import one male pilot whale that stranded in 2004 from Kamogawa SeaWorld in Chiba, Japan, to its facility in San Diego
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided it is satisfied that the whale in question stranded as a result of natural causes.
Agency Response: The Service issued the permit on 10 September 2010; however, neither the permit nor the *Federal Register* notice indicated if the animal stranded as a result of natural causes.

20 January 2010

To: National Marine Fisheries Service
Issue: Application from the California Department of Transportation to take small numbers of California sea lions and harbor seals by harassment incidental to retrofitting the Antioch Bridge, east of the confluence of the Sacramento and San Joaquin Rivers
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that mitigation and monitoring measures proposed in the Service's *Federal Register* notice are implemented.
Agency Response: The Service issued the incidental harassment authorization on 5 April 2010, consistent with the Commission's recommendation.

27 January 2010

To: Naval Facilities Engineering Command Northwest
Issue: Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS) regarding proposed Navy activities in the Gulf of Alaska
Recommendation: The Commission recommended that the Navy (1) revise its DEIS to ensure that (a) all activities included under the no-action alternative have been evaluated, (b) the alternatives evaluated and presented to decision-makers and the public include a reduction in activity level, and (c) the scope of decision-making is not unnecessarily constrained; (2) resolve inconsistencies, omissions, and errors in the DEIS and either reissue it or use some other mechanism to allow decision-makers and the public to review and respond to the revised information; (3) withdraw the current section of the DEIS dealing with Cook Inlet beluga whales, conduct the essential analysis of impacts on this endangered stock, and reissue at least that section of the amended DEIS; (4) provide explicit and detailed descriptions of the measures that will be used to avoid risks to certain species or stocks of special concern; (5) expand the description of marine mammal habitat use in the Gulf of Alaska by reviewing information on species-specific distribution and movement patterns obtained from whaling records, scientific research, and other sources during the past century; (6) evaluate the anticipated effectiveness of mitigation and

monitoring measures; and (7) require vessel commanders to retain vessel logs and reports for a minimum of three years.

Agency Response: The Navy published a final environmental impact statement on 11 March 2011 and a record of decision on 19 May 2011, consistent with one of the Commission's recommendations. The Navy indicated that all activities under the no-action alternative were evaluated, a reduction in training activities would not meet the Navy's purpose and need to fulfill military readiness objectives, and the scope of the decision-making was not constrained in any way. The Navy also did not supplement its analysis of the action area for Cook Inlet belugas, because Cook Inlet is located far from the proposed action and not within the area for consideration of impacts. The Navy did work closely with marine mammal experts and the National Marine Fisheries Service on the analysis for species distribution and density estimates and believes that analysis is complete. In addition, the Navy specified its mitigation and protective measures in Chapter 5 of the DEIS and plans to evaluate the effectiveness of its mitigation and monitoring measures with the cooperation of the Service. Lastly, the Navy indicated that vessel logs would be retained for more than 30 days consistent with the Navy's record management procedures but did not specify if they would be retained for a minimum of three years.

29 January 2010

To: U.S. Fish and Wildlife Service

Issue: Application from Alaska SeaLife Center for renewal of its letter of authorization to assist U.S. Fish and Wildlife Service in the rescue, rehabilitation, and release of stranded northern sea otters and walruses and for an enhancement permit to authorize activities with respect to the threatened southwest Alaska distinct population segment of northern sea otters

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the authorization, provided that the Service, in consultation with the Animal and Plant Health Inspection Service, is satisfied that the applicant's plans and facilities for transporting and maintaining the requested animals are adequate to provide for their health and well-being.

Agency Response: The Service issued the letter of authorization and enhancement permit on 29 June 2010, consistent with the Commission's recommendation.

29 January 2010

To: National Marine Fisheries Service

Issue: Application for a research permit from Alaska SeaLife Center to acquire, possess, import, and export samples (i.e., teeth, hair, vibrissae, reproductive organs, skin, blood, urine, etc.) from up to 4,000 cetaceans and 5,000 pinnipeds

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the applicant (1) obtain all necessary permits under CITES before importing or exporting marine mammal parts and (2) document that each specimen was taken in accordance with the laws of the country of origin, that the taking was consistent with the requirements of the Marine Mammal Protection Act, and that specimens are being used only for bona fide scientific purposes.

Agency Response: The Service issued the permit on 19 March 2010, consistent with the Commission's recommendations.

4 February 2010

To: National Marine Fisheries Service

Issue: Status review for listing the insular population of false killer whales in Hawaii as endangered or threatened under the Endangered Species Act

Recommendation: The Commission recommended that the National Marine Fisheries Service ensure that, whenever possible, longline observers collect samples from all false killer whales caught in Hawaii and expedite genetic analyses of those samples; use all

available photo-identification records to evaluate associations among individual false killer whales in Hawaii and to provide a more powerful assessment of the likelihood of interbreeding between pelagic and insular populations; err on the side of caution by acting on the basis of the multiple-stock hypothesis unless the Service can make a strong case that the insular and pelagic whales are part of a single breeding population; either find this population to be a significant ecological and genetic component of the species, or provide a rationale for why the only known insular population of false killer whales in U.S. waters is not significant to the species; and include the shortline, kaka, and other fisheries likely to take members of the insular population within the scope of the Hawaiian False Killer Whale Take Reduction Team.

Agency Response: After a comprehensive review, the National Marine Fisheries Service determined that the Hawaiian insular false killer whale is a distinct population segment that qualifies as a species under the Endangered Species Act and proposed to list it as endangered. The Service did not propose to designate critical habitat at this time but did ask for comments in the 17 November 2010 *Federal Register* notice regarding a final listing rule and designation of critical habitat in the event the distinct population segment is listed. The Commission commented on 15 February 2011.

11 February 2010

To: National Science Foundation

Issue: Application to modify an authorization from Douglas P. Nowacek, Ph.D., to expand currently authorized research on humpback and minke whales

Recommendation: The Commission recommended that the National Science Foundation adopt a general policy to require that the permit holder or the applicant seeking authorization under the Antarctic Conservation Act to conduct research on marine mammals in areas subject to that Act also be the same applicant or permit holder seeking authorization under the Marine Mammal Protection Act, or if that is not possible, strengthen its coordination efforts with the National Marine Fisheries Service's permit division to determine precisely which researchers are authorized to conduct what activities, under what permit or permits and make that information available as part of the public comment process.

Agency Response: The Foundation issued the authorization modification on 17 February 2010. It is unclear if a general policy regarding consistency between authorized permit holders has been adopted.

17 February 2010

To: National Marine Fisheries Service

Issue: Proposed inclusion of non-strategic Hawaii insular and Palmyra Atoll stocks within the scope of the newly formed False Killer Whale Take Reduction Team

Recommendation: The Commission recommended that the National Marine Fisheries Service include the Hawaii insular and Palmyra Atoll stocks within the scope of the False Killer Whale Take Reduction Team; either include the Hawaii shortline and kaka fisheries within the scope of the False Killer Whale Take Reduction Team or work with the state of Hawaii to (1) consider ways to determine the characteristics and rates of interaction of shortline and kaka fisheries with false killer whales and (2) identify and implement measures to avoid such interactions; use the team to review the available information on the American Samoa stock of false killer whales and the associated longline fishery and develop a research agenda to guide the Service's investigation of interactions between them; and retain the option of adapting the team's scope and membership to address potential incidental false killer whale takes by the American Samoa longline fishery when the available information is sufficient for that purpose.

Agency Response: The National Marine Fisheries Service agreed to include the Hawaii Insular and Palmyra Atoll stocks of false killer whales within the scope of the team; but

declined at this time to include the Hawaii shortline and kaka line fisheries because of limited information regarding the fisheries and lack of documented interactions between those fisheries and marine mammals. The Service also declined to ask the team to address the American Samoa stock of false killer whales or the American Samoa longline fishery but indicated it would consider adapting the team's scope and membership, should information become available indicating that incidental takes from the American Samoa stock of false killer whales are at unsustainable levels.

3 March 2010

To: National Marine Fisheries Service
Issue: Proposed designation of critical habitat for the endangered Cook Inlet stock of beluga whales under the Endangered Species Act.
Recommendation: The Commission recommended that the National Marine Fisheries Service adopt its proposal to designate all waters and coastal areas of Cook Inlet used by beluga whales north of 60° 25' N as critical habitat for the beluga. In addition, the Commission recommended that the Service expand designation farther from shore to include all coastal waters less than 18 m in depth in the rest of the inlet as critical habitat, including waters on the eastern side; include areas in the lower portion of the inlet that must be available for reoccupation if and when the population increases; adopt a precautionary approach by declining to exercise its discretion to exclude any proposed critical habitat based on economic considerations; and provide Fort Richardson's integrated natural resources management plan to the public and, in the final rule, explain the basis for its conclusion that the plan provides benefits to the Cook Inlet beluga whale population.
Agency Response: The Service issued a final rule on 11 May 2011, consistent with some of the Commission's recommendations. The Service did not believe that sufficient justification existed for including additional areas in the lower inlet in the designation, because modeling had not identified those areas as having high habitat use values. It also declined to include any historically (but currently unoccupied) areas in the designation, because it did not believe that those areas are essential to the conservation of the species. In addition, the Service opted to exclude Fort Richardson from the designation, noting that the integrated natural resources management plan provided benefits to beluga whales by restricting personnel access to beluga whale habitat, incorporating mitigation measures designed to reduce the potential for harassment or injury of whales, and promoting research on beluga whale habitat use in and adjacent to the facility.

4 March 2010

To: National Marine Fisheries Service
Issue: Proposed implementing measures to restrict vessels that engage in illegal, unregulated, and unreported (IUU) fishing from entering U.S. ports
Recommendation: The Commission recommended that the National Marine Fisheries Service work closely with the Department of State to promote greater consistency in the definitions of "IUU fishing" and in the IUU deterrence and prevention measures authorized under different regional fishery management organizations; review current legislative authorities for imposing sanctions where the United States has enough evidence of IUU fishing by vessels not listed by any fishery management organization, or where the vessels' activities are in dispute, and, where any gaps in authority are identified, recommend amendments to close them; clarify specific steps to be taken to determine whether to deny port access to a specific vessel; provide notice and explanations for actions taken, whether access is denied or not; support ongoing U.S. Coast Guard efforts to eliminate the notification exemption for foreign vessels less than 300 gross tons; and convey to member nations of the Agreement on the International Dolphin Conservation Program the importance of creating a provisional IUU vessel list at the program's next annual meeting

in June 2010.

Agency Response: The Service issued a final rule on 27 October 2010, consistent with some of the Commission's recommendations. Specifically, the final rule clarified the procedures for denying port access to a specific vessel and agreed to provide notice and explanation for actions taken. However, with respect to the Commission's other recommendations, the Service noted that it was pursuing the issues or policies through other means.

5 March 2010

To: National Marine Fisheries Service

Issue: Application for an exempted fishing permit under provisions of the Atlantic Coastal Fisheries Cooperative Management Act to allow testing of fixed fishing gear with no vertical lines on Jeffrey's Ledge in the Gulf of Maine

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the experimental fishing permit but require the applicant to carry an independent, Service-approved observer to help record data and verify its accuracy and completeness. The Commission further recommended that the Service continue to seek funding to develop and test alternative fishing gear and practices to reduce the risks from conflicts between marine mammals and fishing gear.

Agency Response: The application was withdrawn due to confusion on the part of some Atlantic Large Whale Take Reduction Team members regarding the project.

11 March 2010

To: National Marine Fisheries Service

Issue: Proposed rule to revise guidelines for National Standard 2 of the Magnuson-Stevens Fishery Conservation and Management Act requiring use of the best scientific information available in fisheries conservation and management and to establish new guidelines for scientific peer review

Recommendation: The Commission recommended that the National Marine Fisheries Service include further direction in the guidelines for fishery managers to use scientific information at the ecosystem level; preserve the principles of relevance, inclusiveness, objectivity, transparency and openness, timeliness, verification and validation, and peer review in the final guidelines; emphasize the importance of evaluating uncertainty, identifying gaps in information, and recognizing the associated risks of moving forward with ill-conceived management actions; promote a more cautious interpretation of findings where uncertainty is high in order to ensure conservation of data-poor species, and provide an incentive to collect the necessary information; provide a minimum of 21 days to enable timely but more thorough external review and comment; continue to recognize the scientific and statistical committees as the scientific advisory bodies to the councils, include conflict of interest provisions in the final rule and ensure that they apply to all peer reviewers and committee members; require the Secretary to disclose the source of any information included in a stock assessment and fishery evaluation report and carry out a targeted peer review of new information included in the document; and require more thorough assessments of marine ecosystems in stock assessment and fishery evaluation reports.

Agency Response: The Service did not publish the final rule by the end of 2011 but plans to publish it in early 2012. However, the Service stated that the Commission's comments were very helpful.

26 March 2010

To: National Marine Fisheries Service

Issue: Application to authorize the incidental taking of humpback whales from the endangered central North Pacific stock in the Hawaii-based longline fisheries for a three-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service comply with section 101(a)(5)(E) of the Marine Mammal Protection Act, issue the incidental take authorization, and reexamine the criteria for authorizing the permit to determine whether it is still satisfied if the Service's five-year status review of humpback whales identifies a new stock structure.
Agency Response: The Service issued the incidental take authorization on 24 May 2011 for a period of three years, complying with section 101(a)(5)(E). The stock structure analysis had not been completed by the end of 2010; thus, a new stock structure has not been identified and criteria have not been re-examined.

29 March 2010

To: National Marine Fisheries Service
Issue: Application from the National Marine Fisheries Service Alaska Region to take small numbers of northern fur seals by harassment incidental to replacing and repairing the fur seal research observation towers and walkways on St. Paul Island
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that mitigation and monitoring measures proposed in the Service's *Federal Register* notice are implemented and that field crews (1) clear all construction-related debris from each site when construction ends and (2) use bolts or other materials, rather than nails, so that structures that become decrepit in the future do not become hazardous to animals.
Agency Response: The Service issued the incidental harassment authorization on 16 April 2010, with one of the Commission's recommendations. However, the Service rejected the suggestion to use bolts instead of nails, noting that the construction project had been designed by a certified engineer and that the design met code, structural load/stress, and safety criteria with the use of nails.

29 March 2010

To: National Marine Fisheries Service
Issue: Notice of intent to prepare a recovery plan for the Cook Inlet beluga whale
Recommendation: The Commission recommended that the National Marine Fisheries Service use the conservation plan for the Cook Inlet beluga whale that it had published in October 2008 as a template for developing the recovery plan; promptly establish a recovery team to assist in developing and implementing the recovery plan; and use the conservation plan as the appropriate guide for its research and other conservation efforts pending recommendations of the recovery team and recovery plan.
Agency Response: At the end of 2010 the Service had established a recovery team that is assisting with preparation of a recovery plan.

29 March 2010

To: National Marine Fisheries Service
Issue: Application from Lamont-Doherty Earth Observatory to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in waters of the Northern Mariana Islands
Recommendation: The Commission recommended that, before issuing the incidental harassment authorization, the Service provide additional justification for its preliminary determination that the planned monitoring program will be sufficient to confidently detect all marine mammals within or entering the identified safety zones; clarify when passive acoustic monitoring would not be used to detect marine mammals or when two observers would not be on duty and the conditions under which these otherwise required components of the monitoring program would not be considered practicable; extend the required monitoring period at start-up to at least one hour before the initiation of airgun activities and one hour before the resumption of airgun activities after a power-down because of a marine mammal sighting within the safety zone; and require that observers collect and

analyze data on the effectiveness of ramp-up as a mitigation measure.
Agency Response: The Service did not issue the incidental harassment authorization, because the planned geophysical survey was postponed until 2012. Lamont-Doherty Earth Observatory re-submitted the incidental harassment authorization application in 2011.

31 March 2010

To: U.S. Fish and Wildlife Service
Issue: Application for an enhancement permit from the U.S. Fish and Wildlife Service's Jacksonville Field Office to take Florida manatees for rehabilitation and post-release monitoring, to import rescued manatees from the Bahamas and the Virgin Islands, and to import and export biological specimens collected from rescued manatees
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the enhancement permit under the Endangered Species Act authorizing the identified activities, but that authorization under the Marine Mammal Protection Act be pursuant to section 109(h) rather than by means of an enhancement permit issued under section 104(c)(4) of that Act. If the Service decides to authorize the proposed activities under an enhancement permit, the Commission recommended that the Service fully document its rationale for determining that the requirements of section 104(c)(4) have been met.
Agency Response: The Service issued the permit on 30 August 2011, consistent with the Commission's recommendation.

5 April 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Florida Atlantic University to harass several species of cetaceans, including North Atlantic right whales, during aerial and vessel surveys to obtain data on marine mammals and sea turtles in the Straits of Florida and Gulf Stream Current
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit but defer authorization to harass right whales until the Service has resolved National Environmental Policy Act issues concerning research on this species and has prepared the necessary environmental analyses.
Agency Response: The Service issued the permit on 3 December 2010 but did not address the right whale issues.

9 April 2010

To: National Marine Fisheries Service
Issue: Intent to prepare an environmental impact statement to analyze the impacts of issuing incidental take authorizations to the oil and gas industry for the taking of marine mammals incidental to offshore exploration in the Chukchi and Beaufort Seas off Alaska
Recommendation: The Commission recommended that the National Marine Fisheries Service include the following in the environmental impact statement: a more robust approach that involves convening the responsible agencies, industries, and interested stakeholders to develop and implement a comprehensive assessment of ecosystem baseline conditions before oil and gas operations further progress; a means for coordinating seismic surveys in the Chukchi and Beaufort Seas to cause the least amount of seismic activity and resulting disturbance; and a mechanism to ensure coordinated efforts to integrate the biological, physical, and social information pertinent to oil and gas exploration and production into a framework for analyzing and modeling the resulting effects on Arctic marine ecosystems.
Agency Response: The Service did not issue a draft environmental impact statement by the end of 2011 but did submit it to the Environmental Protection Agency for publication in early 2012.

9 April

To: National Marine Fisheries Service

2010

Issue: Application for a research permit from Paul Ponganis to harass and tag up to five leopard seals a year (not to exceed 10 seals during five years) and to take up to one seal per year by accidental mortality during research activities to determine prey intake rates of leopard seals

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the research be suspended if more than one seal is accidentally killed during a field season or if five animals are killed during the five-year period and the applicant be required to obtain the necessary permits under the Antarctic Conservation Act.

Agency Response: The Service issued the permit on 17 June 2010, consistent with the Commission's recommendations.

12 April 2010

To: National Marine Fisheries Service

Issue: Application to amend a research permit from Andrew Read to harass up to 200 juvenile Arnoux's beaked whales annually and to tag up to five individuals annually in the Southern Ocean

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided the conditions contained in the original permit remain in effect.

Agency Response: The Service issued the permit amendment on 27 September 2010, consistent with the Commission's recommendation.

16 April 2010

To: National Marine Fisheries Service

Issue: Revised application for a research permit from the Office of Science and Technology to increase the number of marine mammals that may be harassed, tagged, and exposed to sound playbacks off southern California

Recommendation: The Commission recommended that the National Marine Fisheries Service defer issuance of the permit until the applicant verifies that the proposed research was approved by an IACUC. The Commission then recommended that the National Marine Fisheries Service issue the permit, provided that the Service withhold authorization for tagging any female cetacean accompanied by a neonate calf, withhold authorization to conduct controlled sound exposure experiments on focal groups that include a neonate calf, consult with the applicant to identify steps to monitor any animal injured or disoriented during playback experiments, require the investigator to suspend an activity if introduced sounds may have led to the serious injury or death of an animal, require any such suspension remain in effect until the Service gives the applicant okay to proceed, consult with the applicant to identify steps to recover and necropsy any animal that may have died due to activities, coordinate with others doing research on the same species in the same areas so as to avoid duplicative research and unnecessary disturbance of animals, verify that the proposed research has been approved by the applicant's IACUC, and ensure that the applicant obtains all necessary permits under CITES before importing or exporting marine mammal parts.

Agency Response: The National Marine Fisheries Service issued the permit on 6 July 2010, consistent with most of the Commission's recommendations. However, the Service did not stipulate if monitoring would occur for animals injured or disoriented during playback experiments or if carcass recovery would occur. It also is unclear if the research was approved by the applicant's IACUC.

21 April 2010

To: National Marine Fisheries Service

Issue: Application from the Washington State Department of Transportation to take small numbers of Pacific harbor seals, California sea lions, and gray whales by harassment

incidental to replacement of the Manette Bridge in Bremerton
Recommendation: The Commission recommended that the Service issue the incidental harassment authorization, provided that proposed mitigation and monitoring measures are implemented.
Agency Response: The Service issued the incidental harassment authorization on 29 June 2010, consistent with the Service's recommendation.

26 April 2010 **To:** U.S. Fish and Wildlife Service
Issue: More Florida manatees died from cold exposure this past winter than during any year on record due to exceptionally cold temperatures and shutdown of a power company
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service immediately reconstitute the warm-water task force and re-establish a Florida manatee recovery team.
Agency Response: The Service decided not to reconstitute the warm-water task force nor re-establish a Florida manatee recovery team, but instead to hold a series of workshops on actions to protect warm water refuges at an undetermined future date.

26 April 2010 **To:** U.S. Fish and Wildlife Service
Issue: Application for an enhancement permit and a letter of authorization from the Service's Caribbean Ecological Services Field Office for a rescue, rehabilitation, and release program for the Antillean manatee in Puerto Rico
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the enhancement permit under the Endangered Species Act, but that authorization of activities under the Marine Mammal Protection Act be issued pursuant to section 109(h) rather than section 104(c)(4) of the Act. If the Service decided to authorize the proposed activities section 104(c)(4) of the Act, the Commission recommended that the Service fully document its rationale for determining that the requirements of that section have been met.
Agency Response: The Service issued a permit on 8 August 2011, consistent with the Commission's recommendation.

26 April 2010 **To:** U.S. Fish and Wildlife Service
Issue: Application for research permit from Robert Rockwell to import hair and scat samples from Canadian polar bears to study the western Hudson Bay population
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided the applicant obtains all necessary permits under CITES before importing marine mammal parts.
Agency Response: The Service issued the permit on 21 July 2010, consistent with the Commission's recommendation.

27 April 2010 **To:** National Marine Fisheries Service
Issue: Application for research permit from the National Marine Mammal Laboratory to continue investigating the foraging ecology, habitat requirements, vital rates, and effects of natural and anthropogenic factors on pinnipeds in the north Pacific Ocean, Bering Sea, Arctic Ocean, and along the Alaska coast
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit as requested.
Agency Response: The Service issued the permit on 10 May 2010, consistent with the Commission's recommendation.

4 May 2010 **To:** National Marine Fisheries Service
Issue: Application for a public display permit from the Louisville Zoo to import a female

South African fur seal from the Toronto Zoo
Recommendation: The Marine Mammal Commission recommended that the National Marine Fisheries Service issue the permit as requested.
Agency Response: The Service issued the permit on 29 June 2010, consistent with the Commission's recommendation.

4 May 2010
To: National Marine Fisheries Service
Issue: Application for a public display permit from SeaWorld to import one male beluga whale from the Vancouver Aquarium to Sea World Texas
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit as requested.
Agency Response: The Service issued the permit on 5 November 2010, consistent with the Commission's recommendation.

4 May 2010
To: U.S. Fish and Wildlife Service
Issue: Application for a photography permit from Sea Studios Foundation to harass up to 15 southern sea otters during filming for a wildlife documentary
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit as requested.
Agency Response: The Service issued the permit on 20 July 2010, consistent with the Commission's recommendation.

7 May 2010
To: Minerals Management Service
Issue: Request for comments on the preliminary revised 5-year Outer Continental Shelf Oil and Gas Leasing Program for 2007–2012
Recommendation: The Commission recommended that the Minerals Management Service consider the potential impact on beluga whale habitat in the lower Cook Inlet before approving any activity in that area, work with the National Marine Fisheries Service to evaluate risks to the North Atlantic right whale before proceeding with sale offshore of Virginia, defer proceeding with lease sales in the central and western Gulf of Mexico until the current oil spill has been stopped and the Service is convinced that provisions will be made to prevent and/or respond more effectively to future spills, provide more details on methods used in its environmental sensitivity analysis to provide a stronger justification for the Secretary's proposed final program, and expand the directive to the U.S. Geological Survey to evaluate the resiliency of all U.S. marine ecosystems where oil and gas operations are being planned or conducted.
Agency Response: The Commission's comments were included in the Minerals Management Service's Revised OCS Oil and Gas Leasing Program for 2007–2012, issued in December 2010. However, it is unclear if any of the comments were addressed within the document.

10 May 2010
To: National Marine Fisheries Service
Issue: Application for research permit from Becky Woodward to harass and tag a variety of cetacean species during the development and testing of two methods of attaching tags using peduncle belts
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided the applicant conducts the study in three phases, reports the results of each phase before being allowed to begin the next phase, and coordinates her research with other permit holders doing similar research in the area to avoid unnecessary disturbance of the animals.
Agency Response: The Service had not issued the permit by the end of 2011.

10 May 2010

To: U.S. Fish and Wildlife Service
Issue: Efforts to recover the Hawaiian monk seal
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service fund the hiring of a wildlife biologist for the Hawaiian Islands National Wildlife Refuge, increase the annual funding base for Midway Atoll National Wildlife Refuge by $3.6 million, provide the National Marine Fisheries Service logistic support for its Hawaiian monk seal recovery efforts, consider options to acquire a vessel to support operations related to Hawaiian monk sea recovery, and support the National Marine Fisheries Service's proposal to remove up to 20 Galapagos sharks at French Frigate Shoals to preserve the atoll's monk seal population.
Agency Response: The Service responded that funding levels will "at best remain stable in the near future," but would consider the Commission's input. The Service also fully supported removing up to 20 Galapagos sharks at French Frigate Shoals to preserve the monk seal population.

10 May 2010

To: National Ocean Service
Issue: Recovery and conservation of the Hawaiian monk seal and conservation of the humpback whale
Recommendation: With regard to the Papahānaumokuākea Marine National Monument and the Northwestern Hawaiian Islands Coral Reef Ecosystem, the Commission recommended that the Office of National Marine Sanctuaries continue working with the National Marine Fisheries Service to evaluate accumulation rates of net debris in northwestern Hawaiian Islands lagoons and to clean up marine debris and continue working with the Service to accomplish Hawaiian monk seal recovery goals in the northwestern Hawaiian Islands. The Commission further recommended that the Sanctuary Office support approval of the Monument's permit request by the Service to kill up to 20 Galapagos sharks at French Frigate Shoals during 2010 and provide the Service with support for deploying and retrieving seasonal monk seal field camp personnel and supplies in the northwestern Hawaiian Islands using the Monument's research vessel. With regard to the Hawaiian Islands Humpback Whale National Marine Sanctuary, the Commission recommended that the Office of National Marine Sanctuaries add conservation of Hawaiian monk seals to the Sanctuary's purposes and assist with or carry out non-regulatory tasks in the Hawaiian Monk Seal Recovery Plan.
Agency Response: The National Ocean Service responded that it would continue to use its staff, especially at Papahānaumokuākea Marine National Monument and the Hawaiian Island Humpback Whale National Marine Sanctuary, to assist with the protection and recovery of the Hawaiian monk seal. The Service also would seek public input on how the Sanctuary should be managed, possible new rules, boundary changes, and marine spatial planning. In addition, the Service indicated that the Monument would continue to support monk seal recovery efforts in the northwestern Hawaiian Islands, which would include marine debris removal, vessel use, and research related to interactions between Galapagos sharks and monk seals.

10 May 2010

To: National Marine Fisheries Service
Issue: Recovery of the Hawaiian monk seal
Recommendation: The Commission recommended that the National Marine Fisheries Service secure dedicated annual budgets at the $7.2 million level to promote the recovery of this long-lived, slow-growing species. The Commission also recommended that the Service (1) maintain deployment levels for northwestern Hawaiian Islands' field camps at the 2009 level for the foreseeable future; (2) provide the Pacific Islands Fisheries Science

Center sufficient resources to fill the position vacated by the retired computer technician and revamp the Hawaiian monk seal database so that it provides essential scientific and management information on a timely basis; (3) complete the ongoing worming trials for juvenile monk seals and analyze the results as soon as possible to determine if and how this approach might be more broadly applied; (4) consult with the Hawaiian Monk Seal Recovery Team and key recovery program partners to prepare a strategic Hawaiian monk seal translocation plan; (5) proceed with the proposed removal of up to 20 Galapagos sharks near monk seal pupping beaches at French Frigate Shoals; (6) work with agencies leading the effort to remove debris from the northwestern Hawaiian Islands and use a portion of its annual monk seal appropriation to support debris removal near monk seal pupping beaches; (7) consult with the Hawaiian Monk Seal Recovery Team and its multiple recovery partners to complete comprehensive, long-term main Hawaiian Islands research and management plans in the coming year; (8) provide the Pacific Islands Fisheries Science Center sufficient resources to dedicate at least one member of its staff to work fulltime to coordinate and help conduct all main Hawaiian Islands Hawaiian monk seal research activities under the plan; (9) work closely with the Hawaii Department of Land and Natural Resources to ensure development and approval of a section 6 Endangered Species Act grant application; (10) provide an additional staff position in the Pacific Islands Regional Office to work fulltime with volunteer networks on different islands in developing and organizing Hawaiian monk seal conservation activities; (11) continue to work with The Marine Mammal Center to develop a long-term health care facility for Hawaiian monk seals and take the lead for securing funding to cover operating costs; (12) contract with a professional public education firm to develop educational materials and work with agency partners to implement a cooperative, coordinated education and outreach program that is focused on key community segments likely to interact with seals and that will deliver a consistent and well-articulated conservation message; (13) immediately begin the contracting process to address community outreach needs; and (14) review the results of its aversive conditioning workshop and then fund studies to develop and test promising techniques to dissuade seals from becoming acclimated to people or frequenting areas that could place seals or people at risk.

Agency Response: The National Marine Fisheries Service responded that the 2011 funding level for monk seals will be similar to the requested level for 2010, but listed several of its accomplishments consistent with the Commission's recommendations: (1) entered all past data into the existing database and designed a new database structure to improve performance of the system; (2) conducted initial field trials related to deworming juvenile monk seals on Laysan Island; (3) identified a potential contractor to prepare a programmatic environmental impact statement to evaluate the impacts of translocating monk seals on the human environment; (4) received a permit from the Hawaii Land Board to remove up to 20 Galapagos sharks from the Papahānaumokuākea Marine National Monument; (5) continued to work with the Coast Guard, National Ocean Service, and other partners to support removal of marine debris in the northwest Hawaiian Islands and to take steps to prevent future debris build-up; (6) continued to work with The Marine Mammal Center to develop a network of monk seal health care facilities; (7) worked on drafting a monk seal research plan for the main Hawaiian Islands; (8) hired a volunteer response coordinator; (9) took steps to develop an outreach and education program to ensure a consistent message on promoting monk seal recovery; and (10) took steps to identify and evaluate techniques to modify the behavior of monk seals at risk of seeking interactions with humans in the main Hawaiian Islands.

11 May 2010

To: National Marine Fisheries Service

Issue: Managing marine mammals and marine ecosystems in U.S. waters of the Hawaiian

archipelago and Pacific Trust Territories

Recommendation: With regard to Pacific cetaceans, the Commission recommended that the National Marine Fisheries Service review its responsibilities, including developing an adequate budget for cetacean research and management in the Pacific Islands region, identifying strategies to strengthen cooperative partnerships with other agencies and groups in the Pacific region, and initiating or expanding international partnerships to coordinate research and management efforts with those having jurisdiction over waters in the central and western North Pacific Ocean. With regard to fishery interactions near the main Hawaiian Islands, the Commission recommended that the Service work with the state of Hawaii to develop an observer or other monitoring program to assess the interaction between marine mammals and Hawaii's kaka and short-line fisheries. With regard to fisheries throughout the central and western North Pacific Ocean, the Commission recommended that the Service's Office of Protected Resources and Office of International Affairs cooperate to track fisheries in international and foreign national waters of the central and western Pacific, assess the bycatch in those fisheries, and cooperate with regional fishery management organizations to reduce bycatch to safe levels.

Agency Response: The National Marine Fisheries Service responded that while many efforts are limited by available funds, it will add a cetacean assessment specialist to its staff, broaden its passive acoustic monitoring and surveying efforts, and hire more field personnel to train researchers in the Marianas, Guam, and American Samoa. The Service also proposed to add the Hawaii kaka line fishery as a Category III fishery in the 2011 List of Fisheries, directed the false killer whale take reduction team to consider the potential impacts of the Hawaii shortline and kaka line fisheries on false killer whales, and supported efforts in various Pacific Island countries to enhance bycatch data collection and analysis.

11 May 2010

To: National Park Service

Issue: The Hawaiian monk seal numbers fewer than 1,200 animals and is declining at a rate of 4.5 percent annually

Recommendation: The Commission recommended that the National Park Service sufficiently fund the Kalaupapa National Historical Park to continue and expand activities to monitor and promote the growth of its new Hawaiian monk seal colony.

Agency Response: The National Park Service responded that it intended to maintain funding for programs that monitor and support the growth of the new Hawaiian monk seal colony at Kalaupapa National Historical Park and would continue its well-developed partnerships with similar agencies. The Service also requested that the Marine Mammal Commission fund a summer student internship or seasonal worker or provide similar monetary assistance.

14 May 2010

To: National Oceanic and Atmospheric Administration (NOAA)

Issue: Development of a national policy to guide aquaculture in U.S. waters

Recommendation: The Commission recommended that NOAA (1) clarify that aquaculture operations do not constitute "fishing" for purposes of the Magnuson-Stevens Fishery Conservation and Management Act and recognize the need for a separate statutory and regulatory regime to govern aquaculture activities; (2) specify that aquaculture activities do not constitute commercial fishing operations for purposes of the Marine Mammal Protection Act; (3) exclude aquaculture facilities from coverage under section 118 of the Marine Mammal Protection Act and require those using high-powered acoustic devices or other deterrent devices likely to harass marine mammals to obtain incidental taking authorizations under section 101(a)(5) of the Act or confine any deterrence activities

to those authorized under section 101(a)(4) of the Act; (4) not rely entirely on section 101(a)(5) as the mechanism to consider and address possible impacts on marine mammals but adopt additional measures to consider and mitigate all possible effects on marine mammals; (5) develop standards and requirements for aquaculture facilities to limit discharge of aquaculture byproducts including fish or shellfish wastes, feeds, and antibiotics or other chemicals to levels determined to be safe for the affected biological communities; (6) craft its policy to ensure that the foods used for cultivated stocks are derived from sustainable sources that do not deplete the wild forage base for marine mammals or other marine species; (7) establish and uphold rigorous standards and requirements for design, construction, and maintenance of aquaculture facilities; (8) delay completion of its aquaculture policy until the coastal and marine spatial planning framework has been approved by the President and the Administration has confirmed that all aspects of its policy are consistent with the framework; (9) implement its aquaculture policy using the best available scientific information on the spatial distribution, movement, and habitat-use patterns of marine mammals; (10) include a clear description of the existing gaps in the scientific information needed to manage aquaculture, the research required to address those gaps, and the funding required to support the research; and (11) include a requirement that each permit under section 191(a)(5) include a monitoring program to detect and record the nature and number of direct interactions between facility operations and marine mammals.

Agency Response: NOAA responded that it wants to ensure that aquaculture is managed so that it complements its comprehensive strategy to maintain healthy and productive marine ecosystems and the mammals that depend on them. Its policy would cover all forms of marine aquaculture, focus on sustainability and the protection of ocean resources and marine ecosystems, address fisheries management issues, and enable U.S. aquaculture to create local jobs and supply domestic seafood. The protection of marine mammals also would be an integral part of the policy.

20 May 2010

To: National Marine Fisheries Service

Issue: Application for a research permit from the Alaska Department of Fish and Game to conduct research on several species of cetaceans in the Bering, Chukchi, and Beaufort Seas to study cetacean population abundance, stock structure, feeding areas, migration routes, and behavior relative to human disturbance

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service require that the investigators stop a tagging attempt if an animal exhibits a strong adverse reaction to such activities, require that an activity be suspended if it contributes to three or more animals being seriously injured or killed in any one year as a result of the research, ensure that researchers coordinate with others doing similar research to avoid unnecessary disturbance of the animals, and require the applicant to obtain all necessary permits under CITES before importing or exporting marine mammal parts.

Agency Response: The Service issued the permit on 21 May 2010 for the beluga and gray whale aspects of the research, consistent with all of the Commission's recommendations except suspending activities if three or more animals are injured or killed in any one year. The Service deferred authorization for bowhead and humpback whale aspects of the research, pending completion of consultation under section 7 of the Endangered Species Act. That portion of the permit was not issued by the end of 2011.

21 May 2010

To: National Marine Fisheries Service

Issue: Application for research permit from Daniel Costa to harass northern elephant seals during studies on growth, behavior, and reproduction

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that activities on the same species and in the same areas are coordinated to avoid unnecessary disturbance of the animals.
Agency Response: The Service issued the permit on 29 June 2010 but did not stipulate a coordination condition in the permit.

24 May 2010

To: National Marine Fisheries Service
Issue: Application from Shell Offshore, Inc., to take small numbers of cetaceans and pinnipeds by harassment incidental to offshore exploratory drilling at the Torpedo and Sivulliq prospects in Camden Bay, Beaufort Sea, Alaska
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization contingent upon the successful negotiation of a conflict avoidance agreement between Shell and the Alaska Eskimo Whaling Commission and affected whaling captains associations; develop more comprehensive conflict avoidance agreements involving other possibly affected communities; require Shell to suspend operations if a dead or seriously injured marine mammal is found near the operations and the death or injury could be attributed to the applicant's activities; revise its assessment of expected takes associated with the proposed activity by evaluating all aspects of Shell's operations; take a lead role pursuing objectives set forth in the expert panel review associated with the open-water meeting to improve ecosystem assessments and assessments of effects of oil and gas operations; develop means for tracking and enforcing Shell's implementation of monitoring and mitigation measures to ensure that they are executed as expected; and include in its environmental assessment an analysis of potential for an oil spill and Shell's ability to respond to such a spill.
Agency Response: The Service reported that Shell withdrew its incidental harassment authorization application.

26 May 2010

To: U.S. Fish and Wildlife Service
Issue: Proposed guidelines for safely deterring polar bears from damaging property or endangering people
Recommendation: The Commission recommended that, before adopting final deterrence for polar bears, the U.S. Fish and Wildlife Service consider less formal ways of implementing measures unless it has a compelling reason for regulations; consider expanding the proposed deterrence measures for polar bears to allow a person at risk to adopt a stepped approach in which all non-lethal measures would be available as alternatives to lethal taking; revise its proposed regulations to clarify who may take action to deter polar bears, under what circumstances, and the reasons for such taking; revise its preamble and proposed regulations to indicate that anyone may deter polar bears, provided they otherwise meet the criteria set forth in section 101(a)(4) and the implementing regulations; explain in the preamble the reason(s) why taking in accordance with the proposed rule would not require additional authorization under the Endangered Species Act; include the rationale or basis for all proposed deterrence measures in the preamble to the proposed rule rather than in the regulations; and provide additional justification for its determination that the proposed sound threshold of acoustic deterrent devices will not adversely affect polar bears.
Agency Response: The Service issued a final rule on 22 September 2010, consistent with some of the Commission's recommendations. The Service explained that it established regulations rather than less formal measures, because a regulation has the effect of law in any future interaction between the public and the Service on the issue of polar bear deterrence. It did not believe that a stepped approach that would allow the use of projectiles as a deterrent was appropriate, because the regulations are intended to apply to everyone,

regardless of their level of skill or training or familiarity with polar bear behavior. The Service indicated that public officials who had the necessary knowledge and expertise would be able to use more aggressive deterrence measures under other authorities.

1 June 2010

To: National Marine Fisheries Service
Issue: Long-term conservation of spinner dolphins in Hawaiian waters
Recommendation: The Commission recommended that the National Marine Fisheries Service secure funding and take steps to conserve spinner dolphins in Hawaii, including (1) assessing abundance and trends, distribution, movement, habitat-use patterns, productivity, and human-related threats for each recognized Hawaiian spinner dolphin stock; (2) strengthening and extending its Dolphin Smart program to include all islands where dolphin-watch tours are offered or where human-dolphin interactions routinely occur; (3) hiring a Dolphin Smart program coordinator; 4) increasing its enforcement presence in areas where interactions between dolphins and people occur, documenting potential cases of harassment, and providing documentation to the appropriate authorities for prosecution when a take has occurred; (5) providing funds to purchase, operate, maintain, and staff a vessel dedicated to enforcement of the Marine Mammal Protection Act and other pertinent statutes and regulations; (6) working with NOAA's Office of the General Counsel to examine the priorities assigned to enforcement of the various statutes under the agency's jurisdiction, including the Marine Mammal Protection Act; and (7) considering alternative sources of funding to support spinner dolphin conservation measures.
Agency Response: The National Marine Fisheries Service indicated that its Pacific Islands Regional Office and Fisheries Science Center have begun to assess the effects of human-related activities on spinner dolphins. The Service also has collaborated on funding a research partnership with Duke and Murdoch Universities to assess the effects of human activities on spinner dolphins along the Kona coast. Progress has been made in introducing the Dolphin SMART program in the Hawaiian Islands to reduce the potential for harassment of spinner dolphins, with the hope of expanding it to all the islands where dolphin tours are offered. The Service agreed with the Commission that increasing its on-water enforcement presence would be effective in reducing the potential for harassment where spinner dolphins and people are likely to encounter each other. Its enforcement activities would be augmented through partnerships with the state of Hawaii and the U.S. Coast Guard.

10 June 2010

To: National Marine Fisheries Service
Issue: Application for public display permit from the Chicago Zoological Society to import two captive-born bottlenose dolphins from Dolphin Quest Bermuda to the Brookfield Zoo
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service, in consultation with the Animal and Plant Health Inspection Service, is satisfied that the applicant's plans and facilities for transporting and maintaining the animals meet the requirements established under the Animal Welfare Act and are adequate to provide for the animals' health and well-being and is satisfied that the applicant's education program is acceptable and its message is consistent with policies of the Marine Mammal Protection Act.
Agency Response: The Service issued the permit on 15 July 2010, consistent with the Commission's recommendations.

10 June 2010

To: National Marine Fisheries Service
Issue: Application from the Georgia Aquarium to import two male, captive-born dolphins from Dolphin Experience, Ltd., Freeport, Grand Bahama Island, and three female captive-

born bottlenose dolphins from Dolphin Quest Bermuda
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service, in consultation with the Animal and Plant Health Inspection Service, is satisfied that the applicant's plans and facilities for transporting and maintaining the animals meet the requirements established under the Animal Welfare Act and are adequate to provide for the animals' health and well-being and is satisfied that the applicant's education program is acceptable and its message is consistent with policies of the Marine Mammal Protection Act.
Agency Response: The Service issued the permit on 15 July 2010, consistent with the Commission's recommendations.

10 June 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from the University of Florida to acquire, import and re-export, and maintain samples from all cetacean and pinniped species (except walrus) of both sexes and all age classes worldwide to study marine mammal diseases during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue permit, provided that the applicant be required to obtain all necessary permits under CITES before importing or exporting marine mammal parts and be required to collect and report information sufficient to document that each specimen was taken in accordance with the laws of the country of origin, that such taking was consistent with the requirements of the Marine Mammal Protection Act, and that specimens are being used only for bona fide scientific purposes. The Commission also recommended that the researchers who are not authorized to conduct research under this permit or who do not hold other valid research permits but wish to use specimens collected under this permit be required to obtain a permit or other appropriate authorization from the Service before obtaining such materials from the permit holder.
Agency Response: The Service issued the permit on 28 July 2010, consistent with the Commission's recommendations.

June 11 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from the National Marine Mammal Laboratory to harass, tag, and sample specified numbers of 33 species of marine mammals
Recommendation: The Commission recommended that the National Marine Fisheries Service defer issuance of the permit until the research protocol has been reviewed and approved by an IACUC, withhold authorization for any future amendment of the permit pending review and approval by an IACUC of all of the research activities covered by the permit and any proposed changes, and defer action on this permit as it pertains to North Pacific right whales until the Service has resolved how best to comply with the National Environmental Policy Act and has prepared the necessary environmental analyses. The Commission also recommended that before authorizing tagging activities involving calves and their mothers, the Service (1) ask the applicant how it intends to determine the age of calves; (2) be satisfied that the applicant has provided adequate justification for biopsy sampling and tagging non-neonate calves and females accompanied by such calves; and (3) be satisfied that post-tagging monitoring will be adequate to determine the impact of tagging on these animals and withhold authorization for biopsy sampling or tagging any female cetacean accompanied by a neonate calf. The Commission further recommended that the Service condition the permit to ensure that the proposed activities and those of other permit holders who might be carrying out research on the same species in the same areas are coordinated to avoid unnecessarily duplicative research and unnecessary disturbance of animals and to ensure all necessary permits under CITES have been

obtained before importing or exporting marine mammal parts.
Agency Response: The Service issued the permit on 24 April 2011, consistent with some of the Commission's recommendations. The Service did indicate that the application was received prior to 31 December 2009 and, thus, did not require the Service's IACUC assurance statement. All subsequent requests would be required to have IACUC review and approval. The Service also stated that it is not precluded from issuing permits while the environmental impact statement is being developed per the National Environmental Policy Act and its implementing regulations at 40 CFR Section 1506.1. Further, it is evaluating the applicant's request for right whale research to determine whether the action would result in significant impacts to the species or other portions of the environment. Lastly, the Service conditioned the permit to restrict biopsy sampling of females with neonate calves only for those cetaceans that are captured (i.e., beluga whales, Dall's porpoise, and harbor porpoise), but allow biopsy sampling of females with neonate calves for other species.

14 June 2010

To: U.S. Army
Issue: The U.S. Army's draft environmental impact statement for resumption of year-round firing opportunities at Fort Richardson, Alaska, using Eagle River Flats as a target for live-fire training exercises
Recommendation: The Commission recommended that the Army not pursue the use of Eagle River Flats, which is integrally connected to the core habitat of endangered Cook Inlet beluga whales, for year-round live-fire training exercises.
Agency Response: The Army had not issued a final environmental impact statement by the end of 2011. Ft. Richardson and Elmendorf Air Force Base merged in 2010. As such, the final environmental impact statement would include activities at both facilities and may be issued by the end of 2012.

16 June 2010

To: National Marine Fisheries Service
Issue: Application from Neptune LNG LLC to take small numbers of various species of marine mammals, including North American right whales, by harassment incidental to commissioning and operating its offshore liquefied natural gas facility in Massachusetts Bay
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that the monitoring and mitigation measures proposed by the Service and the applicant are implemented to mitigate the risk of ships colliding with North Atlantic right whales and other cetacean species and provided that the new section 7 consultation on the project is completed and concludes that the proposed action is not likely to jeopardize the continued existence of the North Atlantic right, humpback, fin, sperm, sei, or blue whales.
Agency Response: The Service issued the incidental harassment authorization on 12 July 2010, consistent with the Commission's recommendations.

17 June 2010

To: NOAA
Issue: NOAA's ocean policy and management programs intended to prevent the extinction of Hawaiian monk seals and conserve cetacean stocks throughout the Pacific Region
Recommendation: The Commission recommended that NOAA and the National Marine Fisheries Service support the 2007 Revised Hawaiian Monk Seal Recovery Plan at the necessary funding levels identified in the Plan for the foreseeable future. The Commission further recommended that the National Marine Fisheries Service review its responsibilities for cetacean research and management in the Pacific Islands region, develop a plan and budget adequate to fulfill those responsibilities, identify strategies to strengthen cooperative partnerships with other agencies and groups that work in the Pacific region,

and initiate or expand international partnerships to coordinate research and management efforts in waters of the central and western Pacific Ocean.

Agency Response: NOAA responded that the National Marine Fisheries Service would request additional support for monk seal conservation through the budget process and that the Pacific Islands Regional Office and Fisheries Science Center have reviewed their responsibilities and will continue planning efforts to address them. Research and conservation concerns are being addressed through strengthened partnerships with other agencies and organizations. The Service also is preparing an action plan to guide international efforts for the conservation of marine mammals and other living marine resources and is working with international regional fishery management organizations on various issues.

21 June 2010

To: National Marine Fisheries Service

Issue: Application from Lamont-Doherty Earth Observatory to harass small numbers of marine mammals during a geophysical survey in the northwest Pacific Ocean

Recommendation: The Commission recommended that, before issuing the incidental harassment authorization, the National Marine Fisheries Service require the applicant to use location-specific environmental parameters to re-estimate exclusion zones and verify the estimates with field measurements prior to or at the beginning of the study and require the applicant to re-estimate exposures based upon location-specific environmental parameters and associated ensonified areas. The Commission also recommended that the Service (1) provide additional justification for its preliminary determination that the planned monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion zones; (2) clarify the qualifiers "when practical," "if practical," and "when feasible;" (3) propose to the Lamont-Doherty Earth Observatory that it revise its study design to add pre- and post-geophysical survey assessments as a way of obtaining more realistic baseline sighting rates for marine mammals and assessing impacts; (4) clarify the qualifier "ideally" and the conditions that it assumes would render the use of passive acoustic monitoring impracticable for supplementing the visual monitoring program; (5) extend the monitoring period to at least one hour before initiation of airgun activities and at least one hour before the resumption of airgun activities after a shutdown because of a marine mammal sighting within an exclusion zone; and (6) require that observations be made during all ramp-up procedures to gather the data needed to analyze and report on their effectiveness as mitigation. The Commission further recommended that the Service work with the applicant to correct discrepancies within the application and between the application and the Service's *Federal Register* notice and advise the applicant of the need to use the 160-dB re 1 µPa threshold for all cetaceans as currently used by the Service or to explain the basis for using another threshold.

Agency Response: The Service issued the incidental harassment authorization on 26 July 2010, consistent with some of the Commission's recommendations. The Service did not require the applicant to re-estimate exclusion zones and takes but did state that the applicant and the National Science Foundation have invested resources into calibration studies, and the Service believes the exclusion zones are appropriate based on the low density of marine mammals and remote, deep-water location of the survey. The Service did note that visual and passive acoustic monitoring should be sufficient to detect most marine mammals in the exclusion zones and that the applicant will observe for marine mammals during pre- and post-survey transit times. In regards to increasing the monitoring period to one hour, the Service states that monitoring is effective longer than 30 minutes due to pre-monitoring and the time required for ramp-up, observers monitor when airguns are not active in many cases, the majority of species are not submerged for more than 30 minutes,

vessels are moving, not stationary sources, and the recommendation would not increase effectiveness of observing marine mammals. Lastly, the Service indicated that data were to be collected during ramp-up procedures, but they are unlikely to result in statistically robust conclusions due to the dearth of data.

21 June 2010

To: National Marine Fisheries Service

Issue: Application from Shell Offshore to take small numbers of marine mammals by harassment incidental to a proposed open-water marine survey program in the Beaufort and Chukchi Seas, Alaska, during the 2010 Arctic open water season

Recommendation: The Commission recommended that the National Marine Fisheries Service require Shell and other operators to evaluate the effectiveness of the mitigation measures adopted and modify them accordingly, review the proposed monitoring measures to ensure that they require the gathering of information on all potentially important sources of noise and the complex sound field that the seismic survey activities create, work with Shell and its contractors to engage acknowledged survey experts to review the survey design and planned analyses to ensure they will provide relatively unbiased and reliable results, work with Shell to coordinate a comparative analysis of the results of vessel-based, aerial, and passive acoustic monitoring methods, develop a plan for collecting meaningful baseline information, and work with Shell to determine how the data collected during the proposed activities can be made available for other scientific purposes. The Commission also recommended that the Service require that Shell complement its vessel-based monitoring plan with towed passive acoustics to provide a more reliable estimate of the number of marine mammals harassed during the course of the proposed seismic survey, require Shell to engage in consultations with those Alaska Native communities that may be affected by the company's activities, seek to resolve any Alaska Native concerns through negotiations of a conflict avoidance agreement, and require Shell to halt its seismic survey and consult with the Service regarding any seriously injured or dead marine mammal when the injury or death may have resulted from Shell's activities.

Agency Response: The Service issued the incidental harassment authorization on 6 August 2010, consistent with some of the Commission's recommendations. The Service largely agreed with the Commission's mitigation and monitoring recommendations. The Service did require some measures from the Open Water meeting in the incidental harassment authorization and did require Shell to collect and analyze data from ramp-up procedures while other mitigation measures are being reviewed. The Service did not believe that towed passive acoustic monitoring was a mature technology to detect marine mammals and, therefore, did not require its implementation. The Service also requested sound source characteristics from Shell to evaluate the monitoring measures. Regarding subsistence use, the Service stated that Shell conducted a plan of cooperation meetings at numerous villages, would consult with local subsistence advisors, and would implement communication plans but would not sign the conflict avoidance agreement.

29 June 2010

To: National Marine Fisheries Service

Issue: Proposed alternatives for a draft environmental impact statement for managing the American lobster fishery in federal waters

Recommendation: The Commission recommended that the National Marine Fisheries Service initiate a new section 7 consultation and complete the associated biological opinion regarding the effects of lobster fishing on North Atlantic right whales before any new or amended American lobster management measures are approved, evaluate possible changes in fishing effort and fishing distribution as a result of the proposed alternative management measures in a new section 7 consultation, and then incorporate any information into the environmental impact statement. The Commission also recommended that the Service

expand all of the alternatives in the environmental impact statement to require that recipients of federal lobster fishing permits provide data and information on lobster fishing practices that are necessary and adequate to evaluate the risks of interactions with right whales and other large endangered whales and the effectiveness of related management actions.

Agency Response: The Service did not issue a proposed rule by the end of 2011, because the action was delayed temporarily to address a lobster recruitment failure determination in southern New England. The Service plans to issue a proposed rule in 2012.

30 June 2010

To: National Marine Fisheries Service

Issue: Application from the U.S. Marine Corps to take Atlantic bottlenose dolphins by harassment incidental to training exercises at the Cherry Point Range Complex in North Carolina

Recommendation: The Commission recommended that, before issuing the incidental harassment authorization, the National Marine Fisheries Service include in any authorization issued the time frame for which it is requested, require a detailed description of the environmental parameters and methods used to estimate the number of exposures and determine the safety zones, require the Marine Corps to either justify its use of the older bottlenose dolphin estimated density (i.e., 0.183 dolphins/km^2) for BT-11 from Read et al. (2003) or recalculate its estimated exposures based on the more recent data for both sites from Maher (2003), and require the Marine Corps to use either direct strike or dynamic Monte Carlo models to determine probability of ordnance strike. The Commission also recommended that the Service advise the Marine Corps that detailed mitigation, monitoring, and reporting requirements must be specified in application for the authorization before the application can be considered complete and withhold the authorization until the Marine Corps develops and is prepared to implement a plan to evaluate the effectiveness of monitoring and mitigation measures before beginning or in conjunction with conducting exercises covered by the proposed incidental harassment authorization. The Commission further recommended that the Service condition the authorization to require suspension of the exercises if a marine mammal is seriously injured or killed and the injury or death could be associated with those exercises.

Agency Response: The Service issued the incidental harassment authorization on 18 November 2010, consistent with some of the Commission's recommendations. The Service believed that the methods for determining safety zones and takes were adequate and fully described and that the Read et al. (2003) density was considered conservative, thus its use was justified. Furthermore, the Service did not agree that a different modeling approach was warranted for the issuance of the incidental harassment authorization. The Service and the applicant did develop more comprehensive mitigation, monitoring, and reporting requirements, which were included in the authorization. However, effectiveness of mitigation and monitoring measures were not addressed.

30 June 2010

To: Minerals Management Service

Issue: Intent to prepare an environmental impact statement for the Outer Continental Shelf Oil and Gas Leasing Program for 2012–2017

Recommendation: The Commission recommended that the Minerals Management Service work with the Department of Energy to develop a long-term national energy strategy and integrate its new five-year oil and gas leasing program into that strategy. It would include in its 2012–2017 environmental impact statement a clear description of the phases of oil and gas production and the infrastructure or equipment involved and a more detailed description of the data and methods used in its ecosystem sensitivity analysis to allow readers to follow the line of reasoning that leads to a particular conclusion. The

Commission also recommended that the Service consult with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, and Marine Mammal Commission to develop a set of standards for baseline information to be obtained prior to the initiation of new energy-related operations and expand Secretary Salazar's directive to the U.S. Geological Survey to evaluate the resilience of all U.S. marine ecosystems where oil and gas operations are being conducted, planned, or contemplated, and incorporate that information in the 2012–2017 environmental impact statement, if the evaluation can be completed in time. The Commission further recommended that the Service use the environmental consequences section of the document to integrate all the information in the preceding sections and systematically describe the risks associated with each phase of oil and gas development/production and each component of the related infrastructure.

Agency Response: The Bureau of Ocean Energy Management, formerly Minerals Management Service, issued a draft programmatic environmental impact statement in November 2011, consistent with none of the Commission's recommendations. It is unclear why the Bureau did not implement any of the Commission's recommendations, as it does not have to respond to comments at the notice of intent phase.

1 July 2010 **To:** U.S. Fish and Wildlife Service

Issue: Application to amend a research permit from the U.S. Geological Survey to conduct research on northern sea otters in southern Alaska and to import otter tissue samples from Russia, Canada, and Japan

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit amendment, provided that the conditions currently contained in the permit remain in effect.

Agency Response: The Service issued the permit amendment on 30 July 2010, consistent with the Commission's recommendation.

2 July 2010 **To:** U.S. Fish and Wildlife Service

Issue: Application for a research permit from the Natural History Museum of Los Angeles County to acquire, import, and export specimens from otters, manatees, dugongs, polar bears, and walruses

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the applicant obtains all necessary permits under CITES before importing or exporting marine mammal parts, maintains detailed records indicating the source of each specimen and the circumstances under which it was collected, and periodically provides reports to the Service sufficient to demonstrate that each specimen was taken in accordance with the laws of the country of origin, was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws, and was used only for bona fide scientific purposes.

Agency Response: The Service issued the permit on 19 October 2010, consistent with the Commission's recommendations.

6 July 2010 **To:** National Marine Fisheries Service

Issue: Application to amend a research permit from Terrie Williams, Ph.D., to conduct research on energetics and diving physiology of captive and rehabilitated marine mammals

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the proposed activities have been reviewed and approved by the permit holder's IACUC and the conditions contained in the original permit remain in effect.

Agency Response: The Service issued the permit amendment on 3 February 2011, consistent with the Commission's recommendations.

6 July 2010 **To:** National Marine Fisheries Service
Issue: Application for a public display permit from the Institute for Marine Mammal Studies to acquire up to eight stranded, rehabilitated California sea lions
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service require the applicant to obtain non-releasable sea lions, provided that such animals are available and suitable for the intended purpose, authorize transfer or retention of animals determined to be releasable only as a secondary option and only if non-releasable animals are not available or are determined by the Service, in consultation with the applicant, to be unsuitable for the applicant's purposes, and require a reasonable waiting period from the date of permit issuance to see if suitable, non-releasable animals become available before allowing the applicant to acquire releasable animals. The Commission also recommended that the Service consult with the Animal and Plant Health Inspection Service to ensure that the applicant's plans and facilities for transport and maintenance of the requested animals are adequate to provide for their health and well-being and to confirm that the probability is extremely low that these animals might be introduced into the Gulf of Mexico, even under the most severe weather conditions. The Commission further recommended that the Service require the applicant to provide a written justification explaining the need for a captive breeding program for California sea lions before such a program is authorized and ensure that the applicant's education program is acceptable.
Agency Response: The Service issued the permit on 5 October 2011, consistent with some of the Commission's recommendations. The Service has noted that the Institute remains on the list to obtain non-releasable sea lions and has encouraged the Institute to consider those sea lions for placement at its facility. The Service did include a one-year waiting period to obtain releasable sea lions as an alternative in its environmental assessment but did not condition the permit to require that waiting period in the permit. In addition, the Animal and Plant Health Inspection Service has confirmed that the Institute is licensed and has adequate space to house the requested number of animals. Lastly, the Service indicated that captive breeding and contingency plans are under the purview of the Animal and Plant Health Inspection Service; however, it is satisfied that the public display criteria have been met.

8 July 2010 **To:** National Marine Fisheries Service
Issue: Application to amend a research permit from Colleen Reichmuth, Ph.D., to add two non-releasable ringed seals, bearded seals, and spotted seals to the captive research program at Long Marine Laboratory in Santa Cruz, California
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the proposed activities have been reviewed and approved by the permit holder's IACUC and the conditions contained in the original permit remain in effect.
Agency Response: The Service issued the permit amendment on 8 September 2010, consistent with the Commission's recommendations.

8 July 2010 **To:** National Marine Fisheries Service
Issue: Application from Statoil USA E&P to take small numbers of marine mammals by harassment incidental to a marine seismic survey in the Chukchi Sea, Alaska
Recommendation: The Commission recommended that, before issuing the incidental harassment authorization, the National Marine Fisheries Service (1) clarify whether the 3-D and 2-D surveys will occur simultaneously or independent of one another and, if they will occur independently, recalculate the total exposed area and subsequent takes for the 2-

D surveys; (2) require Statoil to revise its study design to include expanded pre- and post-seismic survey assessments sufficient to obtain reliable sighting data for comparing marine mammal abundance, distribution, and behavior under various conditions; (3) require Statoil to collect data on the behavior and movements of any marine mammals present during all ramp-up and power-down procedures to help evaluate the effectiveness of these procedures as mitigation measures; (4) undertake or prompt others to undertake studies needed to resolve questions regarding the effectiveness of ramp-up and power-down as mitigation measures; (5) review the proposed monitoring measures and require the applicant to collect and analyze information regarding all the potentially important sources of sound and the complex sound field created by all of the activities associated with conducting the seismic survey; (6) require the applicant to collect information to evaluate the assumption that 160 dB is the appropriate threshold at which harassment occurs for all marine mammals that occur in the survey area; (7) determine, in consultation with Statoil, whether aerial surveys are safe to conduct and should be required and, if not, identify alternative monitoring strategies capable of providing reliable information on the presence of marine mammals and the impact of survey activities on the affected species and stocks; (8) require Statoil to supplement its vessel-based monitoring with towed passive acoustics to provide a more reliable estimate of the species and number of marine mammals taken during the proposed seismic surveys; and (9) require Statoil to halt its seismic survey and related activities and consult with the Service regarding any seriously injured or dead marine mammal when the injury or death may have resulted from Statoil's activities and resume only after steps are taken to avoid additional serious injuries or deaths.

Agency Response: The Service issued the incidental harassment authorization on 6 August 2010, consistent with some of the Commission's recommendations. The Service stated that the 2-D and 3-D surveys were independent and the take estimates for the 2-D survey were provided in the application. The Service believes that revising the study design is beyond the scope of the proposed action but relevant data will be collected before and immediately after the survey. Effectiveness of ramp-up has not been determined; animals are presumed to move away from a sound source that disturbs them. Statoil provided sound source characteristics to the Service. Finally, the Service stated that aerial surveys are impractical due to safety concerns and towed passive acoustic monitoring is not a mature technology. However, both types of monitoring may be considered in the future.

14 July 2010

To: National Marine Fisheries Service

Issue: Application to amend a research permit from Peter Tyack, Ph.D., to conduct research on cetaceans during a study of their behavior and responses to mid-frequency sound levels

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided the conditions currently contained in the permit remain in effect and that the Service withhold authorization for tagging any female cetaceans accompanied by a neonate and for conducting controlled sound exposure experiments on focal groups that include a neonate. The Commission also recommended that, prior to issuing the amendment, the Service require the permit holder to submit documentation indicating that the proposed research has been approved by an IACUC, address the discrepancy between the amendment request and the existing permit as to whether short-finned pilot whales are authorized to be taken in Cape Cod Bay, authorize Dr. Tyack to collect skin and blubber from short- and long-finned pilot whales in Cape Cod Bay, and extend the authorized studies to include the named species in the waters around Cape Hatteras.

Agency Response: The Service issued the permit amendment on 4 August 2010, consistent with most of the Commission's recommendations. However, the Service noted

that obtaining IACUC review and approval is not a Marine Mammal Protection Act permit issuance criterion and is the responsibility of the researcher.

16 July 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Michael Adkesson, D.V.M., Chicago Zoological Society, to import biological samples from live and dead South American fur seals during health assessments in Punta San Juan, Peru, during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the applicant obtains all necessary export permits under CITES before importing fur seal parts into the United States and periodically provides reports to the Service sufficient to demonstrate that each specimen was taken in accordance with the laws of the country of origin, was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws, and is being used for bona fide scientific purposes only.
Agency Response: The Service issued the permit on 23 August 2010, consistent with the Commission's recommendations.

16 July 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from the National Museum of Natural History to collect, import, export, and possess salvaged specimens or parts from cetaceans and pinnipeds
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the applicant obtains all necessary permits under CITES before importing or exporting marine mammal parts, maintains detailed records indicating the source of each specimen and the circumstances under which it was collected, and periodically provides reports to the Service sufficient to demonstrate that each specimen was taken in accordance with the laws of the country of origin, was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws, and is being used only for bona fide scientific purposes.
Agency Response: The Service issued the permit on 18 November 2010, consistent with the Commission's recommendations.

27 July 2010

To: National Marine Fisheries Service
Issue: Application to amend a research permit from James Harvey, Ph.D., to surgically implant radio transmitters into harbor seals in California, Oregon, Washington, and Alaska during biological and ecological research
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the proposed activities were approved by the permit holder's IACUC and the conditions contained in the original permit as amended remain in effect.
Agency Response: The Service issued the permit amendment on 25 August 2010, consistent with the Commission's recommendations.

27 July 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Bruce Mate, Ph.D., to take gray whales by deliberate harassment and other marine mammals by incidental harassment for acoustic research in Oregon during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the proposed activities have been reviewed and approved by the permit holder's IACUC.
Agency Response: The Service issued the permit on 2 November 2010 and noted that

obtaining IACUC review and approval is not a Marine Mammal Protection Act permit issuance criterion and is the responsibility of the researcher.

30 July 2010

To: National Marine Fisheries Service
Issue: Request to amend its marine mammal monitoring plan from the U.S. Navy for missile launch activities on San Nicolas Island, California, through 2014
Recommendation: The Commission recommended that the National Marine Fisheries Service use rulemaking to revise section 216.155 of the regulations to allow the Navy to discontinue monitoring of the potential effects of launches on elephant seals, publish a notice of the proposal in the *Federal Register* and provide an opportunity for public review and comment, require the U.S. Navy to implement the original monitoring plan for the remaining term of the current letter of authorization, consider alternative monitoring schemes only for subsequent letters of authorization and only after rulemaking or other public review procedures, and require the Navy to (1) obtain, analyze, and review the existing information regarding potential displacement of pinnipeds from those rookeries and haul-out sites affected by launch activities, and (2) if the information is insufficient for that purpose, design and implement the necessary monitoring strategy to determine if launch activities are displacing pinnipeds.
Agency Response: The Service issued a notice in the *Federal Register* on 24 September 2010 regarding the modifications to the marine mammal monitoring plan and addressed the Commission's recommendations in its revised letter of authorization issued on 24 November 2010.

2 August 2010

To: National Marine Fisheries Service
Issue: Application to amend a research permit from Daniel Costa, Ph.D., to attach a drag-inducing device on a portion of the tagged Weddell seals in the Antarctic
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the Service consult with the permit holder regarding the design of the drag device that will be used and if the drag device that is selected could hinder passage of Weddell seals through ice holes, require the permit holder to test the device on a small number of seals to ensure that passage is not hindered before being allowed to deploy the device on all eight seals. The Commission also recommended that the Service ensure that the proposed activities have been reviewed and approved by the permit holder's IACUC, require the permit holder to obtain all necessary permits under CITES before importing or exporting marine mammal parts, and require the conditions contained in the permit as currently amended remain in effect.
Agency Response: The Service issued the permit amendment on 7 September 2010, consistent with the Commission's recommendations.

2 August 2010

To: National Marine Fisheries Service
Issue: Application from the U.S. Geological Survey to take small numbers of marine mammals by harassment incidental to a seismic survey in the Beaufort Sea and Arctic Ocean
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided the Service (1) ascertain who will be responsible for operating the Canadian vessel and the airguns and other instruments deployed from the *St. Laurent* and issue an incidental harassment authorization for these activities only if a U.S. agency or U.S. citizen(s) will be conducting those operations; (2) work with the applicant to re-estimate exposures for ice-breaking activities based upon the total area that may be exposed to sound levels greater than or equal to 120 dB re 1 µPa; (3) advise the applicant to consult with the U.S. Fish and Wildlife Service

regarding the need for a separate incidental harassment authorization for walruses and polar bears; (4) provide additional justification for its preliminary determination that the planned monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion zones, including (a) identifying those species that it believes can be detected with a high degree of confidence using visual monitoring only, (b) describing detection probability as a function of distance from the vessel, (c) describing changes in detection probability under various sea state and weather conditions and at night, and (d) explaining how close to the vessel marine mammals must be for observers to achieve the anticipated high nighttime detection rate; (5) clarify the meaning of the qualifiers "when practical," "if practical," and "when feasible"; (6) propose to the U.S. Geological Survey that it revise its study design to collect meaningful baseline sighting data for marine mammals; (7) require the applicant to collect information to evaluate the assumption that 160 dB re 1 µPa is the appropriate threshold at which harassment occurs for all marine mammals in the survey area; and (8) require the applicant to make observations during all ramp-up procedures to gather the data needed to analyze and report on their effectiveness.

Agency Response: The Service issued the incidental harassment authorization on 22 September 2010, consistent with some of the Commission's recommendations. The Service verified that Canadians would be operating the *St. Laurent*; however, it appears that the Service still issued the incidental harassment authorization for the vessel's activities. The Service made it clear that erroneous information was included in the application and *Federal Register* notice regarding the zone of exposure for ice-breaking activities. As such, it is unclear if the zone of exposure and associated takes were estimated correctly. The U.S. Fish and Wildlife Service completed an informal consultation for walrus and polar bears and determined that an incidental harassment authorization was not needed. The Service only provided justification for why marine mammals would be seen at night but did not justify how visual monitoring is effective and how detection probabilities and various sea states affect visual monitoring. The Service stated that data would be collected regarding baseline abundance, behavioral observations at the 160 dB re 1 µPa, and during ramp-up. However, the conclusions may not be statistically robust and some of these recommendations are beyond the scope of the proposed action.

6 August 2010

To: National Marine Fisheries Service

Issue: Application from Excelerate Energy, L.P. and Tetra Tech EC, Inc., on behalf of Northeast Gateway Energy Bridge, LLC, and Algonquin Gas Transmission, LLC, to take small numbers of marine mammals by harassment incidental to operating and maintaining the Northeast Gateway liquid natural gas port facility and associated pipeline in Massachusetts Bay

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that the service include in the authorization and in any proposed regulations issued by the Service during the subsequent five-year period all marine mammal mitigation, monitoring, and reporting measures identified in the Service's *Federal Register* notice and require the applicants to halt activities and consult with the Service regarding any seriously injured or dead marine mammal when the injury or death may have resulted from those activities and allow resumption of those activities only after steps to avoid additional serious injuries or deaths have been implemented or such takings have been authorized under section 101(2)(5)(A) of the Marine Mammal Protection Act.

Agency Response: The Service issued the permit on 27 August 2010, consistent with the Commission's recommendations.

6 August 2010

To: National Marine Fisheries Service
Issue: Request from Bluewater Wind, LLC, to take small numbers of marine mammals by harassment incidental to pile driving during installation of meteorological data collection facilities off the coasts of Delaware and New Jersey
Recommendation: The Commission recommended that, prior to issuing the incidental harassment authorization, the National Marine Fisheries Service require that observations be made during all soft-starts of pile-driving activities to gather the data needed to analyze and report on its effectiveness as a mitigation measure.
Agency Response: The Service issued the incidental harassment authorization on 29 September 2010, consistent with the Commission's recommendation.

6 August 2010

To: National Marine Fisheries Service
Issue: Application for permit from Sea World to import one male short-finned pilot whale from the Netherlands Antilles to Sea World California for public display
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit in accordance with section 104(c)(7) of the Marine Mammal Protection Act to authorize the retention of this pilot whale for public display, although no taking or importation is being authorized.
Agency Response: The Service issued the permit on 11 July 2011 in accordance with section 104(c)(2) of the Act, not 104(c)(7).

12 August 2010

To: NOAA
Issue: The Administration's Draft Next Generation Strategic Plan
Recommendation: The Commission recommended that NOAA revise its Next Generation Strategic Plan by re-examining the concepts of adaptation and resilience, carefully evaluating human ability to manage or control them, and revising the plan to give a more realistic appraisal of their roles in the conservation and sustainability of marine ecosystems. The Commission also recommended that NOAA finalize the Plan and then immediately initiate a companion strategy for identifying and securing the necessary resources.
Agency Response: The Administration considered the Commission's recommendation in the final revisions to the Next Generation Strategic Plan, which was posted in December 2010.

16 August 2010

To: National Marine Fisheries Service
Issue: Application from the Exploratorium to take small numbers of marine mammals by harassment incidental to pile driving during its relocation project in San Francisco Bay
Recommendation: The Commission recommended that, prior to issuing the incidental harassment authorization, the National Marine Fisheries Service require that observations be made during all soft-starts of pile-driving activities to gather the data needed to analyze and report on its effectiveness as a mitigation measure and require the Exploratorium to monitor the presence and behavior of marine mammals during all impact and vibratory pile-driving activities.
Agency Response: The Service issued the incidental harassment authorization on 14 October 2010 and did not agree with the Commission's recommendations. The Service believes that monitoring 30 minutes before, during, and 30 minutes after all impact hammer activities (including soft-starts) and two days each week for vibratory hammer activities is sufficient to allow for adequate interpretation of marine mammal behavior in response to pile driving.

16 August

To: U.S. Navy

2010 **Issue:** The Navy's Integrated Comprehensive Monitoring Program
Recommendation: The Commission recommended that during its annual review of progress in implementing the program and as performance information becomes available, the Navy set standards for the various monitoring methods it uses, emphasize the use of monitoring information to reduce the adverse impact of its activities to the least practicable level, consider the application of a similar program aimed at better understanding of potential effects of low-frequency active sonar, and continue behavioral response studies.
Agency Response: The Navy, working with the National Marine Fisheries Service, revised its Integrated Comprehensive Monitoring Program to incorporate some of the Commission's recommendations, namely to expand the top-level goals and emphasize the use of monitoring information to reduce the adverse impact of its activities.

18 August 2010 **To:** U.S. Fish and Wildlife Service
Issue: Application from the NOAA Restoration Center, SW Region, to take small numbers of marine mammals by harassment incidental to construction activities as part of a tidal wetlands project at the Elkhorn Slough National Estuarine Research Reserve in Moss Landing, California
Recommendation: The Commission recommended that, prior to issuing the incidental harassment authorization, the U.S. Fish and Wildlife Service use behavioral observations documented during the proposed activity to begin building a database of information for determining more realistic thresholds for when taking by harassment may result from in-air sounds, advise the applicant to consult with the National Marine Fisheries Service regarding the need for a separate incidental harassment authorization for harbor seals and California sea lions, require the applicant to determine in-situ safety zones based on specific sound thresholds associated with Level A and Level B harassment and use those safety zones to supplement monitoring by observers and require that observations be made during all ramp-up procedures to gather the data needed to analyze and report on their effectiveness as mitigation measures.
Agency Response: The Service issued the incidental harassment authorization on 23 November 2010, consistent with the Commission's recommendations.

19 August 2010 **To:** U.S. Fish and Wildlife Service
Issue: Application for research permit from Seattle Aquarium to import from Canada tissue samples from northern sea otters for genetic analysis
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the applicant obtains all necessary permits under CITES before importing or exporting marine mammal parts.
Agency Response: The Service issued the permit on 8 October 2010, consistent with the Commission's recommendation.

20 August 2010 **To:** U.S. Fish and Wildlife Service
Issue: Application for research permit from Vince Bacalan, American University, to obtain manatee skeletal material
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the applicant maintain and include in his annual report to the Service detailed records indicating the number of samples collected and the names of the laboratories and institutions from which they were collected.
Agency Response: The Service issued the permit on 5 October 2010, consistent with the Commission's recommendation.

20 August **To:** U.S. Fish and Wildlife Service

2010

Issue: Application to amend a research permit from the North Slope Borough Dept. of Wildlife Management to collect and transport tissues of polar bears and walruses to augment the Alaska Marine Mammal Tissue Archival Project.

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit amendment, provided the conditions contained in the existing permit remain in effect.

Agency Response: The Service issued the permit amendment on 10 September 2010, consistent with the Commission's recommendation.

24 August 2010

To: National Marine Fisheries Service

Issue: Proposed rulemaking regarding the List of Fisheries for 2011

Recommendation: The Commission recommended that the National Marine Fisheries Service provide additional justification for splitting the Washington Dungeness crab pot/trap fishery into two fisheries, consult with the U.S. Fish and Wildlife Service, tribal authorities, and other relevant groups on the need for observer coverage of the Washington Dungeness crab pot/trap fisheries both along the outer coast and in Puget Sound to assess bycatch risks for Washington State sea otters, list the Hawaii kaka line and the Hawaii vertical longline fisheries as Category II fisheries, and work with the state of Hawaii to create an effective observer program for them. The Commission also concurred with the National Marine Fisheries Service's proposal to retain a Category II listing for the Hawaii shallow-set longline/set line fishery, to elevate the southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fishery from Category III to Category II, and to add the Atlantic spotted dolphin (northern Gulf of Mexico stock) to the list of species/stocks incidentally killed or injured in the southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fishery. The Commission also recommended that the National Marine Fisheries Service increase observer coverage in the southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fishery and conduct the stock assessments necessary to estimate reliable potential biological removal levels for the affected marine mammal stocks and set the boundary between the northeast and mid-Atlantic bottom trawl fisheries at the location that will result in the most reliable estimates of bycatch for the two fisheries. The Commission reiterated its prior recommendations that the National Marine Fisheries Service develop new methods that will produce accurate, reliable estimates of effort for the fisheries in question and describe in its List of Fisheries the basis for confirming that a fishery warrants a Category III listing.

Agency Response: The Service issued its final rule on 1 November 2010, consistent with some of the Commission's recommendations. The Service provided additional justification for splitting the Washington Dungeness crab pot/trap fishery into two fisheries; however, the justification is not totally convincing. The Service did consult with the U.S. Fish and Wildlife Service, but the consultations did not yield more observer coverage. The Hawaii kaka line and the Hawaii vertical longline fisheries were not listed as Category II fisheries because the Service does not consider these species similar to other Hawaii shortline and longline fisheries. The Service will increase observer coverage in the southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fishery when resources become available. The Service believed it set a boundary between the northeast and mid-Atlantic bottom trawl fisheries in the proposed rule and concluded this was not an issue. The Service argued that new methods for determining accurate, reliable estimates of fishing effort are not needed because this data will not be used in determining current or future management of fisheries or observer coverage designation. Finally, the Service stated it would consider how best to present information used to list a Category III fishery in the 2012 process, but it did not agree that listing observer effort for all fisheries would provide a clear representation regarding why fisheries are listed.

26 August 2010	**To:** U.S. Fish and Wildlife Service **Issue:** Application to amend a research permit from the U.S. Geological Survey, Alaska Science Center, to capture and study up to 250 polar bears annually during a five-year period **Recommendation:** The Commission recommended that the U.S. Fish and Wildlife Service issue the permit amendment, provided that the conditions currently contained in the permit remain in effect. **Agency Response:** The Service issued the permit on 10 September 2010, consistent with the Commission's recommendation.
30 August 2010	**To:** National Marine Fisheries Service **Issue:** Proposed rulemaking on fish and fish products using regulatory standards to evaluate the impact of foreign fisheries on marine mammals **Recommendation:** The Commission recommended that the National Marine Fisheries Service adopt performance-based standards for evaluating the impact of foreign fishing on marine mammal stocks, expand its programs to export or otherwise facilitate transfer to other nations those U.S. fishing practices, technologies, and programs for reducing marine mammal bycatch, and conduct feasibility analyses on the performance-based standards and select those that would be clear, consistent, uniformly applied, and easily verifiable. The Commission also recommended that the Service collaborate with relevant trade-related offices in the Departments of Treasury, State, and Homeland Security and the U.S. Trade Representative in carrying out the feasibility analyses and include in the feasibility analyses all of the standards applicable to U.S. fisheries regardless of whether those standards have yet to be met fully by U.S. fisheries. The Commission recommended that the Service develop its proposed rule with sufficient detail to allow for meaningful comment and create regulations to provide sufficient direction to other countries, agency reviewers, and the public as to what information they would be required to submit, specify in the proposed rule the requirement that fish-exporting nations provide "reasonable proof" of the impacts of their fishing operations on marine mammals, specify in the proposed rule where the burden of proof lies with respect to imports of fish and fish products under section 101(a)(2) of the Marine Mammal Protection Act, and establish regulatory procedures under which fish-exporting nations must submit promptly the required level of proof concerning the impacts of each applicable commercial fishery to marine mammal mortality and serious injury relative to U.S. standards. The Commission further recommended that the Service require that any findings of non-compliance or inadequate proof be forwarded immediately to the Secretary of the Treasury, stipulate that consultations with those nations whose fish products are banned from U.S. markets be undertaken rapidly to identify and rectify the causes of marine mammal bycatch in excess of U.S. standards, work closely with the Department of the Treasury to identify ways in which the envisioned regulations would address the procedures for assessing the impacts of foreign fisheries on marine mammals and procedures for imposing or lifting import bans based on those assessments, and require any nation seeking to export fish products to the United States to provide documentation or evidence regarding marine mammal bycatch in the harvest of those products relative to U.S. standards. **Agency Response:** The Service had not issued a proposed rule by the end of 2011.
1 September 2010	**To:** U.S. Fish and Wildlife Service **Issue:** Application to amend a research permit from EcoHealth Alliance, Inc., to conduct research on free-ranging and captive manatees in the southeastern United States and import/export samples from live West Indian manatees **Recommendation:** The Commission recommended that the U.S. Fish and Wildlife Service

issue the permit amendment, provided that conditions contained in the current permit remain in effect, and that the permit holder clarify the number of animals from which tail notch samples would be collected annually, the permit holder be required to obtain all necessary permits under CITES before any importing or exporting marine mammal parts, and the permit amendment, if issued, be conditioned to require the permit holder, prior to importing any specific specimen, to submit documentation demonstrating that the specimen was taken in accordance with the laws of the country of origin and was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws.
Agency Response: The Service issued the permit on 19 November 2010, consistent with the Commission's recommendations.

1 September 2010

To: National Marine Fisheries Service
Issue: Application to amend a research permit from Gregory Bossart, V.M.D., Georgia Aquarium to conduct research on up to 400 Atlantic bottlenose dolphins in Charleston, South Carolina
Recommendation: The Commission recommended that the National Marine Fisheries Service defer issuance of the permit amendment until the permit holder provides documentation regarding the review and approval of the proposed research activities by an IACUC, ensures that activities to be conducted under this permit and those of other permit holders are coordinated and data are shared to avoid unnecessary duplication of research and disturbance of animals, ensures the conditions contained in the current permit remain in effect, and advises the applicant to contact the U.S. Fish and Wildlife Service regarding the possible need for an authorization to take Florida manatees incidental to conducting research on dolphins.
Agency Response: The Service issued the permit amendment on 6 April 2011, consistent with most of the Commission's recommendations. The Service did indicate that the applicant verified that the protocols for the Charleston study area are the exact same protocols and sampling techniques as previously analyzed and approved by the IACUC for the original study area (Indian River Lagoon). However, it is unclear if the IACUC approved the Charleston project.

2 September 2010

To: National Marine Fisheries Service
Issue: Application from the Washington State Department of Natural Resources to take small numbers of marine mammals by harassment incidental to removal of pilings and associated structures in Puget Sound, Washington
Recommendation: The Commission recommended that, before issuing the harassment authorization, the National Marine Fisheries Service require the applicant to provide constant monitoring beginning 30 minutes before all daily activities are initiated and ending 30 minutes after all daily activities cease, require the applicant to measure sound pressure levels during vibratory extraction to verify that these levels do not have the potential to cause injury and, if the in-situ sound pressure levels may cause injury, require the applicant to determine a safety zone based on the in-situ levels and to shut down activities if a harbor seal enters the zone, condition the authorization to give the protected species observer the authority to shut down the proposed activities if he or she believes that a seal is at risk of direct strike, and continue to require ramp-up or soft-starts pending the outcome of a meeting between Service and Commission staff.
Agency Response: The Service issued the incidental harassment authorization on 29 October 2010, consistent with the Commission's recommendation regarding soft-starts. The Service disagreed that continuous monitoring was necessary based on the low probability that the proposed activities would cause serious injury or mortality and based on the paucity of species present. The Service noted that there are no known acoustic data

available on source levels of vibratory extraction of timber piles, but it was confident that the extraction would not cause Level A harassment. As such, the Service did not require in-situ measurements or determination of safety zones. The Service inferred that "direct strike" was in reference to the vibratory hammer and not the actual direct strike from piles or structures being removed by heavy equipment. The Service stated that the observers could shut-down operations if seals were in danger of direct strike.

3 September 2010

To: National Marine Fisheries Service
Issue: Draft Biological Opinion for the Bering Sea and Aleutian Islands and Gulf of Alaska Groundfish Fisheries Section 7 Consultation, August 2010
Recommendation: The Commission recommended that the National Marine Fisheries Service revise the biological opinion to (1) describe the full extent of biomass reduction in each of the fisheries over time and as projected under the proposed management strategy for these fisheries; (2) provide a detailed explanation for how such reductions in biomass affect the foraging efficiency of western Steller sea lions; and (3) explain how such reductions still allow for the recovery of the western Steller sea lion population despite a requirement of no changes to the overall harvest strategy to mitigate either jeopardy to the western population's continued existence or adverse modifications to its critical habitat. The Commission also recommended that the Service include a description of the shift in the age/size distribution of the prey stocks and explain how this shift in distribution affects the foraging efficiency of western Steller sea lions, describe changes in the distribution of the fished stocks under unfished and fished conditions, and take advantage of the circumstances surrounding the Alaska groundfish fisheries by developing an adaptive, experimental approach to fisheries management. In addition, the Commission recommended that the Service (1) correct and clarify the use of the terms "recovery" and "carrying capacity" and ensure that references to recovery in the opinion are consistent with the recovery criteria set forth in the Service's revised Steller Sea Lion Recovery Plan and (2) analyze all of the reasonable and prudent measures and alternatives and explain how they facilitate Steller sea lion recovery rather than just maintaining the status quo.
Agency Response: The Service issued the biological opinion on 24 November 2010. In the Commission's view, the Service has not yet addressed the Commission's recommendations.

9 September 2010

To: U.S. Coast Guard
Issue: Comments for the Interagency Coordinating Committee on Oil Pollution Research regarding oil pollution research priorities
Recommendation: The Commission recommended that the Interagency Coordinating Committee on Oil Pollution (1) compile and analyze required background information; (2) describe in detail all aspects of the proposed activities and their potential sources of failure; (3) project the fate of spilled oil, dispersants, and dispersed oil from different operations and geographical locations; (4) evaluate options for response given current technology and capabilities and the environment in which operations will occur; and (5)identify the limits of response technologies' capabilities and understand the research that is needed to address those limits. The Commission also recommended that the Committee describe interactions with other human activities that may affect or be affected by oil and gas operations and accidents, conduct a risk analysis and develop a research plan and budget for filling data gaps for living marine resources and their habitats, identify existing education and outreach tools, and develop a research plan with a detailed budget and timeline to address knowledge and technology gaps related to oil-spill prevention and response in the Arctic.
Agency Response: The Coast Guard did not finalize its Oil Pollution Research and Technology Plan by the end of 2011 but plans to finalize it in 2013.

16 September 2010	**To:** U.S. Fish and Wildlife Service **Issue:** Application for a research permit from Pennsylvania State University to import polar bear blood from Norway for population genetics analyses **Recommendation:** The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the permit holder is required to obtain all necessary permits under CITES before importing the specimens. **Agency Response:** The Service issued the permit on 18 October 2010, consistent with the Commission's recommendation.
17 September 2010	**To:** National Science Foundation **Issue:** Application to modify an authorization from Daniel Costa, Ph.D., to administer isotopes and to attach small drag-inducing devices to Weddell seals in addition to ARGOS telemetry tags, time-depth recorders, and accelerometers **Recommendation:** The Commission recommended that the National Science Foundation issue the authorization modification only after it has confirmed that the National Marine Fisheries Service has issued a permit amendment under the Marine Mammal Protection Act to authorize the proposed activities and advise the permit holder of the need to obtain all necessary permits under CITES before importing or exporting marine mammal parts. **Agency Response:** The Foundation issued the authorization modification on 26 October 2010, consistent with the Commission's recommendations.
23 September 2010	**To:** U.S. Fish and Wildlife Service **Issue:** Application for a research permit from Iskande Larkin, Ph.D., University of Florida, to take manatees during behavioral observations and health assessments to obtain information on the reproductive endocrine health of Florida manatees **Recommendation:** The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that conditions currently contained in the permit remain in effect and refrain from authorizing the proposed male reproductive studies until the IACUC has approved those studies. **Agency Response:** The Service issued the permit on 25 February 2011, consistent with the Commission's recommendations.
27 September 2010	**To:** National Marine Fisheries Service **Issue:** Application for a research permit from James Harvey, Ph.D., to conduct research on blue, fin, humpback, and gray whales off California, Oregon, and Washington during a five-year period **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided it restricts biopsy sampling and tagging neonates or females accompanied by a neonate. The Commission also recommended that the Service condition the permit to require that the applicant document observations regarding short- and long-term effects from biopsy sampling and tagging and report them to the Permit office and provide the Service with documentation that the applicant's IACUC has reviewed and approved the research protocol prior to initiating the activities. **Agency Response:** The Service issued the permit on 29 March, 2011, consistent with most of the Commission's recommendations. The Service did indicate that it is the responsibility of the researcher to obtain IACUC approvals for their research.
28 September 2010	**To:** National Marine Fisheries Service **Issue:** Application from Scripps Institution of Oceanography to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the eastern

tropical Pacific Ocean

Recommendation: The Commission recommended that the National Marine Fisheries Service, prior to issuing the incidental harassment authorization, require the applicant to use location-specific environmental parameters to re-estimate safety zones and then recalculate associated takes, require the applicant to use in-situ measurements to verify and, if need be, refine the safety zones prior to or at the beginning of the survey, and require the applicant to determine actual takes based on refined safety zones, sightability, and relevant detection functions. The Commission also recommended that the Service provide additional justification for its preliminary determination that the planned monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified safety zones, propose to Scripps Institution of Oceanography that it revise its study design to include collections of meaningful baseline data on the distribution and behavior of marine mammals, extend the monitoring period to at least one hour before initiation of airgun activities and at least one hour before the resumption of airgun activities after a power-down because of a marine mammal sighting within a safety zone, continue to require ramp-up and power-down procedures as a mitigation measure pending the outcome of a meeting to discuss these procedures, and not include detailed information and analyses for species that are not expected to be in the proposed survey area in future *Federal Register* notices.

Agency Response: The Service issued the incidental harassment authorization on 15 October 2010, consistent with some of the Commission's recommendations. The Service was confident in the calibration results from the Gulf of Mexico as the basis for the safety zones, and believed they were considered best available science. It also believed the safety zones were appropriate based on the low density of marine mammals in the area. The Service stated that the monitoring measures would detect marine mammals in the safety zones based on the small size of the safety zones and planned monitoring and mitigation measures. At night, night vision technology would be used to monitor for marine mammals and ramp-up would not commence unless the safety zone was visible for 30 minutes. The Service believed that redesigning the study was beyond the scope of the proposed action; however, sighting data would be obtained pre- and post-survey to provide baseline information. The Service did not agree with using a 1-hour clearance time because the majority of the species do not submerge longer than 30 minutes, observations are made for time periods greater than 30 minutes before airguns are active and during ramp-up procedures, and power-down would not occur based on the nature of the sound source. Finally, the Service believed the level of detail for pinnipeds was necessary to support their exclusion from the authorization.

6 October 2010

To: National Science Foundation

Issue: Application for authorization from Paul Ponganis to assess leopard seal hunting strategies and their impact on the emperor penguin colony at Cape Washington, Antarctica

Recommendation: The Commission recommended that the National Science Foundation issue the authorization as requested.

Agency Response: The Foundation issued the authorization on 12 October 2010, consistent with the Commission's recommendation.

6 October 2010

To: National Marine Fisheries Service

Issue: Application for a research permit from George Church, Harvard University, to acquire and maintain frozen whale lung and skin cells extracted from tissues previously collected from stranded bowhead whales

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit as requested.

Agency Response: The Service issued the permit on 24 January 2011, consistent with the Commission's recommendation.

7 October 2010

To: National Marine Fisheries Service
Issue: Request from the Knik Arm Bridge and Toll Authority in coordination with the Department of Transportation's Federal Highway Administration to take small numbers of beluga whales, harbor seals, and harbor porpoises by harassment incidental to bridge construction from 2013–2017
Recommendation: The Commission recommended that the National Marine Fisheries Service require the applicants to (1) clarify how source levels of the impact and vibratory hammers were determined; (2) fully describe the process and data used to estimate propagation loss, associated distances to Level A and B harassment thresholds, and the number of takes; (3) clarify how those takes reflect variations in the activities that would be conducted and the seasonal distribution of marine mammals near the project site; and (4) refrain from issuing a proposed rule for the proposed construction activities until the Service or the applicants have obtained and verified source level and propagation loss data for large-diameter, drilled-shaft construction methods using an oscillator and use that information to estimate the expected number of takes. The Commission also recommended that the Service verify the timing of the proposed in-water construction activities, require that the applicants provide marine mammal density estimates and estimated takes during those months currently not addressed in the application, and explain how the applicants would adjust their activities during the construction period to take into account the observed distribution, movements, and behavior of beluga whales. If the Service proposes regulations for the planned bridge construction activities without better data, the Commission recommends that it incorporate safety zones with added precautionary buffers for use with the impact and vibratory hammers until in-situ measurements have been made and estimated sound pressure levels have been verified and apply the same proposed safety zones associated with vibratory hammer use to the oscillator's use. Before publishing a proposed rule, the Commission recommended that the Service (1) resolve the uncertainty when using the qualifiers "when possible and practicable" and "when weather and daylight hours permit" and structure the proposed rule to prohibit in-water activities at times and under conditions when the specified mitigation and monitoring measures are not being implemented or are not expected to be effective; (2) require that observations be made before, during, and after all soft-starts of pile-driving and pile-removal activities to gather the data needed to analyze the effectiveness of this technique as a mitigation measure and require the applicants to analyze and report their findings as part of the monitoring and reporting requirements; and (3) condition the proposed rule and any letter of authorization issued thereunder to require suspension of the construction activities if a marine mammal is seriously injured or killed and the injury or death could be associated with those activities and, if supplementary measures are unlikely to reduce this risk to a negligible level, require the applicants to suspend their activities until an authorization for such taking has been obtained.
Agency Response: The Service had not issued the proposed rule by the end of 2011.

14 October 2010

To: U.S. Fish and Wildlife Service
Issue: Application for a photography permit from Thomas Postel to harass Florida manatees during filming activities at Blue Spring State Park, Florida
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit as requested.
Agency Response: The applicant amended the request and the Service published a *Federal Register* notice reopening the public comment period (see 19 January 2011, below).

15 October 2010

To: Office of Marine Sanctuaries

Issue: Management plan review for the Hawaiian Islands Humpback Whale National Marine Sanctuary

Recommendation: The Commission recommended that the Office of National Marine Sanctuaries develop a new management plan for the Hawaiian Islands Humpback Whale National Marine Sanctuary that expands its purpose and scope from the current conservation of a single species to one with an ecosystem perspective. Specifically, the Commission recommended that the new management plan include protecting, conserving, and restoring significant biological components and marine habitats occurring between the shoreline and a seaward boundary around all eight main Hawaiian Islands; adopt a new name for the sanctuary and new vision and mission statements that encompass an ecosystem-based management approach to protect, conserve, and restore marine life, marine habitat, and ecosystem health using management strategies that balance conflicting or competing uses while complementing existing management programs and measures; include a clear statement of intent to develop and implement all sanctuary management actions in close consultation with federal and state agencies and Native Hawaiian organizations that share responsibilities for conserving living marine resources in the sanctuary boundaries; and include provisions for establishing an interagency coordinating committee chaired by the Sanctuary's co-superintendents with representatives from the National Marine Fisheries Service, the Coast Guard, the Navy, the Western Pacific Regional Fishery Management Council, key offices of state government, and the Native Hawaiian community. The Commission also recommended that the Office of Sanctuaries direct particular attention to the need for protecting and promoting the reoccupation of the main Hawaiian Islands by Hawaiian monk seals, reducing risks to humpback whales from entanglement in fishing gear and collisions with vessels, minimizing harassment of spinner dolphins, monitoring and assisting with the recovery of the insular stock of false killer whales, and responding to stranded or distressed marine mammals. The Commission further recommended that the Office reserve authority to regulate future activities and development including vessel traffic, commercial and recreational fishing, sound sources, and construction activities.

Agency Response: The Sanctuary Advisory Council working groups developed management recommendations that were expected to be presented to the full council for their approval at a meeting in early 2012, prior to being forwarded to sanctuary management.

19 October 2010

To: National Marine Fisheries Service

Issue: Application from the U.S. Navy for revision of its letter of authorization for missile launch activities on San Nicolas Island, California, to discontinue targeted monitoring of northern elephant seals but continue targeted monitoring of California sea lions and harbor seals

Recommendation: The Commission recommended that the National Marine Fisheries Service (1) initiate a rulemaking or provide adequate justification to support a determination that rulemaking is not required to amend section 216.155 of the regulations to authorize the Navy to discontinue monitoring the potential effects of launches on elephant seals and (2) clarify the intent of section 216.158(a)(1) of its regulations and explain why it does not believe that the Navy should be held to the commitment that there would be no substantial modifications to the monitoring program to be carried out during the 12 months covered by the letter of authorization, particularly when it sought renewal of its letter of authorization just months before submitting the request to change the monitoring requirements. The Commission also recommended that the Service provide the

Commission and the public with the information necessary to evaluate the conclusion that there has been no displacement of pinnipeds from rookeries and haul-out sites in the areas potentially affected by launch activities, and develop and implement a monitoring strategy designed to determine whether there are gaps in the available information for assessing possible long-term impacts and, if so, to what extent the cumulative impacts of repeated launch activities might be displacing pinnipeds.

Agency Response: The Service issued a revised letter of authorization on 18 November 2010. It determined that rulemaking was not required to amend regulations because the Navy notified the Service of the changes and the requirements under 50 CFR 216.155 remain in effect. The Service also determined that the changes are not substantial; therefore, section 216.158(a)(1) is not relevant. Information regarding elephant seal displacement was provided, including an overall increase of numbers near launch sites from 2000–2005, but information regarding disturbance of other pinniped species was not provided. Lastly, the Service determined that the current monitoring strategy is sufficient to determine long-term impacts to pinnipeds from the launch activities.

22 October 2010

To: National Marine Fisheries Service

Issue: Application from the NOAA Restoration Center, Southwest Region, to take small numbers of harbor seals by harassment incidental to construction activities during a tidal wetlands project at the Elkhorn Slough National Estuarine Research Reserve in Moss Landing, California

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that it require the applicant first use site-specific environmental parameters to re-estimate safety zones and then use in-situ measurements to verify and, if need be, refine the safety zones prior to or at the beginning of sill construction and require that observations be made during all soft-starts to gather the data needed to analyze and report on its effectiveness as a mitigation measure.

Agency Response: The Service issued the incidental harassment authorization on 23 November 2010, consistent with most of the Commission's recommendations. The Service required the applicant to conduct in-situ measurements for the impact hammer but not the vibratory hammer due to its lower source level.

22 October 2010

To: U.S. Fish and Wildlife Service

Issue: Application for a public display permit from the Indianapolis Zoological Society to continue to retain a juvenile male walrus maintained at the Indianapolis Zoo

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the Service, in consultation with the Animal and Plant Health Inspection Service, is satisfied that the applicant's facilities for maintaining the animal are adequate to provide for its health and well-being and is satisfied that the applicant's education program is acceptable.

Agency Response: The Service did not issue the permit because the animal died.

22 October 2010

To: U.S. Fish and Wildlife Service

Issue: Application for a research permit from the U.S. Fish and Wildlife Service's Marine Mammals Management to take polar bears in Alaska and in waters around Alaska during a five-year period

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the Service consults with the applicant to determine the number of serious injuries and deaths of animals that might occur during the proposed activities and provide authorization for a limited number of accidental deaths. The Commission also recommended that the Service require that activities be suspended if the

mortality level reaches the authorized number, consult with the applicant to determine whether the harassment of non-target marine mammal species is warranted and should be included in the permit request, ensure that activities to be conducted under this permit and those of other permit holders are coordinated to avoid duplicative research and unnecessary disturbance of animals, and is satisfied that the proposed activities have been reviewed and approved by the permit holder's IACUC.
Agency Response: The Service issued the permit on 11 March 2011, consistent with the Commission's recommendations.

29 October 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Randall Wells, Ph.D., to conduct research on bottlenose dolphins off the west coast of Florida during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it conditions the permit to require the applicant to provide IACUC approval prior to initiating the research activities.
Agency Response: The Service issued the permit on 26 May 2011, consistent with the Commission's recommendation.

1 November 2010

To: U.S. Department of Energy
Issue: Review by the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling
Recommendation: The Commission recommended that the Oil Spill Commission identify the proximate causes of the Deepwater Horizon oil spill, take a critical look at the regulatory and social environment in which this event occurred, and develop measures to reduce the likelihood that faulty judgment and human error may contribute to similar events. The Commission also recommended that the Oil Spill Commission call for development of a national database for all oil and gas operations in U.S. waters and mandatory standardized testing of all major types of equipment and technology used in oil and gas operations to assess risks, make recommendations regarding how to improve government regulators to ensure adequate industry regulation, and review the environmental analyses prepared for the Deepwater Horizon drill site, including the BP oil spill response plan, to identify their shortcomings and make recommendations to address them. The Commission further recommended that the Oil Spill Commission (1) evaluate the role society played in creating the conditions and circumstances that led to the Deepwater Horizon oil spill and make recommendations that will lead to a comprehensive national energy policy that will reduce the risk of future spills; (2) pay close attention to the quantity and quality of baseline population and health information for wildlife in the Gulf of Mexico and, where it identifies shortcomings in that information, make recommendations for its improvement; (3) examine the balance between collection of essential information and multiple review processes and consider whether information standards ought to be imposed to ensure transparency; and (4) evaluate the nature, impacts, and efficacy of response methods and the apparent lack of preparation for addressing problems that could and should have been anticipated by the oil and gas industry and government regulators.
Agency Response: The Oil Spill Commission issued its report, "Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling," in January 2011, consistent with some of the Commission's recommendations. The Oil Spill Commission noted that while the oil spill itself was caused by a lack of well control, the ultimate cause of the disaster was a failure in the safety culture of the industry as a whole. The Oil Spill Commission determined that a fundamental reform of the regulatory oversight process was needed, as well as, self-policing by the industry. The Oil Spill Commission made numerous recommendations

designed to improve the safety of offshore operations, enhance environmental safeguards, strengthen oil spill response capabilities, and advance well-containment technologies. A complete discussion of the Commission's recommendations is provided in Chapter Three of this report.

2 November 2010

To: National Marine Fisheries Service
Issue: Review of the draft 2010 stock assessment reports
Recommendations: To improve stock assessment efforts generally, the Commission recommended that the National Marine Fisheries Service (1) review its observer programs nationwide, set standards for observer coverage, identify gaps in existing coverage, and determine the resources needed to (a) observe all fisheries that do or may directly interact with marine mammals, and (b) provide reasonably accurate and precise estimates of serious injury and mortality levels; (2) work with federal and state fishery management agencies and the industry to develop a funding strategy that will support adequate observer programs for collecting data on incidental serious injury and mortality of marine mammals and other protected species; (3) develop a strategy to collaborate with other nations to expand existing surveys and assessments for stocks that move into international or foreign waters and may be subject to fisheries or other human-related risk factors; and (4) develop and implement a systematic approach for integrating all human-related risk factors into stock assessment reports.

To improve stock assessment efforts in the Atlantic and Gulf of Mexico region, the Commission recommended that the National Marine Fisheries Service (1) conduct the necessary surveys of North Atlantic pinniped stocks and incorporate the results in its stock assessment reports; (2) improve stock assessments for bottlenose dolphins in both the Atlantic and the Gulf of Mexico by conducting the research needed to describe stock structure, provide more accurate and precise estimates of the abundance and trends of the various stocks, and provide more precise estimates of the level of dolphin serious injury and mortality from fisheries and other human activities in those regions; and (3) develop a stock assessment plan for the Gulf of Mexico that describes (a) a feasible strategy for assessing the Gulf's marine mammal stocks, (b) the infrastructure needed to support that plan, (c) the expertise required to carry out the plan, and (d) the funding needed to implement the plan.

To improve stock assessment efforts in the Alaska region, the Commission recommended that the National Marine Fisheries Service (1) proceed with formal recognition of 12 stocks of harbor seals in Alaska and then proceed with the necessary research and management of those stocks as required by the Marine Mammal Protection Act; (2) continue to seek the additional support needed to develop and implement an ice seal research and management strategy that is commensurate with the grave threats that those species face; (3) ensure that funding for research on the eastern stock of North Pacific right whales is incorporated into the Administration's fiscal year 2012 budget; and (4) provide in the 2011 stock assessment reports updated estimates of serious injury and mortality for the 11 stocks identified in the 2009 stock assessment reports but not addressed in the 2010 drafts, or at least explain why that information is not available.

To improve stock assessment efforts in the Pacific region, the Commission recommended that the National Marine Fisheries Service (1) investigate possible sources of fishery-related mortality of harbor porpoises from central California to the Washington coast and ensure adequate observer coverage on vessels in fisheries that may be taking harbor porpoises so that the total bycatch can be estimated more accurately; and (2) conduct the

necessary surveys to update stock assessment reports for harbor seals along the Oregon/Washington coast and in Washington inland waters.

Agency Response: The Service released its final 2010 stock assessment reports on 6 June 2011, highlighting ongoing efforts that will address many of the Commission's comments and recommendations. Specifically, the Service has begun to or will address the need for a review of observer programs, a strategy to incorporate funding from industry, and an international strategy for marine mammal conservation. Although the Service acknowledged that additional information would improve the stock assessment reports and better inform conservation decisions, it already has utilized available resources for surveys, observer programs, and estimating other types of mortality. Thus, the Service will not initiate any new large surveys or other programs until additional resources are available or ongoing monitoring or conservation efforts can be terminated and resources are redirected.

In response to recommendations regarding the Atlantic and Gulf of Mexico region, the Service detailed plans for a harbor seal abundance survey in May 2011, including determining a correction factor for seals not hauled out during the survey. The Service also will analyze archived digital images from 2005–2011 of seasonal seal surveys off the southeast Massachusetts coast to provide a minimum abundance estimate of non-pup gray seals in the Cape Cod/eastern Nantucket Sound region. In addition, the Service indicated that the critical elements for a strategic stock assessment plan for the Gulf of Mexico already exist in the protected species Stock Assessment Improvement Plan, and these elements are addressed in the 2008 Southeast Fisheries Science Center Marine Mammal Program Strategic Plan and a 2007 research plan for assessing bottlenose dolphin stocks in the north-central Gulf of Mexico. Because of limited staff resources, the Service will not develop a focused Southeast Fisheries Science Center document in the near future.

In response to recommendations regarding the Alaska region, the Service explained that the draft 2011 stock assessment reports will include separate evaluations of 12 harbor seal stocks for Alaska. Although the Service has completed status reviews of ringed, bearded, ribbon, and spotted seals, it is apparent that more information is needed to assess any potential threats or the impact to those species. The Service continues to request appropriations for ice seals to the extent consistent with other priorities of the Administration for the national budget. The Service also partners with other agencies to support research and monitoring of ice seals to the extent such activities are consistent with the priorities of those agencies. Lastly, the Service stated that it will continue to seek resources to study the critically endangered North Pacific right whale.

The Service did not provide any specific comments in response to the Commission's recommendations regarding the Pacific region.

4 November 2010

To: U.S. Fish and Wildlife Service

Issue: Application for a research permit from the Florida Fish and Wildlife Conservation Commission to conduct research on up to 90 West Indian manatees annually and to import/export salvaged specimens and biological samples from manatees and dugongs during a five-year period

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service defer issuing the permit until the applicant clarifies the additional number of manatees that could be taken by biopsy sampling; explained the reason for biopsy sampling an individual animal up to 10 times annually; explained why it is necessary to take incidentally a subset of manatees up to 30 times annually and either has provided a reasoned basis for assuming that the proposed number of takes will not have significant impact on the manatees and

their habitat-use patterns or has described how the applicant will evaluate the potential impact of that many takes; and provided written documentation demonstrating that the procedures proposed in the permit request have been reviewed and approved by the applicant's IACUC.
Agency Response: The Service issued the permit on 20 October 2011, consistent with the Commission's recommendations.

8 November 2010

To: Bureau of Ocean Energy Management, Regulation, and Enforcement
Issue: Review of categorical exclusions for outer continental shelf decisions
Recommendations: The Commission recommended that the Bureau of Ocean Energy Management, Regulation, and Enforcement discontinue the use of categorical exclusions for exploration, development, and production plans for proposed oil and gas activities on the outer continental shelf in the central or western Gulf of Mexico; review its requirements for safety and environmental management systems and its practices for inspecting those systems to ensure that they are functioning as designed and expected; and work with the Services to expedite implementation of the incidental take provisions of the Marine Mammal Protection Act in the Gulf of Mexico, including collection and analysis of the information needed to assess accurately the impact of oil and gas operations on marine mammals and other marine resources.
Agency Response: The Bureau had taken no formal action by the end of 2011 but reported that the issue is still under review.

9 November 2010

To: National Marine Fisheries Service
Issue: Application from the U.S. Air Force to take Atlantic bottlenose dolphins incidental to training operations off the coast of Santa Rosa Island at the Eglin Gulf Test and Training Range in the Gulf of Mexico from 2011–2015
Recommendation: The Commission recommended that the National Marine Fisheries Service require the Air Force to describe in detail the environmental parameters and methods used to determine the safety zones and subsequent takes and incorporate these in the final rule and, before issuing the final rule, require the Air Force to re-estimate the safety zones and associated takes based on the Level A harassment (injury) threshold of 13 psi-msec and the Level B harassment (non-TTS) threshold of 177 dB re 1 μPa^2-sec. The Commission also recommended that the Service, before issuing the final rule, provide additional justification for its preliminary determination that the mitigation and monitoring measures would be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified safety zones; condition the final rule and any letter of authorization issued under that rule to require suspension of the proposed activities if a marine mammal is seriously injured or killed and the injury or death could be associated with the proposed activities and, if supplementary measures are unlikely to reduce the risk of serious injury or death to a very low level, require the Air Force to suspend its activities until an authorization for such taking has been obtained; and ensure that numerous discrepancies in the application and proposed rule are corrected in the final rule.
Agency Response: The Service had not issued a final rule by the end of 2011.

18 November 2010

To: National Marine Fisheries Service
Issue: Application from the U.S. Navy to take marine mammals incidental to military training operations in the Temporary Maritime Activities Area in the Gulf of Alaska from 2011–2015
Recommendation: The Commission recommended that if the National Marine Fisheries Service proceeds with publication of a final rule to authorize the taking of small numbers

of marine mammals incidental to the proposed military training operations, the Service should (1) advise the Navy to consult with the U.S. Fish and Wildlife Service to determine if the Navy also needs authorization to take sea otters; (2) require the Navy to conduct an external peer review of its marine mammal density estimates for the Gulf of Alaska, the data upon which those estimates are based, and the manner in which those data are being used; (3) require the Navy to conduct seasonal, systematic vessel or aerial line-transect surveys supplemented with passive acoustic monitoring and satellite tracking to provide marine mammal density, distribution, and habitat use data during the seasons and in the regions when and where the Navy plans to conduct its exercises; (4) require the Navy to estimate marine mammal takes using season- and site-specific environmental parameters (including sound speed profiles and wind speed) and marine mammal densities before the Service issues the final rule; (6) if the Navy plans to conduct major training exercises in April or May but does not provide more realistic take estimates for those months, limit the final rule to major training exercises that occur during the period from June to October; (7) extend the required monitoring period to at least one hour before the resumption of training exercises when an animal has been sighted within a safety zone and after power-down and shutdown of active sonar sources; (8) condition the final rule to require that all members of the Navy's mitigation teams be required to complete the marine mammal training program (i.e., the Service-approved Marine Species Awareness Training) before they participate in any of the proposed activities; (9) require the Navy to use a sufficient level of monitoring during all training activities to ensure that marine mammals are not being taken in unanticipated ways or numbers; and (10) condition the final rule to require that the Navy suspend any of the training exercises or other activities covered by this authorization if it observes a marine mammal that is seriously injured or dead and the injury or death could have resulted from the Navy's activities. The Commission also recommended that, before issuing the final rule, the Service clarify the meaning of the qualifiers "when operationally feasible," "if operationally feasible," "when feasible," and "if feasible" to indicate how often, under what specific conditions, and for what timeframe the Navy expects to use visual and aural monitoring via aerial- and vessel-based observers and passive acoustic sensors; ensure that it can provide oversight of and response to uncommon stranding events within the Temporary Maritime Activities Area in the Gulf of Alaska sufficient to meet in full the monitoring and reporting requirements of the Marine Mammal Protection Act; and ensure that discrepancies within and between the application and *Federal Register* notice are corrected and addressed in the final rule.

Agency Response: The Service issued a final rule on 25 April 2011, consistent with a few of the Commission's recommendations. The Service indicated that the Navy consulted with the U.S. Fish and Wildlife Service regarding sea otters, which were considered extralimital in the range complex. The Service also stated that the Navy uses peer-reviewed science whenever it is available and applicable, and it has encouraged the Navy to have the models they use and data they gather peer-reviewed. The Service did agree that the Navy should focus its monitoring plan on passive acoustics; however, it did not address vessel or aerial surveys and all monitoring would occur after the final rule would be issued. Further, the Service indicated that the Navy used the greater densities for determining takes but did not address site-specific or season-specific modeling. The Service did not extend the monitoring period to one hour because it believes that animals that have the ability to dive for longer than 30 minutes may not dive for extended periods, that it is unlikely that vessels and animals would travel in the same direction at the same sustained speed to be exposed to sonar for extended periods of time, and animals avoid vessels and active sonar sources. The Service did not indicate if all members of the mitigation team (i.e., look-outs) would be required to complete the Service-approved Marine Species Awareness Training, as it is used to augment look-out training. Individuals are not expected to identify marine

mammals to species and they are not expected to provide in depth behavioral or status information on marine mammals. The Service believes that the monitoring stipulated in the monitoring plan and conducted by the look-outs is sufficient, as it did not require further monitoring requirements. Lastly, the Service did not specifically respond to the last four recommendations and the Commission is unsure if they were implemented.

18 November 2010

To: National Marine Fisheries Service
Issue: Application from the U.S. Navy to take gray whales, bottlenose dolphins, California sea lions, and harbor seals by harassment incidental to training operations at the Silver Strand Training Complex, California, for a one-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service require the Navy to revise the density estimates and subsequent number of takes to reflect accurately the densities presented in the references or provide a reasoned explanation for the densities that were used; require the Navy to conduct an external peer review of its marine mammal density estimates, the data upon which those estimates are based, and the manner in which those data are being used; issue the incidental harassment authorization contingent on the requirement that the Navy first use site-specific environmental parameters to re-estimate safety zones and then use in-situ measurements to verify and, if need be, refine the safety zones prior to or at the beginning of pile driving and removal, and before issuing the authorization, require the Navy to use consistent methods for rounding "fractional" animals to whole numbers to determine takes from underwater detonations and pile driving and removal and re-estimate marine mammal takes using the same methods for all proposed activities. The Commission also recommended that the Service require the Navy to monitor for at least 30 minutes before, during, and at least 30 minutes after all underwater detonation and pile-driving and pile-removal activities, to take steps to ensure that the safety zones for pile driving and removal are clear of marine mammals for at least 30 minutes before activities can be resumed after a shutdown, and to make observations during all soft-starts to gather the data needed to analyze and report on the effectiveness of soft-starts as a mitigation measure. The Commission further recommended that the Service condition the authorization to require suspension of exercises if a marine mammal is seriously injured or killed and the injury or death could be associated with those exercises, and if additional measures are unlikely to reduce the risk of additional serious injuries or deaths of marine mammals to a very low level, require the Navy to obtain the necessary authorization for such takings under section 101(a)(5)(A) of the Marine Mammal Protection Act before continuing the training exercises and ensure that the discrepancies within the application and the Service's *Federal Register* notice are corrected and addressed in the incidental harassment authorization.
Agency Response: The Service had not issued the incidental harassment authorization by the end of 2011.

18 November 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Oleg Lyamin, University of California at Los Angeles, to import whole brains and brain tissues from 10 sub-adult male fur seals to study sleep mechanisms
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service consult with the applicant and the previous permit holder to obtain clarification on whether importations of samples under Permit No. 1009-1640 exceeded the number authorized and require that the applicant obtain all necessary permits under CITES before importing or exporting marine mammal parts.
Agency Response: The Service issued the permit on 18 July 2011, consistent with the

Commission's recommendations.

24 November 2010

To: National Marine Fisheries Service
Issue: Proposal to authorize the taking of certain endangered and threatened marine mammal stocks incidental to conducting Alaska-based groundfish fisheries for three years
Recommendation: The Commission recommended that the National Marine Fisheries Service (1) issue an authorization under section 101(a)(5)(E) to permit the incidental take of endangered and threatened stocks of humpback whales, fin whales, sperm whales, and Steller sea lions; (2) emphasize research and monitoring programs to address uncertainties related to reproduction and survival of the far-western sub-populations of the western U.S. stock of Steller sea lions and re-evaluate the negligible impact determination as new information becomes available; (3) work with state and tribal fisheries managers and participants in those fisheries to expand observer coverage in fisheries that may take marine mammals and, as observers provide better data, re-evaluate the negligible impact determination; and (4) identify the information gaps related to endangered and threatened species that may be affected by the issuance of the proposed permit and elevate the priority given to addressing those gaps.
Agency Response: The Service issued the permit for several groundfish fisheries in the Bering Sea and the Gulf of Alaska on 21 December 2010, consistent with most of the Commission's recommendations. The Service did indicate that implementation of some of the recommendations were dependent on budgetary constraints.

24 November 2010

To: National Science Foundation
Issue: Draft Programmatic Environmental Impact Statement/Overseas Environmental Impact Statement (PEIS) for marine seismic research (i.e., geophysical surveys) funded by the National Science Foundation or conducted by the U.S. Geological Survey
Recommendation: The Commission recommended that the National Science Foundation and the U.S. Geological Survey be prepared to conduct supplemental environmental analyses under the National Environmental Policy Act; redefine the alternatives considered in the programmatic analysis to encompass the broad technological, monitoring, and mitigation issues that pertain to all marine seismic research and provide a clear basis for choosing among options by decision-makers and the public; require for each proposed project specific mitigation and monitoring requirements tailored to the species present in the research area, pertinent oceanographic and bathymetric features, and the proposed operations; and develop guidelines for cruise research design and planning that would minimize the potential impacts of seismic research on marine mammals and other protected species. The Commission also recommended that the Foundation work with their observers, observer service providers, and the Services to establish and implement standards for protected species observers, establish requirements for analysis of data collected by the observers, provide additional justification for their preliminary determination that the mitigation and monitoring measures that depend on visual observations would be sufficient to detect, with a high level of confidence, all marine mammals within or entering identified mitigation zones. The Commission further recommended that the Foundation provide a comprehensive analysis of the cumulative impacts expected from proposed and future seismic surveys.
Agency Response: The Foundation issued the final programmatic environmental impact statement in June 2011, consistent with some of the Commission's recommendations. The Foundation believed that that the technologies for potential future surveys and monitoring and mitigation are well defined in the PEIS, thus the alternatives presented in the PEIS are appropriate. The Foundation also stated that the monitoring reports currently, and will continue to, estimate potential effects on marine mammals and provide information

regarding the effectiveness of monitoring and mitigation measures. Data collected by observers are viewed as public information and any further analysis of them is allowable, and encouraged, at user's expense. Because the National Marine Fisheries Service views the combination of visual and passive acoustic monitoring as the most effective mitigation techniques available for detecting marine mammals within or entering the exclusion zone, the Foundation believes they are effective. Lastly, the Foundation indicated that its cumulative impacts analysis in the draft PEIS examined potential impacts at a programmatic level, but it will include a cumulative impact analyses for future projects.

6 December 2010

To: Bureau of Ocean Energy Management, Regulation, and Enforcement
Issue: Draft Supplemental Environmental Impact Statement for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Recommendation: The Commission recommended that the Bureau of Ocean Energy Management, Regulation, and Enforcement (1) adopt a slow, phased approach to oil and gas development in the Chukchi Sea Planning Area by limiting initial operations to one or two active lease areas until the Bureau, industry, and all responsible parties have demonstrated their ability to conduct oil and gas operations safely in this region, have developed means for responding to oil spills in icy waters, and have collected needed baseline information on the marine wildlife and habitat at risk from such operations; (2) strengthen its supplemental environmental impact statement by providing a more complete description of the added risks associated with natural gas extraction, including a large-scale spill or loss of well control, prolonged use of platforms in the harsh Arctic environment, and construction and maintenance of the proposed gas pipeline; (3) work with other agencies with related responsibilities, the oil and gas industry, conservation organizations, and other stakeholders to develop standards and seek resources for baseline research and monitoring in areas under consideration for oil and gas development, including the Chukchi Sea Planning Area; such standards must take into account the rapidly changing conditions in the Arctic; and (4) work with the Department of Energy and related agencies to develop a national energy policy that will reduce the environmental risks being imposed by the nation's current dependence on oil and gas for energy.
Agency Response: The Bureau issued its final supplemental environmental impact statement in October 2011. The Bureau did not address or provide responses to the Commission's recommendations in the final statement.

8 December 2010

To: National Marine Fisheries Service
Issue: Petition from the California Gray Whale Coalition to designate the Eastern North Pacific population of gray whales as "depleted" under the Marine Mammal Protection Act
Recommendation: The Commission recommended that the National Marine Fisheries Service defer any status change until the scientific evidence provides a stronger basis for concluding that the population may be below its maximum net productivity level, focus its research and management efforts related to the eastern North Pacific gray whale population on continued monitoring and expanded study of the whales' natural history and factors that may affect conservation of the population, and establish and fund a program to continue monitoring gray whale abundance and reproduction and to initiate efforts to understand how climate change in the Arctic affects gray whales. The Commission also recommended that the Service take advantage of opportunities to convene groups of gray whale researchers from Mexico, Canada, the Service, state research and management agencies, non-governmental organizations, academic institutions, and Native American groups to discuss ways of coordinating research aimed at the issues most relevant to conservation of the eastern North Pacific gray whale population.
Agency Response: The Service found that the petition did not present substantial

information to indicate that a status review may be warranted and indicated that the Commission's comments were helpful in reaching its decision, as it agreed with the Commission's recommendations. However, the Service did state that compliance with some of the recommendations was based on budgetary constraints.

9 December 2010

To: National Marine Fisheries Service
Issue: Application to amend a research permit from the Northwest Fisheries Science Center to tag with suction-cup tags 20 southern resident killer whales per year and to tag with satellite dart tags six southern resident killer whales per year
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the conditions contained in the existing permit remain in effect and the Service ensure that the researchers coordinate and integrate all proposed tagging and biopsy activities with those of Canadian researchers studying the southern resident killer whale population.
Agency Response: The Service issued the permit amendment on 9 December 2011, consistent with the Commission's recommendations.

13 December 2010

To: Gray's Reef National Marine Sanctuary
Issue: Proposed rule from NOAA to create a research area within the Gray's Reef National Marine Sanctuary for conducting controlled scientific studies
Recommendation: The Commission recommended that NOAA adopt the proposed rule to establish a research area within the Sanctuary and prohibit fishing, diving, and stopping while transiting the area. The Commission also recommended that the Administration encourage research to assess the localized effects of removing fishing and other human activities on the size, distribution, abundance, and reproduction of economically important fish and shellfish within and outside the research area and encourage researchers working in the Sanctuary to record information on bottlenose dolphins, thereby providing a stronger basis for their management and conservation.
Agency Response: The Service issued a final rule on 4 December 2011 designating the southern third of NOAA's 22-square mile Gray's Reef National Marine Sanctuary as a research area.

20 December 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from ABR, Inc. Environmental Research and Services to harass 11 species of marine mammals during aerial surveys in Alaska waters during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it conditions the permit to require ABR, Inc., to collect, maintain, and annually report any disturbance caused by the planned surveys and require that ABR, Inc., consult with the Service if the surveys cause disturbance of Cook Inlet beluga whales to determine how to adjust survey methods to prevent such disturbance.
Agency Response: The Service issued the permit on 21 November 2011, consistent with one of the Commission's recommendations. The Service indicated that it is not reasonable to require the permit holder to modify its methods to avoid harassment of Cook Inlet beluga whales when the aerial surveys are targeting those whales.

21 December 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from the Wildlife Resources Division of the Georgia Department of Natural Resources to conduct research on North Atlantic right whales off Florida, Georgia, and South Carolina during a five-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service refrain from issuing the permit until it either completes a programmatic environmental impact statement or explains why it no longer believes that an environmental impact statement is necessary to comply with the National Environmental Policy Act. If the Service decides to issue a permit without resolving this issue, the Commission recommended that the Service ensure that the proposed research has been approved by an IACUC and require the applicant to obtain all necessary permits under CITES before importing or exporting marine mammal parts.
Agency Response: The Service issued the permit on 24 June 2011, consistent with none of the Commission's recommendations. The Service stated that it is not precluded from issuing permits while the environmental impact statement is being developed, per the National Environmental Policy Act and its implementing regulations at 40 CFR Section 1506.1. It is evaluating the applicant's request for right whale research to determine whether the action would result in significant impacts to the species or other portions of the environment. The Service also indicated that it is the responsibility of the researcher to obtain IACUC approvals for his or her research and CITES permits for import and export of marine mammal parts.

21 December 2010

To: National Marine Fisheries Service
Issue: Application for a research permit from Scott Kraus, Ph.D., to conduct research on North Atlantic right whales along the U.S. East Coast from New York Harbor to the Maine-Canada border during a three-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service refrain from issuing a permit until it either completes a programmatic environmental impact statement or explains why it no longer believes that preparation of an environmental impact statement is necessary to comply with the National Environmental Policy Act. If the Service decides to issue the requested permit without resolving this issue, the Commission recommended that the Service ensure that the proposed research has been approved by an IACUC.
Agency Response: The Service issued the permit on 21 April 2011, consistent with none of the Commission's recommendations. The Service stated that it is not precluded from issuing permits while the environmental impact statement is being developed, per the National Environmental Policy Act and its implementing regulations at 40 CFR Section 1506.1. It is evaluating the applicant's request for right whale research to determine whether the action would result in significant impacts to the species or other portions of the environment. The Service also indicated that the applicant's IACUC reviews his protocols annually and the Animal Plant and Health Inspection Service implements the Animal Welfare Act, not the National Marine Fisheries Service.

30 December 2010

To: National Marine Fisheries Service
Issue: Application to amend a research permit from Terrie Williams, Long Marine Laboratory, to conduct physiological research on up to 18 captive Hawaiian monk seals in facilities in the United States and to hold up to three Hawaiian monk seals at Long Marine Laboratory at any given time
Recommendation: The Commission recommended that the Service issue the permit amendment as requested.
Agency Response: The Service issued the permit amendment on 3 February 2011, consistent with the Commission's recommendation.

30 December

To: National Marine Fisheries Service
Issue: Application from the California Department of Transportation to take small

2010 numbers of marine mammals by harassment incidental to construction of a replacement bridge for part of the San Francisco-Oakland Bay Bridge

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization subject to a condition requiring the applicant to make observations before, during, and after all soft-starts of pile-driving activities to gather the data needed to analyze and report on its effectiveness as a mitigation measure.

Agency Response: The Service issued the incidental harassment authorization on 7 February 2011, consistent with the Commission's recommendation.

2011

3 January 2011

To: U.S. Fish and Wildlife Service
Issue: Possible listing of the Pacific walrus as threatened or endangered under the Endangered Species Act
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service propose to list the Pacific walrus as threatened under the Endangered Species Act because the population faces serious threats and its management warrants a precautionary approach.
Agency Response: The Service issued its 12-month finding on 10 February 2011 in which it determined that listing the walrus as a threatened or endangered species was warranted but precluded at this time due to higher priority listing actions. Thus, the walrus is considered a candidate species, which requires annual reviews and determining a schedule for rule making.

3 January 2011

To: Bureau of Ocean Energy Management, Regulation, and Enforcement
Issue: Notice of intent to prepare a supplemental environmental impact statement for the remaining Western and Central Planning Area lease sales in the 2007–2012 leasing program
Recommendation: The Commission recommended that the Bureau of Ocean Energy Management, Regulation, and Enforcement (1) consult with the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the Commission to develop a set of standards for baseline information needed to assess the impacts of oil and gas operations on marine mammals and their environments; (2) initiate research on these topics prior to the resumption of lease sales in the Gulf of Mexico; (3) consider ways to improve oil spill prevention and response capabilities by (a) requiring the industry to provide the resources for related research and technology development and (b) adding performance-based incentives for the industry; and (4) prepare for public review a detailed description of the lessons learned and adjustments made to improve management of offshore oil and gas operations based on experience from the BP oil spill.
Agency Response: The Bureau issued its final supplemental environmental impact statement for Lease Sale 218 (i.e., the remaining lease sale for the 2012-2017 leasing program in the Western Planning Area) in August 2011, consistent with one of the Commission's recommendations. The Bureau included a summary of its regulatory changes resulting from the Deepwater Horizon oil spill event to improve the safety of oil and gas development on the Outer Continental Shelf. The Bureau had not issued a final supplemental environmental impact statement for combined lease sales 216 and 222 (i.e., the remaining lease sales in the Central Planning Area) by the end of 2011, but it anticipated issuance in early 2012.

14 January 2011

To: National Marine Fisheries Service
Issue: Application from the St. George Reef Lighthouse Preservation Society to take small numbers of pinnipeds by harassment incidental to aircraft operations, restoration and maintenance work on the St. George Reef Light Station on Northwest Seal Rock off the coast of Crescent City, California
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures.
Agency Response: The Service issued the incidental harassment authorization on 16 February 2011, consistent with the Commission's recommendation.

14 January 2011

To: National Marine Fisheries Service
Issue: Application from the U.S. Fish and Wildlife Service to take small numbers of pinnipeds by harassment incidental to aircraft operations during polar bear captures in the Chukchi Sea
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures.
Agency Response: The Service issued the incidental harassment authorization on 4 March 2011, consistent with the Commission's recommendation.

19 January 2011

To: U.S. Fish and Wildlife Service
Issue: Application to amend a photography permit request from Thomas Postel to film manatees at various Florida locations year-round for one year (see 14 October 2010, above)
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that it specifies that, when required, additional authorization to enter the water to conduct filming activities be obtained from Florida state and/or federal refuge authorities and filming of a particular animal or animals cease if the animals appear to be unduly disturbed by the activity.
Agency Response: The Service issued the permit amendment on 6 May 2011, consistent with the Commission's recommendations.

24 January 2011

To: National Marine Fisheries Service
Issue: Application from the Alaska Aerospace Corporation to take small numbers of harbor seals and Steller sea lions by harassment incidental to missile launches at Kodiak Launch Complex, Alaska, for a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service (1) include in its final rule all of the applicant's proposed mitigation and monitoring measures, including those described in the preamble; (2) require the Corporation to use a remote video-camera system to monitor harbor seals on the eastern side of Ugak Island during at least five launches; if the cameras detect any disturbance then the Corporation and the Service should consult to determine what monitoring adjustments are needed and, if the authorized harbor seal takes are exceeded due to disturbance on the eastern side of the island, the Corporation should consult with the Service to determine if amendments to the regulations or letters of authorization are needed; (3) require appropriate monitoring of Steller sea lions before, during, and after launches to determine if the launches are disturbing the sea lions' use of Ugak Island and possibly discouraging more sea lions from hauling out there; and (4) advise the applicant of the need to consult with the U.S. Fish and Wildlife Service regarding the potential incidental take of sea otters.
Agency Response: The Service issued a final rule on 16 February 2011, consistent with some of the Commission's recommendations. However, the Service did not require monitoring of Steller sea lions, stating that monitoring could occur after the first five launches via the remote video-camera system and that the Corporation would attempt to capture sea lion behavioral responses. The Service further stated that the Corporation is aware of U.S. Fish and Wildlife's jurisdiction over incidental take of sea otters.

24 January 2011

To: Bureau of Ocean Energy Management
Issue: Notice of intent to prepare an environmental assessment for proposed seismic surveys by ION Geophysical Corporation in the Beaufort and Chukchi Seas in 2011
Recommendation: The Commission recommended that the Bureau of Ocean Energy Management expand its environmental analysis to include, at a minimum, an alternative

that highlights other possible methods for gaining the required information and describes the levels of risk to marine mammals and other marine life associated with those methods, work with stakeholders to develop alternative survey strategies that avoid unnecessary redundancy in seismic studies in the Alaska Arctic and elsewhere, describe the limitations in existing baseline data for the September–December period, and ensure that the resulting uncertainty is acknowledged and accounted for in the analysis of impacts and the final decision-making process. The Commission also recommended that the Bureau analyze the benefits and costs of using visual observations and passive acoustics together to mitigate potential adverse impacts and produce a more reliable estimate of the number of marine mammal takes resulting from the proposed survey, require the use of expanded safety zones as a precautionary measure, and require ION Geophysical Corporation to (1) instruct its monitoring teams on the survey vessel to keep detailed records of each marine mammal sighting, the species involved, the location of the animal(s) relative to the vessels and array, and the reaction of the animal(s) to the vessels and array and (2) ensure analysis of that information to provide a more accurate assessment of the number of animals taken and the nature of their responses as a function of distance from the vessels and array and the level of exposure to airgun sounds. In addition, the Commission recommended that the Bureau use its 2011 environmental assessment to describe the potential cumulative impacts of the proposed activity and other human activities in the region, the information needed to assess those impacts, the information that is presently available for that purpose, and the resulting uncertainty regarding those impacts for all marine mammal species in the action area and reconsider whether an environmental impact statement would be more useful and appropriate in this case.

Agency Response: The Bureau did not issue a draft environmental assessment by the end of 2011.

27 January 2011

To: U.S. Fish and Wildlife Service

Issue: Application for a research permit from Texas A&M University, Randall Davis, Ph.D., to conduct research on sea otters in Prince William Sound, Alaska, during a five-year period

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit but condition it to (1) protect females with pups by prohibiting the positioning of a skiff above their dive sites; (2) limit the collection of dive depth and location data for other otters to periods after a foraging bout has been completed and animals have surfaced at least 50 m from the dive site and are no longer foraging; and (3) require monitoring and reporting of sea otter reactions to the presence of the boat.

Agency Response: The Service issued the permit on 19 May 2011, consistent with the Commission's recommendations.

27 January 2011

To: National Marine Fisheries Service

Issue: Application to amend a research permit from the National Marine Mammal Laboratory to conduct research on narwhals during a five-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit as requested.

Agency Response: The Service issued the permit on 25 April 2011, consistent with the Commission's recommendation.

31 January 2011

To: National Marine Fisheries Service

Issue: Application for a research permit from Craig Matkin to conduct research on killer, gray, Baird's beaked, Cuvier's beaked, and Stejneger's beaked whales in Alaska during a five-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit authorizing the applicant to biopsy and tag killer, gray, Baird's beaked, Cuvier's beaked, and Stejneger's beaked whales but condition the permit to exclude authorization to biopsy or tag calves less than six months of age or females accompanied by calves less than six months of age and include a permit condition requiring the applicant to document observations regarding possible short- and long-term effects from biopsy sampling and tagging and report them to the Permit Office. The Commission also recommended that the Service 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 and include a permit condition specifically limiting the applicant from approaching a carcass if a marine mammal is within a specified distance (e.g., 100 yards) of the carcass. In addition, the Commission recommended that the Service require that a co-investigator's or collaborator's IACUC review and approve the research protocol, prior to issuing the permit.

Agency Response: The Service issued the permit on 23 February 2011, consistent with most of the Commission's recommendations. However, the Service stated that it cannot require permit holders to share samples or data under section 104 of the Marine Mammal Protection Act. In addition, compliance with the IACUC provisions of the Animal Welfare Act is not a criterion under section 104 of the Act and enforcement of compliance with those provisions is not under the purview of the Service.

3 February 2011

To: National Marine Fisheries Service

Issue: Application to amend a research permit from the Aleut Community of St. Paul Island to harass Steller sea lions and harbor seals during collection of scat samples used to characterize their diet

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment as requested.

Agency Response: The Service issued the permit amendment on 31 March 2011, consistent with the Commission's recommendation.

4 February 2011

To: National Marine Fisheries Service

Issue: Application from Neptune LNG LLC to take small numbers of pinnipeds and cetaceans by harassment incidental to work on its offshore liquefied natural gas facility, Neptune Deepwater Port, during a five-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the final rule, provided that it (1) allows additional opportunity for public review and comment before publication of a final rule if the recalculated takes or zones in which takes might occur are significantly greater than those described in the proposed rule, or, if it determines that additional notice and opportunity to comment are not needed, it ensures the revised estimates of the zones of exposure and anticipated takes for each of the three proposed activities are provided in the final rule together with the rationale for not providing an additional opportunity for public review and comment; (2) adopts a consistent requirement that mitigation zones be clear of all species of marine mammals for 30 minutes before initiation or resumption of activities; (3) requires that visibility also be at least 1 km before maintenance and repair activities can proceed or provide a reasoned basis for allowing these activities under poorer visibility; (4) (a) requires that protected species observers monitor continuously for the presence of marine mammals when activities occur during daylight hours, and (b) either prohibits nighttime operations or adopts measures that it can demonstrate to be reliable for detecting all marine mammals within the specified

mitigation zones under nighttime conditions; and (5) includes in its final rule an analysis evaluating the impact of the proposed operations together with the cumulative impacts of all the other pertinent risk factors affecting right whales and other marine mammals that occur in the port area and explains why it believes that the combined impact would be negligible.

Agency Response: The Service issued a final rule on 11 July 2011, consistent with some of the Commission's recommendations. The Service did revise its exposure and take estimates (which decreased) and did provide rationale for those changes. As such, the Service did not believe an additional public comment period was warranted. The Service also indicated that a cumulative effects analysis was included in various NEPA documents related to Neptune's activities and that it considered those data and data within stock assessment reports and other scientific reports in its negligible impact conclusion.

4 February 2011

To: National Marine Fisheries Service

Issue: Proposed interim final rule pertaining to fisheries of the Exclusive Economic Zone off Alaska and Steller sea lion protection measures for the Bering Sea and Aleutian Islands groundfish fisheries off Alaska

Recommendation: The Commission recommended that the National Marine Fisheries Service implement its interim final rule and then begin the process of reexamining and modifying the specified protective measures with the goal of facilitating recovery rather than just preventing further decline and expand its section 7 consultations regarding the Alaska groundfish fisheries by analyzing the theory underlying its fishing strategy and its full ecological effects.

Agency Response: The Service implemented the interim final rule that was effective in January 2011. It is unclear if the Service began reexamining and modifying its protective measures to facilitate recovery.

8 February 2011

To: U.S. Fish and Wildlife Service

Issue: Draft recovery plan for the distinct population segment of northern sea otters in southwest Alaska

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service adopt the draft recovery plan for the southwest Alaska distinct population segment of northern sea otters subject to the following changes: (l) revise the draft plan by including estimates of the total time and cost required to recover the population to the point that it can be delisted; (2)(a) delete the statement concluding that the potential impact on sea otters from oil development in southern portions of the Bering Sea will be negligible and replace it with a statement that potential impacts on sea otters could range from negligible to high depending on the nature and extent of any spills that occur and (b) update the tables in the Threats Analysis section accordingly; (3) reconsider and revise its proposed approach for determining when the listing status of the southwest Alaska sea otter should be changed to endangered; (4) revise the plan to include the initial frequency for population monitoring surveys of each management unit; (5) expand the list of actions under Task 2.3 to include the development of an oil spill response plan that describes (a) priority areas requiring protection, (b) personnel and equipment needed to protect those areas from contact by oil and to respond to oiled otters, (c) logistical requirements for deploying those resources and response efforts, and (d) the costs of purchasing and establishing equipment caches to meet specific sea otter response needs; (6) restructure the planned actions to investigate the role and significance of disease on pages 8-6 and 8-7; and (7) work with the National Marine Fisheries Service to modify Task 5.1 on predation impacts by (a) dividing the task into two subtasks, one for studies focused on sea otters and the other for studies focused on killer whales and other predators, (b) expanding the discussion under each to

identify the studies that the Services believe to be of highest priority, and (c) providing cost estimates for those studies.
Agency Response: The Service had not issued its recovery plan by the end of 2011 but anticipates finalizing the plan in spring 2012.

11 February 2011
To: U.S. Fish and Wildlife Service
Issue: Application for research permit from Floragenex, Inc., to import tissue samples from up to 30 polar bears from Canada for population genetics analyses
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that Floragenex is required to obtain all necessary permits under CITES before importing the samples.
Agency Response: The Service issued the permit on 24 February 2011, consistent with the Commission's recommendation.

15 February 2011
To: National Marine Fisheries Service
Issue: Possible listing of the Hawaiian insular false killer whale as endangered
Recommendation: The Commission recommended that the National Marine Fisheries Service proceed with the proposed listing of the Hawaiian insular false killer whale as endangered under the Endangered Species Act and further investigate (1) fishery-related reductions of the target fish stocks and the manner in which those reductions are realized on a spatial basis and (2) how those reductions coincide with or may affect the foraging of Hawaiian insular false killer whales. The Commission also recommended that the Service expand the scope of the False Killer Whale Take Reduction Team to include Hawaiian inshore fisheries and recommend measures to identify and reduce their impact on Hawaiian insular false killer whales.
Agency Response: The Service had not issued the final rule by the end of 2011.

17 February 2011
To: National Marine Fisheries Service
Issue: Possible delisting of the eastern distinct population of Steller sea lions
Recommendation: The Commission recommended that the National Marine Fisheries Service proceed with delisting the eastern distinct population segment of Steller sea lions. The Commission further recommended that the Service (1) conduct a review of Steller sea lions in California waters to examine the existing genetic and other related information to determine if the southern portion of the eastern population is discrete and warrants management as a separate unit; (2) develop or design a strategy to track the status of the population in California waters; (3) identify possible causes of the southern range contraction and the evidence needed to prove or disprove each; (4) develop a research plan to investigate the gaps in information regarding the potential causes of the contraction; and (5) estimate the costs for carrying out such a plan.
Agency Response: The Service had not issued its 12-month finding by the end of 2011 but anticipated publishing it in spring 2012.

17 February 2011
To: National Marine Fisheries Service
Issue: Application to amend a research permit from the Alaska SeaLife Center to revise the terms and conditions governing handling of animals and monitoring following surgical and hot-branding procedures
Recommendation: The Commission recommended the National Marine Fisheries Service issue the amended permit, provided that the amendment (1) denies the Alaska SeaLife Center's request to change the allowable holding time of non-feeding juveniles from 10 days after capture to 10 days after arrival at the Center; (2) includes authorization to implant juveniles with life history tags before they have regained capture weight if they are

otherwise above a minimum weight, are healthy, and are feeding sufficiently well to be gaining weight; and (3) includes authorization to release implanted juveniles 10 days after implantation provided that they meet all other criteria for release. The Commission also recommended that the Service renew its efforts to find ways to authorize the permanent retention of non-releasable animals as an alternative to euthanasia.

Agency Response: The Service issued the permit amendment on 29 March 2011, consistent with the Commission's first recommendation. The Service denied the other requested changes to the permit conditions because the Center and Commission did not provide objective or measurable criteria that are clearly articulated for compliance and enforcement in a permit. As such, the Service conditioned the permit to require that animals that are not feeding sufficiently well to be gaining weight and/or are 5% or more below their capture mass would not be selected for life history tag implantation. The Service also did not believe that the issue is whether the "extra" four days of monitoring in captivity outweigh the "added risk" of exposure and habituation, but whether the condition is consistent with applicable permit issuance requirements under the Marine Mammal Protection Act. The condition is consistent and has not hindered the Center in conducting research in the past. Lastly, the Service declined to reconsider its position on euthanizing non-releasable animals.

22 February 2011

To: National Marine Fisheries Service

Issue: Application for research permit from Dan Salden, Ph.D., to conduct research on humpback whales, Hawaiian insular false killer whales, and other cetaceans in Hawaii waters during a five-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit but condition it to (1) ensure that the applicant takes steps to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with female/calf behavior, feeding, or other vital functions; (2) require monitoring, documentation, and reporting of any and all strong whale reactions to the approach and presence of research watercraft and researchers; and (3) ensure that activities to be conducted under this permit 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 duplicative research and unnecessary disturbance of animals.

Agency Response: The Service issued the permit on 18 November 2011, consistent with the Commission's recommendations.

22 February 2011

To: National Science Foundation

Issue: Application for authorization from Natalie Goodall to salvage cetacean and pinniped skeletal remains from South Georgia, the south Shetlands, the Antarctic Peninsula, and adjacent islands during a five-year period

Recommendation: The Commission recommended that the National Science Foundation issue the authorization, but condition it to apply only to naturalists who are not U.S. citizens until such time that any U.S. naturalist who might be involved in collecting and transporting marine mammal parts has obtained the necessary permit under the Marine Mammal Protection Act and advise Ms. Goodall of the need to obtain all necessary permits under CITES before exporting any marine mammal part.

Agency Response: The Foundation had not issued the authorization by the end of 2011, because the applicant had not obtained the necessary permit under the Marine Mammal Protection Act.

23 February 2011j	**To:** National Marine Fisheries Service **Issue:** Application for a photography permit from Wild Horizons, Ltd., to harass bottlenose dolphins during filming activities at Bull Creek and Hilton Head, South Carolina **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it requires the applicant to monitor and report all cases where filming leads to sufficient disturbance that the dolphins alter their behavior or otherwise exhibit strong response to filming activities, the boat, or the helicopter. **Agency Response:** The Service issued the permit on 10 June 2011, consistent with the Commission's recommendation.
23 February 2011	**To:** National Marine Fisheries Service **Issue:** Application from the Burke Museum of Natural History and Culture to import, export, analyze, and archive specimens of all marine mammal species for the purposes of archiving, scientific exchange, and scientific research for a five-year period **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the applicant obtains all necessary permits under CITES before importing or exporting any marine mammal part, maintains detailed records indicating the source of each specimen and the circumstances under which it was collected, and periodically provides reports to the Service sufficient to demonstrate that each specimen was taken in accordance with the laws of the country of origin, was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws, and is being used only for bona fide scientific purposes and incidental educational and public display purposes. **Agency Response:** The Service issued the permit on 25 April 2011, consistent with the Commission's recommendations.
23 February 2011	**To:** National Marine Fisheries Service **Issue:** Application for a research permit from Waikiki Aquarium to conduct research on captive Hawaiian monk seals and to continue and expand its related enhancement efforts during a five-year period **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, but condition it to require that only one seal be vaccinated at first and the second be vaccinated only after sufficient time has passed to rule out an adverse response and to require that the applicant consult with the Service and Commission if the first seal vaccinated dies. **Agency Response:** Waikiki Aquarium amended and resubmitted its application in May 2011; however, the Service had not issued the permit by the end of 2011.
28 February 2011	**To:** National Marine Fisheries Service **Issue:** Application from the Navy to take marine mammals by harassment incidental to a test pile program at Naval Base Kitsap in Bangor, Washington **Recommendation:** The Commission recommended that the National Marine Fisheries Service require the Navy to (1) make careful observations in conjunction with in-air propagation information in order to add to the miniscule dataset so that in the future thresholds can be set based on a more robust dataset; (2) provide a full description of the survey methods used, including how the Navy searched for animals, if and how it corrected its estimate for sighting probability, and if and how it corrected its estimate for decreasing sighting probability with distance from the observer; (3)(a) explain why it used the anticipated area of ensonification rather than surveyed area to estimate sea lion density and (b) correct the density estimates unless the Navy has a reasoned basis for not making such corrections; and (4) re-estimate the expected number of in-water and in-air takes using the

overall density of harbor seals in Hood Canal (i.e., 3.74 animals/km^2). In addition, the Commission recommended that if the Navy does not request authorization for in-air takes of harbor seals, the Service should require the Navy to shut down activities whenever a harbor seal is within the in-air Level B harassment zone (i.e., within a radius of 501 m). The Commission also recommends that the Service encourage the Navy to consult with experts at the National Marine Mammal Laboratory to review and revise the Navy's survey methods as needed to make them scientifically sound, require the Navy to record distances to and behavioral observations of animals sighted within the entirety of the in-water Level B harassment zone that would be established for vibratory pile driving and removal activities, and complete an analysis of the impact of the proposed activities together with the cumulative impacts of all the other pertinent risk factors (including the Navy's concurrent wharf repair project) affecting marine mammals in the Hood Canal area before issuing the authorization.

Agency Response: The Service issued the incidental harassment authorization on 16 July 2011, consistent with some of the Commission's recommendations. However, the Service did not correct the Navy's sea lion or harbor seal densities because it believes it used the best data available, albeit not ideal. Thus, takes were not re-estimated. In addition, the Service did not require the applicant to monitor the entirety of the Level B harassment zones based on financial constraints and consistency with other incidental harassment authorizations (i.e., seismic and geophysical surveys and sonar activities).

2 March 2011

To: National Marine Fisheries Service

Issue: Application to amend a research permit from the Alaska SeaLife Center to unintentionally kill up to five captive adult Steller sea lions during tagging and other scientific research activities

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment.

Agency Response: The Service issued the permit amendment on 21 March 2011, consistent with the Commission's recommendation.

4 March 2011

To: National Marine Fisheries Service

Issue: Application for a research permit from Jennifer Burns, Ph.D., to import and export samples from seals and sea lions to and from various countries

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it require the applicant to obtain all necessary permits under CITES; maintain detailed records indicating the source of each specimen and the circumstances under which it was collected; specify the approximate numbers and types of samples that would be collected and imported from live pinnipeds in Canada and Norway and clarify whether these specimens would be collected specifically for purposes of the proposed research or would be collected for other purposes; and provide periodic reports to the Service summarizing by country and species the number of animals from which such samples were taken and providing sufficient information to demonstrate that each specimen was taken in accordance with the laws of the country of origin, was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws, and is being used for bona fide scientific purposes only.

Agency Response: The Service issued the permit on 25 April 2011, consistent with the Commission's recommendations.

4 March 2011

To: U.S. Navy

Issue: Revised Integrated Comprehensive Monitoring Program

Recommendation: The Commission recommended that, as performance information

becomes available, the Navy identify standards that should be applied across multiple range complexes and integrate those standards into the respective range-specific monitoring programs and continue to support studies to better understand the impacts of sonar on marine mammals, including sonar-related changes in behavior and pathological changes that may occur as a result of exposure to sonar.
Agency Response: The Navy updated the Integrated Comprehensive Monitoring Program, consistent with the Commission's recommendations.

7 March 2011

To: National Marine Fisheries Service
Issue: Application from the U.S. Navy to take marine mammals by harassment incidental to pile driving at Naval Base Kitsap in Bangor, Washington
Recommendation: The Commission recommended that the National Marine Fisheries Service require the Navy to (1) make careful observations in conjunction with in-air propagation information in order to add to the miniscule dataset so that in the future thresholds can be set based on a more robust dataset; (2) provide a full description of the survey methods used, including how the Navy searched for animals, if and how it corrected its estimate for sighting probability, and if and how it corrected its estimate for decreasing sighting probability with distance from the observer; (3)(a) explain why it used the anticipated area of ensonification rather than surveyed area to estimate sea lion density and (b) correct the density estimates unless the Navy has a reasoned basis for not making such corrections; and (4) re-estimate the expected number of in-water and in-air takes using the overall density of harbor seals in Hood Canal (i.e., 3.74 animals/km^2). In addition, the Commission recommended that if the Navy does not request authorization for in-air takes of harbor seals, the Service should require the Navy to shut down activities whenever a harbor seal is within the in-air Level B harassment zone (i.e., within a radius of 501 m). The Commission also recommended that the Service encourage the Navy to consult with experts at the National Marine Mammal Laboratory to review and revise the Navy's survey methods as needed to make them scientifically sound, require the Navy to record distances to and behavioral observations of animals sighted within the entirety of the in-water Level B harassment zone that would be established for vibratory pile driving and removal activities and complete an analysis of the impact of the proposed activities together with the cumulative impacts of all the other pertinent risk factors (including the Navy's concurrent test pile program) on marine mammals in the Hood Canal area before issuing the authorization.
Agency Response: The Service issued the incidental harassment authorization on 16 July 2011, consistent with some of the Commission's recommendations. However, the Service did not correct the Navy's sea lion or harbor seal densities because it believes it used the best data available, albeit not ideal. Thus, takes were not re-estimated. In addition, the Service did not require the applicant to monitor the entirety of the Level B harassment zones based on financial constraints and consistency with other incidental harassment authorizations (i.e., seismic and geophysical surveys and sonar activities).

7 March 2011

To: National Marine Fisheries Service
Issue: Application from the Lamont-Doherty Earth Observatory to take marine mammals by harassment incidental to a marine geophysical survey in the eastern tropical Pacific Ocean
Recommendation: The Commission recommended that the National Marine Fisheries Service require the Observatory to (1) provide a full description of the Observatory's model as it is used to estimate safety and buffer zones and (2) rerun the model using site-specific information to determine safety and buffer zones and associated takes. The Commission also recommended that, prior to issuing the incidental harassment

authorization, the Service provide additional justification for its preliminary determination that the planned monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified safety zones; propose to the Observatory that it revise its survey design to add pre- and post-seismic survey assessments as a way of obtaining a more realistic baseline abundance estimate of marine mammals; require the applicant (1) to report on the number of marine mammals acoustically detected for which a power-down or shutdown of the airguns was initiated, (2) specify if the animals also were visually detected, and (3) compare the results from the two methods to help identify their respective weaknesses; and condition the authorization to prohibit an eight-minute pause before ramping up after either a power-down or shutdown of the airguns, based on the presence of a marine mammal in the safety zone and the *Langseth's* movement (speed and direction). In addition, the Commission recommended that the Service extend the monitoring period to at least 1 hour before initiation of seismic activities and at least 1 hour before the resumption of airgun activities after a power-down or shutdown and before ramp-up because of a marine mammal sighting within a safety zone, and condition the authorization to require the Observatory to monitor, document, and report observations during all ramp-up procedures.

Agency Response: The Service issued the incidental harassment authorization on 7 April 2011, consistent with some of the Commission's recommendations. However, the Service did not require modeling of site-specific information because of its analysis of the likely effects of the activity on the marine mammals and their habitat, the implementation of the mitigation and monitoring measures, and the appropriateness and sufficiency of the exclusion zones. The Service also indicated that the monitoring program would be sufficient to detect marine mammals because the mitigation and monitoring measures are the most effective, feasible measures available. In addition, the Service did not extend the monitoring period to 1 hour because observations are made longer than 30 minutes during ramp-up procedures, observers are monitoring in many cases when the airguns are not firing, the majority of the species do not remain underwater for more than 30 minutes, and there is a one in three chance that an animal would surface before the 30-minute period and then not again during the 30-minute period.

21 March 2011

To: U.S. Fish and Wildlife Service

Issue: Application to amend a research permit from the U.S. Geological Survey, Alaska Science Center, to increase the number of polar bears that can be biopsy darted annually and to paint mark each bear that is biopsy darted

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the amendment request provided that the proposed research has been reviewed and approved by the permit holder's IACUC and the conditions currently contained in the permit remain in effect.

Agency Response: The Service issued the permit amendment on 20 April 2011, consistent with the Commission's recommendation.

23 March 2011

To: National Marine Fisheries Service

Issue: Proposed rule and finding regarding a petition from the Center for Biological Diversity to list the Arctic, Okhotsk, Baltic, and Ladoga subspecies of ringed seal under the Endangered Species Act

Recommendation: The Commission recommended that the National Marine Fisheries Service list the Arctic ringed seal subspecies as threatened under the Endangered Species Act, but first determine if ringed seals in the Canadian Archipelago might be recognized as discrete and excluded from that listing based on projections of limited change in physical and ecological conditions in the Archipelago; list the Okhotsk ringed seal subspecies as threatened under the Endangered Species Act; and re-evaluate the status and threats to the

Baltic and Ladoga ringed seal subspecies and consider listing them as endangered. The Commission also recommended that the Service devise and implement a research plan to address the major uncertainties and programmatic shortcomings revealed in the status review; strengthen collaborative efforts among range states to (1) assess the status and trend of ringed seal populations throughout the species' range and (2) identify the need for protective measures where necessary; collaborate with the Alaska Native community to monitor abundance and distribution of ringed seals and use seals taken in the subsistence harvest to obtain relevant data; and continue investigating ringed seal population structure, especially that of the arctic subspecies.
Agency Response: The Service had not issued the final rule by the end of 2011, because the deadline for issuance was extended until June 2012.

23 March 2011

To: National Marine Fisheries Service
Issue: Proposed rule and finding regarding a petition from the Center for Biological Diversity to list the bearded seal under the Endangered Species Act
Recommendation: The Commission recommended that the National Marine Fisheries Service proceed with listing the Sea of Okhotsk and Beringia distinct population segments of the bearded seal as threatened under the Endangered Species Act and devise and implement a research plan to address the major uncertainties and information gaps revealed in the status review, including a research budget that is sufficient to address the priority needs. The Commission also recommended that the Service seek ways to facilitate cooperation in bearded seal research and management among the five nations with jurisdiction over parts of the species' range, collaborate with the Alaska Native community to monitor abundance and distribution of bearded seals, use seals taken in the subsistence harvest to collect relevant data, and periodically re-evaluate the species as more information becomes available regarding the subspecies' population status and trends and/or risk factors that may threaten its existence.
Agency Response: The Service had not issued the final rule by the end of 2011, because the deadline for issuance was extended until June 2012.

28 March 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from Robin Baird, Ph.D., to conduct research on cetaceans in the Pacific Ocean during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the Service includes a permit condition requiring the applicant to make observations sufficient to detect possible short- and long-term effects of biopsy sampling and tagging and report the effort made and the information collected to the Permit Office; ensures 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; and advises the applicant of the need to obtain permits under CITES before importing or exporting any cetacean part.
Agency Response: The Service issued the permit on 1 August 2011, consistent with most of the Commission's recommendations. It did clarify that the permit will not cover biopsy sampling, even though biopsy sampling was mentioned in the application and take tables.

28 March 2011

To: U.S. Fish and Wildlife Service
Issue: Application for a photography permit from Wild Horizons, Ltd., to harass Alaskan sea otters during filming activities in Glacier Bay and Prince William Sound, Alaska
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that it conditions the permit to specify the number of sea otters

that may be harassed in Glacier Bay and Prince William Sound as a result of the filming activities, and require the applicant to monitor and report all cases where the filming activities lead to sufficient disturbance that the otters alter their behavior or otherwise exhibit strong response to filming activities, the boat, or the helicopter.
Agency Response: The Service issued the permit on 5 October 2011, consistent with the Commission recommendation.

28 March 2011

To: Bureau of Ocean Energy Management, Regulation, and Enforcement
Issue: Notice of intent to prepare an environmental impact statement for its 2012–2017 leasing program in the Gulf of Mexico's Western and Central Planning Areas
Recommendation: The Commission recommended that the Bureau of Ocean Energy Management, Regulation, and Enforcement (1) work with the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the Marine Mammal Commission to develop comprehensive standards for baseline environmental information needed to evaluate the impacts of offshore oil and gas operations on marine mammals and their environment; (2) conduct an immediate, systematic, and rigorous expert review of the state of environmental knowledge in the Gulf to provide the basis for its proposed multi-sale environmental impact statement; (3) use recommendations from that review to revise and expand its Environmental Studies Program for the Gulf to address priority research needs and data gaps prior to further lease sales; (4) work with the oil and gas industry to fully fund and implement a revised and expanded Environmental Studies Program for the Gulf; and (5) provide a comprehensive analysis of the cumulative impacts expected from oil and gas operations, in the context of all other human uses of the offshore environment.
Agency Response: The Bureau issued a draft environmental impact statement in December 2011, consistent with none of the Commission's recommendations. The document did not address specifically any of the Commission's recommendations.

11 April 2011

To: U.S. Fish and Wildlife Service
Issue: Application from the Alaska Oil and Gas Association to take polar bears and Pacific walruses by harassment incidental to year-round oil and gas operations in the Beaufort Sea and the adjacent northern coast of Alaska
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the final rule, provided that it advises the applicant of the desirability of initiating a conference for the walrus to help fulfill the applicant's obligations under the Endangered Species Act for the five-year period of the final rule; describes all updated information for the four sites in question and reassess the risk of oil spills to polar bears for the Northstar and Liberty sites prior to issuing the final rule; assesses the risk of an oil spill to polar bears at Oooguruk and Nikaitchuq sites prior to issuing the final rule; and requires applicants for letters of authorization under the final rule to incorporate those updated oil spill projections in their applications, when available.
Agency Response: The Service issued the final rule on 3 August 2011, consistent with some of the Commission's recommendations. However, the Service believed it used the best available information regarding oil spills and encapsulated all of the known Industry activities that will occur in the geographic region during the five-year regulation period, as such oil spill risk at those four sites either were not assessed for the first time or reassessed based on new information.

13 April 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from the National Marine Mammal Laboratory to conduct research on pinnipeds on the west coast of the United States during a five-year period

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, contingent on conditioning the permit to require suspension of research activities and review by the Service if 6 or more sea lions are unintentionally killed in one year and consult with the Commission if 10 sea lions are unintentionally killed in one year.
Agency Response: The Service issued the permit on 18 May 2011, without implementing any of the Commission's recommendations. The Service stated that the researchers may not know when 6 (or 10) animals have died as a result of their research; thus, the conditions proposed by the Commission are impractical. In addition, the Service noted that the Commission did not provide a rationale for suspending research if 6 (or 10) animals die, or suggest what the consultation between the Service and the permit holder, or the Service and the Commission, should achieve.

13 April 2011

To: National Marine Fisheries Service
Issue: Application from the Alaska SeaLife Center to conduct research on Weddell seals to quantify thermoregulatory costs to seals in Antarctica during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, contingent on the applicant providing the Service documentation demonstrating that the proposed research has been reviewed and approved by the IACUC identified in the application.
Agency Response: The Service issued the permit on 25 May 2011, without implementing the Commission's recommendation. The Service noted that review and approval by an IACUC is not a condition of permit issuance under the Marine Mammal Protection Act, but is a requirement under the Animal Welfare Act. The U.S. Department of Agriculture enforces compliance with that provision, not the Service.

18 April 2011

To: Bureau of Ocean Energy Management, Regulation, and Enforcement
Issue: Notice soliciting comments and information pertinent to wind energy production in marine areas off Massachusetts
Recommendation: The Commission recommended that the Bureau of Ocean Energy Management, Regulation, and Enforcement (1) prepare an environmental impact statement, rather than an environmental assessment, to evaluate the potential impacts of issuing renewable energy leases; (2) consult with the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the Army Corps of Engineers, and the Marine Mammal Commission to develop a set of standards for the collection of baseline information on marine mammals and their environment; and (3) identify and address any significant data gaps before initiating the leasing process for renewable energy operations.
Agency Response: The Bureau posted the comments it received on regulations.gov website. It expects to publish a request for information in early 2012.

18 April 2011

To: National Marine Fisheries Service
Issue: Application from the Sonoma County Water Agency to take small numbers of marine mammals by harassment incidental to construction and maintenance activities in association with estuary management at the Russian River near Jenner, California
Recommendation: The Commission recommended that the Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures.
Agency Response: The Service issued the incidental harassment authorization on 21 April 2011, consistent with the Commission's recommendation.

2 May

To: U.S. Fish and Wildlife Service

2011 **Issue:** Application from the Alaska Department of Transportation and Public Facilities and the Aleutians East Borough to take small numbers of northern sea otters by harassment incidental to construction of a new airport, access road, and hovercraft landing area on Akun Island; a hovercraft landing and storage area on Akutan Island; and testing of a hovercraft between Akun and Akutan Islands, Alaska

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the incidental harassment authorizations, provided that it requires the applicants to conduct monitoring for 30 minutes before, during, and 30 minutes after hovercraft testing and conditions the authorizations to require suspension of hovercraft testing if a sea otter is seriously injured or killed and the injury or death could be associated with those activities.

Agency Response: The Service issued the incidental harassment authorizations on 23 May 2011, consistent with the Commission's recommendation.

2 May 2011 **To:** National Marine Fisheries Service

Issue: Application from the U.S. Geological Survey to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the central Gulf of Alaska

Recommendation: The Commission recommended that the National Marine Fisheries Service require the U.S. Geological Survey to re-estimate the proposed exclusion and buffer zones and associated takes of marine mammals using site-specific information and, if site-specific information is not used, then provide a detailed justification for basing the exclusion and buffer zones for the proposed survey in the Gulf of Alaska on empirical data collected in the Gulf of Mexico or on modeling that uses measurements from the Gulf of Mexico and that explains the significance of any deviations in survey method, such as the proposed change in tow depth. The Commission also recommended that the Service specify in the authorization all conditions under which an 8-minute period could be followed by a resumption of the airguns at full power, extend the 30-minute period following a marine mammal sighting in the exclusion zone to cover the full dive times of all species likely to be encountered, and provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion and buffer zones. In addition, the Commission recommended that the Service consult with the funding agency and individual applicants to develop; validate, and implement a monitoring program that provides a scientifically sound, reasonably accurate assessment of the types of marine mammal taking and the number of marine mammals taken; and require the applicant (1) to report on the number of marine mammals that were detected acoustically and for which a power-down or shutdown of the airguns was initiated, (2) specify if such animals also were detected visually, and (3) compare the results from the two monitoring methods to help identify their respective strengths and weaknesses. Lastly, the Commission recommended that the Service condition the authorization to require the U.S. Geological Survey to monitor, document, and report observations during all ramp-up procedures and analyze those data, in collaboration with the National Science Foundation, to determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys.

Agency Response: The Service issued the incidental take authorization on 5 June 2011, consistent with some of the Commission's recommendations. However, the Service did not require modeling of site-specific information because sound source verification studies are impractical logistically and financially, even though the Commission recommended site-specific modeling. In addition, the Service did not require remodeling because of its analysis of the likely effects of the activity on the marine mammals and their habitat, the implementation of the mitigation and monitoring measures, and the appropriateness and

sufficiency of the exclusion zones. The Service also indicated that the monitoring program would be sufficient to detect marine mammals because the mitigation and monitoring measures are the most effective feasible measures available. The Service did not extend the monitoring period to 1 hour because observations are made longer than 30 minutes during ramp-up procedures, observers are monitoring in many cases when the airguns are not firing, the majority of the species do not remain underwater for more than 30 minutes, and there is a one in three chance that an animal would surface before the 30-minute period and then not again during the 30-minute period. Lastly, data from geophysical surveys are being compiled but are scant and will not be analyzed for some time.

3 May 2011

To: U.S. Fish and Wildlife Service
Issue: Application for a research permit from Mote Marine Laboratory to conduct research on manatees during a five-year period
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the proposed studies have been reviewed and approved by the applicant's IACUC; the Service ensures that the activities to be conducted under this permit and those of other permit holders who might be carrying out research on the same species in the same areas are coordinated and data shared to avoid duplicative research and unnecessary disturbance; the applicant maintains detailed records indicating the source of each specimen and the circumstances under which it was collected; and the applicant periodically provides reports to the Service sufficient to demonstrate that each specimen was taken in accordance with the laws of the country of origin, was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws, and is being used only for bona fide scientific purposes or incidental educational and public display purposes. In addition, the Commission recommended that the Service require the applicant to provide a report of activities conducted annually and ensure that the applicant has obtained the necessary permits under CITES before importing or exporting any manatee part.
Agency Response: The Service issued the permit on 9 November 2011, consistent with the Commission's recommendations.

4 May 2011

To: National Marine Fisheries Service
Issue: Application from Mithriel MacKay to conduct research on humpback whales in Puerto Rico waters during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service defer action on this application and advise the applicant to gain experience with seasoned marine mammal biologists, who regularly approach humpback whales at a close distance and dive underwater with females and their calves, for at least one field season before seeking further action on this application. If the National Marine Fisheries Service decides to issue the permit notwithstanding the Commission's recommendation that action be deferred, the Commission recommended that the Service condition the permit to ensure that the applicant takes all necessary steps to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female-calf pairs, and stopping an approach if there is any evidence that the activity may be interfering with female-calf interactions such as nursing or other vital functions and condition the permit to require that the applicant remain at least 100 m from any female-calf pair when recording vocalizations
Agency Response: The Service issued the permit on 29 December 2011, consistent with some of the Commission's recommendations. The Service deferred action while Ms. MacKay worked with Dr. Jon Stern to gain experience approaching whales. Dr. Stern provided a letter of support regarding her boat-based work with him around whales in

Washington and his
assessment of her skills for the proposed research in Puerto Rico. Ms. MacKay withdrew her request to dive with the whales. The Service also conditioned the permit to require that Ms. MacKay remain at least 50 m from female-calf pairs when recording vocalizations.

4 May 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from the Alaska Department of Fish and Game to conduct research on pinnipeds in Alaska during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit but condition it to (1) require that the applicant provide its updated IACUC approval to the Service once it has been issued and before the Department initiates research under the new permit; (2) require that the applicant suspend research activities and consult with the Service if, in any given year, its research leads to the death of four or more seals from any single species covered by the permit and consult with the Service and Commission regarding possible changes to the research protocols if more than eight seals (all species combined) are unintentionally killed during research in a given year; and (3) prohibit the Alaska Department of Fish and Game from leaving capture nets unattended in the water at any time, day or night.
Agency Response: The Service issued the permit on 18 May 2011, without implementing any of the Commission's recommendations. The Service stated that compliance with the IACUC provisions of the Animal Welfare Act is not a criterion of the Marine Mammal Protection Act and enforcement of compliance with those provisions is not under the purview of the Service. However, the Service believes that the applicant has provided information in its application sufficient for it to determine whether the methods are consistent with the Act's definition of humane. The Service also stated that the researchers may not know when four (or eight) animals have died as a result of their research; thus, the conditions proposed by the Commission are impractical. In addition, the Service noted that the Commission did not provide a rationale for suspending research if four (or eight) animals die, or suggest what the consultation between the Service and the permit holder, or the Service and the Commission, should achieve. Lastly, the Service did not prohibit the nets being unattended at night, because (1) it would interfere with their ability to achieve their research objectives by making it impossible to catch enough seals for tagging; (2) tending the nets causes disturbance that keeps seals away; and (3) the net is designed to allow captured seals to come to the surface to breath and that they have had no capture mortalities during capture of 167 seals in the last five years.

5 May 2011

To: National Marine Fisheries Service
Issue: Application to amend a research permit from North Pacific Universities Marine Mammal Research Consortium, University of British Columbia, to perform various procedures on 35 lactating female seals and sea lions
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the permit holder be required to provide documentation regarding the review and approval of the research activities by the University of British Columbia's Animal Care Committee sufficient to demonstrate compliance with the Animal Welfare Act and the conditions contained in the current permit remain in effect, including having an experienced marine mammal veterinarian present to ensure proper dosages and protocols for use of sedatives and anesthesia and for emergency response.
Agency Response: The Service issued the permit amendment on 25 May 2011, consistent with the Commission's recommendation that the conditions in the original permit remain in effect. However, the Service noted that compliance with the Animal Welfare Act is not

an issuance criterion under section 104 of the Marine Mammal Protection Act or its implementing regulations for permits. As such, IACUC documentation was not required.

6 May 2011

To: National Marine Fisheries service
Issue: Application to amend a research permit from the National Marine Mammal Laboratory to authorize additional research involving the western distinct population segment of Steller sea lions in Alaska
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the conditions contained in the current permit remain in effect, including having an experienced marine mammal veterinarian present to ensure proper dosages and protocols for use of sedatives and anesthesia and for emergency response. In addition, the Commission recommended that the Service condition the permit to include requirements to monitor darted animals and report (1) their behavioral response and any activities that place them at heightened risk of injury of death; (2) whether they entered the water and their fate could not be determined; and (3) the number of dependent pups of those darted animals and their behavior. The Commission also recommended that the Service require the permit holder to halt the use of this darting technique and to consult with the Service and the Commission if three or more animals are darted and suffer unanticipated adverse effects, including entering the water and either drowning or disappearing so that their fate cannot be determined.
Agency Response: The Service issued the permit amendment on 8 June 2011, consistent with the Commission's recommendations.

6 May 2011

To: National Marine Fisheries Service
Issue: Application from the United Launch Alliance to take small numbers of marine mammals by harassment incidental to *Delta Mariner* operations, cargo unloading activities, and harbor maintenance activities at Vandenberg Air Force Base, California
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures, including a condition that requires suspension of the proposed activities if the Service determines that an injury or death of a marine mammal may have resulted from those activities and that modifications to the proposed activities or mitigation measures would be warranted.
Agency Response: The Service issued the incidental harassment authorization on 7 June 2011, consistent with the Commission recommendation.

6 May 2011

To: U.S. Coast Guard
Issue: Request for comments regarding the development of a port access route study for U.S. waters in the Bering Strait
Recommendation: The Commission recommended that, as part of its planned port access route study for the Bering Strait, the U.S. Coast Guard (1) conduct a spatial and temporal analysis of factors affecting the distribution and potential co-occurrence of both marine mammals and ship traffic through the Bering Strait to identify options for vessel traffic routes that would minimize overlap between marine mammals and ships while also meeting requirements for vessel safety and other environmental, cultural, and subsistence protection needs. The Commission also recommended that the Coast Guard consult with (1) the National Marine Fisheries Service and the U.S. Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act to determine the vessel management actions and accident response capabilities needed to protect marine mammals listed or under consideration for listing under that Act from possible impacts associated with vessel traffic and alternative vessel traffic management options; (2) the National Marine Fisheries

Service's National Marine Mammal Laboratory to characterize the occurrence, movements, and seasonality of non-endangered and non-threatened seals and cetaceans in the Bering Strait and their potential vulnerability to impacts associated with vessel traffic; (3) Alaska Native communities bordering the Bering Strait, Alaska Native Organizations (e.g. the Alaska Eskimo Whaling Commission and Eskimo Walrus Commission) and the Alaska Department of Fish and Game to identify and characterize the species, seasons, and areas in which traditional marine mammal subsistence hunting occurs; and (4) its Russian counterpart to advise it of steps being taken in the United States to plan for increased shipping though the Bering Strait, to share data on vessel traffic and the possible impact of shipping on the environment, and to consider establishment of cooperative, complementary vessel management actions on both U.S. and Russian sides of the area. In addition, the Commission recommended that the Coast Guard analyze potentially hazardous cargo that might be transported through the Bering Strait and identify equipment and logistical requirements necessary to free vessels that run aground and clean up any hazardous materials that might be spilled in all possible seasons, weather, and ice conditions, assess the value of (1) establishing a mandatory vessel traffic separation scheme and (2) designating areas outside the vessel traffic lanes as "areas to be avoided" as defined by the International Maritime Organization, while taking account of environmental, cultural and subsistence protection needs, and consider the need for establishing vessel speed restrictions of 10 knots if vessel traffic and bowhead whales are likely to overlap during the species' peak migratory periods through the Bering Strait.

Agency Response: The Coast Guard had not issued its plans for the port access route study by the end of 2011 but anticipates issuance by the end of 2012.

11 May 2011

To: National Marine Fisheries Service

Issue: Draft environmental assessment regarding issuance of a public display permit for placing releasable, rehabilitated California sea lions at the Institute for Marine Mammal Studies in Gulfport, Mississippi

Recommendation: The Commission recommended that the National Marine Fisheries Service consider whether the precedent-setting nature of this and similar permit applications warrants the preparation of an environmental impact statement and, at a minimum, that the Service expand the discussion in the environmental assessment to explain why it believes that adoption of such a policy is not considered significant. The Commission further recommended that the National Marine Fisheries Service, in consultation with the Commission and other interested parties, conduct a review of issues related to the roles, rights, and responsibilities of the Permit Office, rehabilitation facilities, and public display facilities in determining whether, when, and where to place releasable, rehabilitated marine mammals and adopt policies to resolve those issues.

Agency Response: The Service issued an environmental assessment and a finding of no significant impact in September 2011. However, it does not appear that the Service considered or addressed any of the Commission's recommendations.

3 June 2011

To: National Marine Fisheries Service

Issue: Application for a research permit from Rebecca Dickhut, Ph.D., to import from Sweden samples from four phocid species and one cetacean species originally collected in Antarctica

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the applicant submits documentation that each sample was taken legally under Swedish law and obtains all necessary permits under CITES before importing any phocid samples.

Agency Response: The Service had not issued the permit by the end of 2011.

June 3 2011	**To:** National Marine Fisheries Service **Issue:** Application for a research permit from Paul Nachtigall, Ph.D., to conduct auditory measurements and recordings on cetaceans that have stranded or are undergoing rehabilitation **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit as requested. **Agency Response:** The Service had not issued the permit by the end of 2011.
6 June 2011	**To:** National Marine Fisheries Service **Issue:** Application for a photography permit from Oceanic Nature Film Productions to take various species of whales by close approach during filming activities in waters off Kona, Hawaii **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided that the applicant agrees to monitor and report all cases where filming leads to sufficient disturbance that a whale alters its behavior or otherwise exhibits strong response to filming activities, the boats, or the divers; stop filming a particular whale or whales if they appear to be unduly disturbed by the activity; and obtain the appropriate authorization to conduct filming from the state of Hawaii, if needed. **Agency Response:** The Service issued the permit on 29 June 2011, consistent with the Commission's recommendation.
6 June 2011	**To:** National Marine Fisheries Service **Issue:** Application from Lamont-Doherty Earth Observatory to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the western Gulf of Alaska **Recommendation:** The Commission recommended that the National Marine Fisheries Service require the Lamont-Doherty Earth Observatory to re-estimate the proposed exclusion and buffer zones and associated takes of marine mammals using site-specific information; if the exclusion and buffer zones and takes are not re-estimated, require the Lamont-Doherty Earth Observatory to provide a detailed justification (1) for basing the exclusion and buffer zones for the proposed survey in the Gulf of Alaska on empirical data collected in the Gulf of Mexico or on modeling that relies on measurements from the Gulf of Mexico and (2) that explains why simple ratios were used to adjust for tow depth and median values were applied to intermediate water depths rather than using empirical measurements; and use species-specific maximum densities rather than best densities to re-estimate the anticipated number of takes. The Commission also recommended that if the Service is planning to allow the applicant to resume full power after nine minutes under certain circumstances, it should specify in the authorization all conditions under which a 9-minute period could be followed by a full-power resumption of the airguns. In addition, the Commission recommended that the Service extend the 30-minute period following a marine mammal sighting in the exclusion zone to cover the full dive times of all species likely to be encountered, provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion and buffer zones prior to issuing the incidental harassment authorization, consult with the funding agency (i.e., the National Science Foundation) and individual applicants (e.g., the Lamont-Doherty Earth Observatory and U.S. Geological Survey) to develop, validate, and implement a monitoring program that provides a scientifically sound, reasonably accurate assessment of the types of marine mammal taking and the number of marine mammals

taken, and require the applicant to (1) report on the number of marine mammals that were detected acoustically and for which a power-down or shut-down of the airguns was initiated; (2) specify if such animals also were detected visually; and (3) compare the results from the two monitoring methods (visual versus acoustic) to help identify their respective strengths and weaknesses. Lastly, the Commission recommended that the Service condition the authorization to require the Lamont-Doherty Earth Observatory to monitor, document, and report observations during all ramp-up procedures, work with the National Science Foundation to analyze these monitoring data to help determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys after the data are compiled and quality control measures have been completed, and condition the incidental harassment authorization to require the Observatory to (1) report immediately all injured or dead marine mammals to the Service and (2) suspend the geophysical survey if a marine mammal is seriously injured or killed and the injury or death could have been caused by the survey (e.g., a fresh dead carcass).

Agency Response: The Service issued the incidental harassment authorization on 28 June 2011, consistent with some of the Commission's recommendations. However, the Service did not require modeling of site-specific information because it believes that the exclusion zone and density data are sufficient for the Service to conduct its analysis and make determinations and that the numbers of takes were estimated based on best available scientific information and estimation methodology. In addition, the Service did not require remodeling because of its analysis of the likely effects of the activity on the marine mammals and their habitat, the implementation of the mitigation and monitoring measures, and the appropriateness and sufficiency of the exclusion zones. The Service also indicated that the monitoring program would be sufficient to detect marine mammals and account for the number of takes because the mitigation and monitoring measures are the most effective feasible measures available. The Service did not extend the monitoring period to 1 hour because observations are made longer than 30 minutes during ramp-up procedures, observers are monitoring in many cases when the airguns are not firing, the majority of the species do not remain underwater for more than 30 minutes, and there is a one in three chance that an animal would surface before the 30-minute period and then not again during the 30-minute period. Lastly, data from geophysical surveys are being compiled but are scant and will not be analyzed for some time.

6 June 2011

To: National Marine Fisheries Service

Issue: Request to amend a research permit application from Waikiki Aquarium to conduct research on captive Hawaiian monk seals and to take by unintentional mortality up to three monk seals during the five-year permit

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit provided that it require only one seal be tested with the vaccines at first and research involving the other seals be allowed only if no adverse responses from that vaccine are detected and the applicant halt research activities and consult with the Service and the Commission should any of the seals die during the research.

Agency Response: The Service had not issued the permit by the end of 2011.

10 June 2011

To: National Science Foundation

Issue: Application for authorization from the Alaska SeaLife Center to conduct research on Weddell seals in McMurdo Sound and along the shore of Ross Island, Antarctica, during a five-year period

Recommendation: The Commission recommended that the National Science Foundation issue the authorization under the Antarctic Conservation Act, provided that it condition the permit to require the Center to wait to see if a seal that hauls out at Cape Royds will leave

that area on its own and only usher it out of or recapture it in that area if the researchers have no other time or option.
Agency Response: The Foundation issued the authorization on 6 July 2011, consistent with the Commission's recommendation.

10 June 2011 **To:** U.S. Fish and Wildlife Service
Issue: Application for a research permit from the U.S. Geological Survey to conduct research on West Indian manatees in the southern United States and Puerto Rico during a five-year period
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the Service conditions the permit to allow two unintentional serious injuries or deaths during the five-year period but require suspension of research activities, pending review by the Service, if any death or serious injury occurs and takes steps to ensure that activities to be conducted under this permit and those of other permit holders who might be conducting manatee research in the same areas are coordinated and, as possible, data and samples are shared to avoid duplicative research and unnecessary disturbance of the animal. In addition, the Commission recommended that the Service advise the applicant of the need to obtain state permits and require the applicant to obtain all necessary permits under CITES before importing or exporting any manatee part and to provide periodic reports to the Service sufficient to demonstrate that each specimen was taken in accordance with the laws of the country of origin and was not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws.
Agency Response: The Service had not issued the permit by the end of 2011.

20 June 2011 **To:** National Marine Fisheries Service
Issue: Application for a research permit from Glacier Bay National Park and Reserve to conduct research on humpback, killer, and minke whales in southeastern Alaska during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided it requires the applicant to provide documentation that an IACUC has reviewed and approved the research activities before initiation of those activities; includes a permit condition requiring the applicant to make observations sufficient to detect possible short- and long-term effects of biopsy sampling and report the effort made and the information collected to the Permit Office; and ensures 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.
Agency Response: The Service had not issued the permit by the end of 2011.

20 June 2011 **To:** National Marine Fisheries Service
Issue: Application from the Monterey Bay National Marine Sanctuary to take small numbers of marine mammals by harassment incidental to permitting commercial fireworks displays within the Sanctuary waters of California
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures.
Agency Response: The Service issued the incidental harassment authorization on 4 July 2011, consistent with the Commission's recommendation.

23 June **To:** National Marine Fisheries Service

2011 **Issue:** Application from Statoil USA E&P to take marine mammals by harassment incidental to open-water shallow hazards survey in the Chukchi Sea, Alaska, from July through November 2011

Recommendation: The Commission recommended that the National Marine Fisheries Service provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified Level B harassment zones prior to issuing the incidental harassment authorization; require Statoil to (1) determine detection probabilities as a function of distance from the vessel and (2) describe changes in detection probabilities under the various sea state and weather conditions and light levels likely to be encountered at the times when activities would be conducted; and require Statoil to report and analyze both visual and acoustic data on the occurrence, abundance, distribution, and movement of marine mammals for periods before, during, and after all of the proposed activities. In addition, the Commission recommended that the Service work with Statoil and other industry operators to (1) evaluate the potential for using new technology for mitigation and monitoring purposes and (2), when and as appropriate, consult with the Federal Aviation Administration and other responsible agencies to clarify existing constraints on the use of such technology and devise methods to implement the new technology while staying within the constraints set by the responsible agencies. Lastly, the Commission recommended that the Service condition the incidental harassment authorization to require Statoil to suspend its activities if a marine mammal is seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh dead carcass is found).

Agency Response: The Service issued the incidental harassment authorization on 1 August 2011, consistent with some of the Commission's recommendations. The Service believed that the proposed monitoring program would be sufficient to detect, with a high level of confidence, nearly all the marine mammals within or entering the exclusion zones based on the proposed measures, prior years' marine mammal visual monitoring measures as reported in the 90-day reports and comprehensive reports for seismic surveys in the Arctic, and the small exclusion zones anticipated during the proposed Statoil shallow hazards surveys. The Service did note that it investigated new technologies; however, those technologies are still in the developmental phase and could not be implemented presently. The Service did not address the Commission's recommendations regarding detection probabilities and conditions that affect those probabilities.

23 June 2011 **To:** National Marine Fisheries Service

Issue: Application from the Cher-Ae Heights Indian Community of the Trinidad Rancheria to take small numbers of marine mammals by harassment incidental to pile driving and pile removal during reconstruction of the Trinidad Pier in California

Recommendation: The Commission recommended that the Service defer issue of the incidental harassment authorization until it has (1) required the applicant to develop a more realistic estimate of the number of harbor seal takes that (a) accounts for all harbor seal haul-out sites in the area, (b) corrects seal abundance estimates to account for seals in the water during the counts, (c) incorporates a more realistic assessment of the portion of seals that will enter the water in the Level B harassment zone during the proposed construction operations, (d) includes a reasoned basis for estimating takes that occur from in-air construction sound, and (e) is based on a realistic estimate of the time required to remove 205 wood piles; (2) reviewed estimates of numbers of takes for California sea lions and gray whales during the proposed activities; and (3) re-estimated the distances to various in-water and in-air Level A and B harassment thresholds for all three types of proposed

sound-producing activities and then re-evaluated the proposed mitigation and monitoring measures to ensure that the appropriate areas are adequately monitored. In addition, the Commission recommended that the Service require the applicant to verify the associated Level A and B harassment zones through calibrated in-situ sound measurements and to adjust those zones as appropriate; require that shut-down procedures be established for both species of pinnipeds, provide further analysis and justification regarding the efficacy of visual monitoring for the proposed activities and the manner in which the number of takes can be determined accurately; require the applicant to use 30 minutes as the appropriate clearance time for gray whales before ramp-up activities may commence and to use hydrophones for acoustic detection of gray whales; and address the deficiencies identified by the Commission and publish a new proposed incidental harassment authorization in the *Federal Register* with the corrected information and provide for an additional 30-day comment period.

Agency Response: The Service issued the incidental harassment authorization on 1 August 2011, consistent with a few of the Commission's recommendations. The Service believed that the action described accounts for all of the harbor seal haul-out sites in the action area and that harbor seals may haul out elsewhere but enter the Bay to forage has not been corroborated by data. Movement data was not discussed in the Goley pers. comm. reference (i.e., a phone call), as that data supposedly does not exist. The Service used the 1.54 correction factor but then reduced the in-water harbor seal takes by 65% using the ratio of the average number of hauled out seals and the correction factor, even though those numbers are associated with any given timeframe, not the extended timeframe the activities would occur during one day. The Service, again, based the vast majority of its marine mammal occurrence, abundance, and density data on Goley et al. 2007 and Goley pers. comm. The Service did not extend the harassment zones beyond Trinidad Bay, as it cites that sound levels would slightly exceed ambient and harbor seals habituate to those types of sounds. The Service also believed that the take estimates for California sea lions and gray whales as presented in the *Federal Register* notice and application are accurate and likely overestimate the potential for takes, rendering further review unnecessary. In addition, the Service did not revise the distances to various in-water and in-air Level A and B harassment thresholds for the three types of proposed sound-producing activities or re-evaluate the proposed mitigation and monitoring measures, as it did not find evidence that significant changes were necessary. The Service stated that the applicant's visual monitoring program would be sufficient to detect, with reasonable certainty, the majority of marine mammals within or entering the exclusion zone; therefore, the monitoring program has been deemed sufficient. The Service did not require passive monitoring for gray whales, because the technology is largely experimental and cost prohibitive for the applicant; it did, however, require 30 minute clearance time for gray whales. Lastly, the Service believed that it and the applicant addressed all of the Commission's issues and recommendations, and that publishing a revised notice and allowing for an additional 30-day comment period was unnecessary.

24 June 2011

To: National Marine Fisheries Service

Issue: Application from PRBO Conservation Science to take small numbers of marine mammals by harassment incidental to conducting seabird and pinniped research on Southeast Farallon Island, Año Nuevo Island, and Point Reyes National Seashore in California

Recommendation: The Commission recommended that the Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures.

Agency Response: The Service issued the incidental harassment authorization on 29 July

2011, consistent with the Commission's recommendation.

24 June 2011

To: National Science Foundation
Issue: Application to modify an authorization from Robert Pitman to conduct additional research on cetaceans near the Antarctic Peninsula and within McMurdo Sound and the Ross Sea
Recommendation: The Commission recommended that the National Science Foundation issue the authorization modification, provided that it contacts the permit holder to confirm whether he intends to approach fin whales to take photos as part of the proposed research and, if that is the intention, explains why an authorization is not needed for photo-identification activities involving fin whales. The Commission also recommended that the Foundation specify not only the species and total numbers of each species authorized to be taken, but also provide a breakdown of the authorized types of takes and advise the permit holder of the need to obtain all necessary permits under CITES before importing or exporting any marine mammal part.
Agency Response: The Foundation issued the authorization modification on 1 August 2011, consistent with one of the Commission's recommendations. However, it is unclear if the Foundation confirmed whether the permit holder intends to approach fin whales for photography purposes or advised the permit holder of the need to obtain relevant permits.

27 June 2011

To: National Marine Fisheries Service
Issue: Interim final rule from the Navy to amend regulations that govern the taking of marine mammals incidental to military training operations conducted in the Virginia Capes and Jacksonville Range Complexes between June 2009 and June 2014
Recommendation: The Commission recommended that the National Marine Fisheries Service take all steps possible to avoid invoking the good cause exception for future rulemakings under similar circumstances.
Agency Response: The Service issued the final rules in early June 2011 but did not address the Commission's recommendation.

8 July 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from Jennifer Lewis, Ph.D., to conduct research on bottlenose dolphins in the Everglades National Park, Florida, during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it requires Dr. Lewis to justify biopsy sampling, or attempting to biopsy sample up to 114 individuals from a single strategic stock with an unknown abundance estimate, rather than biopsy sampling 38 individuals from that stock and requires that Dr. Lewis not initiate her research until she has provided documentation that her IACUC has reviewed and approved the research. The Commission also recommended that the Service advise Dr. Lewis of the potential need to obtain additional permits from the National Park Service to conduct research activities in the park.

Agency Response: The Service issued the permit on 18 November 2011, consistent with some of the Commission's recommendations. The Service did not justify the biopsy sample size issue and indicated that IACUC approvals are not required under the Marine Mammal Protection Act; thus, it is not under its jurisdiction. However, Dr. Lewis did provide her IACUC approval by the time the permit was issued.

8 July 2011

To: National Marine Fisheries Service
Issue: Application from the U.S. Geological Survey to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the central-western

Bering Sea

Recommendation: The Commission recommended that the National Marine Fisheries Service require the U.S. Geological Survey to re-estimate the proposed exclusion and buffer zones and associated takes of marine mammals using site-specific information and species-specific maximum densities rather than best densities and, if the exclusion and buffer zones and numbers of takes are not re-estimated, require the U.S. Geological Survey to provide a detailed justification (1) for basing the exclusion and buffer zones for the proposed survey in the Bering Sea on empirical data collected in the Gulf of Mexico or on modeling that relies on measurements from the Gulf of Mexico and (2) that explains why simple ratios were used to adjust for tow depth. The Commission also recommended that if the Service is planning to allow the applicant to resume full power after 8 minutes under certain circumstances, it should specify in the authorization all conditions under which an 8-minute period could be followed by a full-power resumption of the airguns. In addition, the Commission recommended that the Service extend the 30-minute period following a marine mammal sighting in the exclusion zone to cover the full dive times of all species likely to be encountered; provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion and buffer zones prior to issuing the incidental harassment authorization; consult with the funding agency (i.e., the National Science Foundation) and individual applicants (e.g., the U.S. Geological Survey and Lamont-Doherty Earth Observatory) to develop, validate, and implement a monitoring program that provides a scientifically sound, reasonably accurate assessment of the types of marine mammal taking and the number of marine mammals taken; and require the applicant to (1) report the number of marine mammals that were detected acoustically and for which a power-down or shut-down of the airguns was initiated, (2) specify if such animals also were detected visually, (3) compare the results from the two monitoring methods to help identify their respective strengths and weaknesses, and (4) use that information to improve mitigation and monitoring methods. Lastly, the Commission recommended that the Service condition the authorization to require the U.S. Geological Survey to monitor, document, and report observations during all ramp-up procedures; work with the National Science Foundation to analyze monitoring data to help determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys after the data are compiled and quality control measures have been completed; and condition the incidental harassment authorization to require the Survey to (1) report immediately all injured or dead marine mammals to the Service and (2) suspend the geophysical survey if a marine mammal is seriously injured or killed and the injury or death could have been caused by the survey (e.g., a fresh dead carcass).

Agency Response: The Service issued the incidental harassment authorization on 7 August 2011, consistent with some of the Commission's recommendations. However, the Service did not require modeling of site-specific information because it believes that a sound source verification study is not warranted, although the Commission did not request for a verification study to estimate the relevant zones. The Service believed that the exclusion and buffer zones and density data are sufficient for the Service to conduct its analysis and make any determinations and that the numbers of takes were estimated based on best available scientific information and estimation methodology. In addition, the Service did not require remodeling because of its analysis of the likely effects of the activity on the marine mammals and their habitat, the implementation of the mitigation and monitoring measures, and the appropriateness and sufficiency of the exclusion zones. The Service also indicated that the monitoring program would be sufficient to detect marine mammals and account for the number of takes because the mitigation and monitoring measures are the most effective feasible measures available. The Service did not extend the monitoring

period to 1 hour because observations are made longer than 30 minutes during ramp-up procedures, observers are monitoring in many cases when the airguns are not firing, the majority of the species do not remain underwater for more than 30 minutes, and there is a one in three chance that an animal would surface before the 30-minute period and then not again during the 30-minute period. Lastly, data from geophysical surveys are being compiled but are scant and will not be analyzed for some time.

12 July 2011

To: U.S. Fish and Wildlife Service
Issue: Application to amend a research permit from Matson's Laboratory, LLC, to import more than 500 polar bear teeth per year, the limit imposed by its five-year permit
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit and maintain the requirement that the applicant obtain all necessary permits under CITES before importing any polar bear teeth.
Agency Response: The Service issued the permit on 5 October 2011, consistent with the Commission's recommendation.

12 July 2011

To: National Marine Fisheries Service
Issue: Application for a public display permit from Blank Park Zoo to import up to five non-releasable harbor seals or California sea lions during a five-year period
Recommendation: The Commission recommended that the Service issue the permit, provided that it is satisfied, along with the Animal and Plant Health Inspection Service, that the applicant's plans and facilities for transporting and maintaining the animals meet the requirements established under the Animal Welfare Act and are adequate to provide for the animals' health and well-being and is satisfied that the applicant's education program is acceptable.
Agency Response: The Service issued the permit on 8 September 2011, consistent with the Commission's recommendation.

12 July 2011

To: U.S. Fish and Wildlife Service
Issue: Application to amend a research permit from Tom Smith, Ph.D., to harass 18 polar bears per year while conducting den monitoring via videotaping in Alaska and to install devices that would allow real-time monitoring of polar bear den activity and remote data downloading
Recommendation: The Commission recommended that the Service issue the permit amendment as requested.
Agency Response: The Service had not issued the permit by the end of 2011.

14 July 2011

To: National Marine Fisheries Service
Issue: Request for comments regarding an application from the Bureau of Ocean Energy Management, Regulation, and Enforcement to take cetaceans incidental to oil and gas industry-sponsored seismic surveys for geological and geophysical exploration on the Outer Continental Shelf in the Gulf of Mexico during a five-year period
Recommendation: The Commission recommended that, in the proposed rule, the Service provide sufficient justification for its selection of the appropriate threshold for Level A harassment, regardless of which threshold is adopted; verify whether the Bureau is in fact requesting authority to take cetaceans by Level A harassment; and verify whether geotechnical soil surveys are part of the proposed action and, if so, include an estimate of the number and types of takes associated with the dynamic positioning system of the survey vessel, and, if the sound sources are considered continuous sources, use the threshold of 120 rather than 160 dB re 1 μPa for estimating Level B harassment takes. The Commission also recommended that the Service identify activity-specific Level A and B

harassment zones in the proposed rule. Those zones should be based on acoustic modeling and/or empirical data and, if based on modeling, should be updated after in-situ measurements have been made and estimated sound pressure levels have been verified. In-situ measurements should be made for all airgun configurations, the sub-bottom profiler, and geotechnical soil surveys at the onset of each activity and adjustments regarding the harassment zones should be made accordingly. In addition, the Commission recommended that the Service include a requirement that the Bureau use the same Level A harassment zone to initiate the shut-down of activities regardless of what species of marine mammal is detected within that zone; include power-down requirements and supplement the mitigation measures proposed by the Bureau to include speed reduction and course alteration requirements and restrictions on the timing or location of activities to avoid disturbing marine mammals during breeding or calving seasons; and include a requirement that passive acoustic monitoring be used to collect data on the occurrence, abundance, distribution, and movement of marine mammals during periods before, during, and after all of the proposed activities. Lastly, the Commission recommended that the Service advise the Bureau of the need to work jointly with industry operators to consider, and potentially fund, the testing of new technologies (i.e., unmanned aerial or underwater vehicles) for use in far-field monitoring and require the Bureau to report immediately all injured and dead marine mammals in the vicinity of the proposed surveys to the Service and to suspend those activities if a marine mammal is seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh dead carcass is found).
Agency Response: The Service had not issued the proposed rule by the end of 2011.

15 July 2011

To: National Marine Fisheries Service
Issue: Application for an exempted fishing permit from the Gulf and South Atlantic Fisheries Foundation to collect and retain, under certain restrictions, limited numbers of fish and crustacean specimens taken as bycatch in the shrimp fisheries of the Gulf of Mexico and South Atlantic
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the exempted fishing permit, provided it is conditioned to require the applicant to record and report data about any incidental mortality or injury of a marine mammal during the course of this study and ensure the proper handling and safe release of those species.
Agency Response: The Service issued the exempted fishing permit on 18 July 2011. It is unclear if the Service implemented the Commission's recommendation.

18 July 2011

To: U.S. Fish and Wildlife Service
Issue: Application for a research permit from the U.S. Fish and Wildlife Service's Marine Mammals Management Office to conduct research on walruses in the Bering and Chukchi Seas during a five-year period
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit after the 30-day comment public comment period provided that it conditions the permit to require the Management Office to sponsor a review of its mark-recapture assessment approach before initiating field work; conditions it to allow for a maximum number of disturbances from aerial surveys and require monitoring and reporting of all disturbance events observed during those surveys; and requires the Management Office to estimate and then document and report the number of walruses harassed incidental to conducting the biopsy sampling and tagging activities proposed in this application. The Commission also recommended that the Service consult with the Management Office and reconsider whether it should include authorization for some level of unintended mortality in its research permit; condition the permit to require the

Management Office to provide documentation that any individual authorized to collect biopsy samples or tag walruses remotely has received sufficient training and has sufficient experience to conduct those activities before he or she is allowed to do so unsupervised; take steps to ensure that activities to be conducted under this permit and those of other permit holders who might be conducting research on walruses in the same areas are coordinated and, as possible, data and samples are shared to avoid duplicative research and unnecessary disturbance of animals; and condition the permit to require the applicant to obtain all necessary permits under CITES before importing any walrus part.

Agency Response: The Service issued the permit on 15 July 2011, prior to the end of the comment period based on the possibility of the Management Office losing a unique research opportunity (i.e., expiration of funding and opportunity to collect samples with the U.S. Geological Survey on this year's cruise). The Service indicated that the permit is valid for one year only, at which time it will review and address the Commission's recommendations before issuing the permit for the remaining four years.

28 July 2011

To: National Marine Fisheries Service

Issue: Proposed rulemaking regarding the List of Fisheries for 2012

Recommendation: Based on its review of the draft List of Fisheries for 2012, the Marine Mammal Commission concurred with the National Marine Fisheries Service's proposal to elevate (1) the California/Oregon thresher shark/swordfish drift gillnet fishery to Category II and its proposal to designate the California/Oregon/Washington stock of humpback whales as the basis for that categorization; (2) the Hawaii charter vessel and Hawaii trolling, rod and reel fisheries from Category III to Category II and its proposal to designate the Hawaii stock of pantropical spotted dolphins as the basis for those categorizations; and (3) the Southeastern Atlantic, Gulf of Mexico stone crab trap/pot fishery from Category III to Category II, based on analogy to the blue crab trap/pot fishery and on the likelihood of occasional interactions with bottlenose dolphins. The Commission also concurred with the Service's proposal to (1) list bottlenose dolphins (Northern North Carolina estuarine system stock) as a stock subject to incidental killing or serious injury in the Virginia pound net fishery and recommended that the Service work with the state of Virginia to develop a formal, scientifically sound system for observing or otherwise monitoring marine mammal interactions in this fishery; (2) add Gulf of Mexico bay, sound, and estuarine stocks of bottlenose dolphins to the list of marine mammals killed or injured in the Atlantic Ocean, Gulf of Mexico, Caribbean commercial passenger fishing vessel fishery and recommended that the Service elevate the Atlantic Ocean, Gulf of Mexico, Caribbean commercial passenger fishing vessel fishery to Category II; (3) add the Western North Atlantic stock of Risso's dolphins to the list of stocks incidentally killed or seriously injured in the Mid-Atlantic bottom trawl fishery and recommended that the Service further investigate any factors that may account for the notable recent increase in takes of Risso's dolphins in this fishery; and (4) add several marine mammal stocks, absent information on stock identity and fisheries interactions, to the list of those subject to incidental killing or serious injury in the Category I Western Pacific pelagic fishery, Hawaii deep-set component and the Category II Western Pacific pelagic fishery, Hawaii shallow-set component and recommended that the Service work with its international and industry partners to compile and analyze information about marine mammals on the high seas and their interactions with fisheries, so that the list of species incidentally killed or seriously injured in high seas fisheries can be refined in the near future. The Commission also reviewed its recommendations from previous years for the proposed List of Fisheries for 2012 and recommended that the Service work with the Commission to develop an effective long-term strategy for determining marine mammal stock structure and abundance, potential biological removal levels, and fisheries mortality and serious injury rates in the

Gulf of Mexico and work on its own and in collaboration with states to develop new, consistent methods for estimating fishing effort. Lastly, the Commission commended the Service for its efforts to centralize information used to classify Category III fisheries, including observer coverage and other fishery characteristics, and looks forward to seeing this effort come to fruition.
Agency Response: The Service had not issued the final rule by the end of 2011 but anticipated issuance in early 2012.

5 August 2011

To: National Marine Fisheries Service
Issue: Proposed rule to expand critical habitat boundaries for the endangered Hawaiian monk seal
Recommendation: The Commission recommended that the National Marine Fisheries Service adopt a final rule to expand the existing critical habitat boundaries for endangered Hawaiian monk seals as proposed.
Agency Response: The Service had not issued a final rule by the end of 2011.

5 August 2011

To: National Marine Fisheries Service
Issue: Application from BP Exploration (Alaska) to take marine mammals by harassment incidental to the operation of the Northstar facility for a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the final rule, provided that it require BP to provide a reasoned justification for the requested number of takes of beluga whales during the open-water season and ensure that the resulting take estimate is reflected accurately in section 217.142 of the regulations and (1) require BP to identify all untested or novel impulsive and continuous sound sources, (2) work with BP to determine activity- and site-specific in-air and in-water Level A and B harassment zones for all those sources (including using the 120-dB re 1 µPa threshold for continuous sources), and (3) require BP to monitor those zones during all operations of the various sound sources and report its findings. The Commission also recommended that the Service require BP to use ramp-up, shut-down, and power-down procedures with all activities that require establishment of harassment zones based on either impulsive or continuous noise, whether in air or in the water; require BP to conduct monitoring for 30 minutes before, during, and for 30 minutes after all in-water activities that use impulsive or continuous sources; and work with BP to continue its monitoring, analysis, and reporting of the acoustic data it collects on the occurrence, abundance, distribution, and movement of bowhead whales for periods before, during, and after all of the proposed activities. In addition, the Commission recommended that the Service work with BP and other industry operators to (1) evaluate the potential for using new technologies for mitigation and monitoring purposes and (2) when and as appropriate, consult with the Federal Aviation Administration and other responsible agencies to (a) clarify existing constraints on the use of such technology and (b) devise methods to implement the new technologies within those constraints. Lastly, the Commission recommended that the Service review BP's revised Oil Discharge Prevention and Contingency Plan to determine whether the plan is adequate for preventing and responding to a major oil spill; convey the findings of this determination to the Bureau of Ocean Energy Management, Regulation, and Enforcement; include a full description of response capabilities in the final rule and incorporate sufficient mitigation measures into that rule to address response capabilities; and condition the final rule to require BP to suspend its activities if more than five ringed seals are killed in any year, or any other marine mammal is seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh carcass is found).
Agency Response: The Service had not issued a final rule by the end of 2011.

10 August 2011

To: U.S. Fish and Wildlife Service
Issue: Draft evaluation of the Southern sea otter translocation program
Recommendation: The Commission recommended that, as part of a proposed rulemaking to terminate the sea otter translocation, the U.S. Fish and Wildlife Service include proposed amendments to section 17.84(d)(8)(vi) to eliminate the requirement that sea otters at San Nicolas Island be returned to the parent population and complete that part of the rulemaking prior to making a final failure determination.
Agency Response: The Service issued a proposed rule on 26 August 2011 but did not include the Commission's recommendation. It assumed that by terminating the sea otter translocation program the requirement to return the sea otters at San Nicolas Island to their parent population also would be terminated.

10 August 2011

To: National Marine Fisheries Service
Issue: Application from the University of Alaska Geophysics Institute to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the Chukchi Sea and Arctic Ocean
Recommendation: The Commission recommended that the National Marine Fisheries Service require the Institute to re-estimate the proposed exclusion and buffer zones for the mitigation airgun using operational and site-specific environmental parameters and the model developed by Marine Acoustics, Inc.—if the Service does not follow this recommendation, then require the Institute to provide a detailed justification for basing the exclusion and buffer zones for the proposed survey in the Chukchi Sea and Arctic Ocean on modeling that relies on measurements from the Gulf of Mexico and that is inconsistent with the modeling approach used for the 10-airgun array. The Commission also recommended that the Service (1) specify in the authorization all conditions under which an 8-minute period could be followed by a full-power resumption of the airguns if the Service planned to allow the Institute to resume full power after 8 minutes under certain circumstances; (2) provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect all marine mammals within or entering the identified exclusion and buffer zones prior to issuing the incidental harassment authorization; (3) condition the authorization to require the Institute to monitor, document, and report observations during all ramp-up procedures; and (4) consult with the funding agency (i.e., the National Science Foundation) and individual applicants (i.e., the University of Alaska Geophysics Institute, the U.S. Geological Survey, and Lamont-Doherty Earth Observatory) to develop, validate, and implement a monitoring program that provides a scientifically sound, reasonably accurate assessment of the types of marine mammal taking and the number of marine mammals taken. In addition the Commission recommended that the Service require the applicant to (1) report the number of marine mammals that were detected acoustically and for which a power-down or shut-down of the airguns was initiated; (2) specify if such animals also were detected visually; (3) compare the results from the two monitoring methods to help identify their respective strengths and weaknesses; and (4) use that information to improve mitigation and monitoring methods. Lastly, the Commission recommended that the Service work with the National Science Foundation to analyze those data to help determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys after the data are compiled and quality control measures have been completed.
Agency Response: The Service issued the incidental harassment authorization on 5 September 2011, consistent with some of the Commission's recommendations. However, the Service was satisfied that the exclusion and buffer zone data were sufficient for it to conduct its analysis and make any determinations, and therefore no further effort is needed

by the applicant. Given that the mitigation airgun is a small source, the Service thought it was unnecessary to run an additional model incorporating environmental parameters for this survey. The Service also believes that the final monitoring and mitigation measures are the most effective feasible measures, and NMFS is not aware of any additional measures that could meaningfully increase the likelihood of detecting marine mammals in and around the exclusion zone. Lastly, the Service indicated that the Foundation is compiling all data associated with ramp-up, to be analyzed at a later date.

11 August 2011

To: Bureau of Ocean Energy Management, Regulation, and Enforcement
Issue: Draft environmental assessment for commercial wind lease issuance and site characterization activities on the Atlantic Outer Continental Shelf offshore of New Jersey, Delaware, Maryland, and Virginia
Recommendation: The Commission recommended that the Bureau of Ocean Energy Management, Regulation, and Enforcement continue its proactive and collaborative approach for identifying specific leasing areas for wind energy development; select Alternative D as the preferred alternative for leasing of wind energy areas in the mid-Atlantic to minimize the likelihood of noise-related injuries and vessel strikes to marine mammals from activities associated with site characterization and assessment; and work with lessees to ensure the availability of adequate baseline information before moving forward with wind energy site characterization and assessment projects. The Commission also recommended that the Bureau (1) require lessees to apply mitigation measures to reduce the impacts of vessel activities on marine mammal species, including those that are and are not listed under the Endangered Species Act; (2) require the use of passive acoustic monitoring to increase protection of marine mammals during geophysical surveys; (3) require lessees to estimate the proposed exclusion and buffer zones for all sound sources using operational- and site-specific information and the relevant thresholds established by the National Marine Fisheries Service and modify those zones as necessary using in-situ sound measurements; (4) use exclusion zones to protect both listed and non-listed marine mammals; (5) require lessees to report immediately all injuries or mortalities of both listed and non-listed marine mammals and suspend their activities if a marine mammal is seriously injured or killed and the injury or death could have been caused by their activities; and (6) consult with the National Marine Fisheries Service and the Marine Mammal Commission to determine the cause of the injury or death and devise means for avoiding such impacts before operations resume. In addition, the Commission recommended that the Service (1) allow lessees to resume to full power for geophysical surveys only when the shutdown has been eight minutes or less in duration and when no marine mammals have been observed within the exclusion zone before or during the shutdown or when a marine mammal is seen within the exclusion zone but also is observed leaving the zone; (2) require lessees to cease pile driving if a marine mammal has entered the exclusion zone around a pile driving operation until the marine mammal is observed to have left the exclusion zone or has not been seen or otherwise detected within the exclusion zone for 15 minutes in the case of small odontocetes and 30 minutes in the case of mysticetes and large odontocetes; and (3) require that any alternative monitoring methods used during pile driving or other activities be clearly specified so that a determination can be made as to the effectiveness and adequacy of that alternative method. Lastly, the Commission recommended that the Service encourage lessees to use acoustical monitoring to characterize ambient sound levels before, during, and after proposed activities and to monitor for the presence and movements of cetaceans in the vicinity of specific proposed wind energy areas and provide a comprehensive analysis of the cumulative impacts of wind energy development and other human activities that affect the development area.

Agency Response: The Bureau had not issued a final environmental assessment by the end of 2011 but anticipated its issuance in early 2012.

15 August 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from the Southwest Fisheries Science Center to conduct research on four pinniped species in Antarctica during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it requires the Center to (1) have an experienced marine mammal veterinarian present to ensure proper dosages and protocols for use of sedatives and anesthesia and to direct emergency responses or (2) if—despite all reasonable efforts—a marine mammal veterinarian or another experienced veterinarian is not available, ensure that the researchers have been instructed in procedures for sedating pinnipeds by an experienced marine mammal veterinarian and their protocols and equipment for animal handling, sedation, and emergency response have been reviewed by that veterinarian prior to conducting the proposed activities. The Commission also recommended that the Service advise the Center of the need to obtain approval from its IACUC prior to conducting the proposed activities and all necessary permits under CITES before importing any marine mammal part.
Agency Response: The Service issued the permit on 22 September 2011, consistent with some of the Commission's recommendations. It did not require the presence of a veterinarian but did require proper training by a veterinarian. The Service indicated that compliance with IACUC review and approval requirements is not a criterion under the Marine Mammal Protection Act and is not under its jurisdiction. However, the Center did provide the Service with its IACUC approval letter.

18 August 2011

To: National Marine Fisheries Service
Issue: Application from the U.S. Air Force to take marine mammals by harassment incidental to air-to-surface gunnery missions within the Eglin Air Force Base's Gulf of Mexico Test and Training Range
Recommendation: The Commission recommended that the National Marine Fisheries Service withhold issuing the incidental harassment authorization until the Air Force has provided a clear, step-by-step description of how it estimated the zones of exposure and associated number of takes for the sound exposure level thresholds; require the Air Force to evaluate its mitigation and monitoring measures to assess their effectiveness in detecting marine mammals and minimizing takes; and work with the Air Force to design and conduct the necessary performance verification testing for electronic detection devices under relevant sea state conditions.
Agency Response: The Service issued the incidental harassment authorization on 26 September 2011, consistent with none of the Commission's recommendations. The Service did not agree with the Commission that the incidental harassment authorization should not be issued until additional information regarding the zones of exposure and number of takes can be provided, as it believes the method and analytical approach was explained fully. Because the Commission did not make any specific recommendations regarding the performance testing of mitigation measures to assess their actual effectiveness at detecting marine mammals, the Service was uncertain as to what exactly it is the Commission was recommending be done in this instance. Lastly, Air Force subject matter experts have determined based on in-the-field experience, the airborne systems adequately function in a sea state of 4. Therefore, performance verification testing per se was not needed.

18 August 2011

To: National Science Foundation
Issue: Application for authorization from the Southwest Fisheries Science Center to

conduct research on pinnipeds on the South Shetland Islands and Antarctic Peninsula
Recommendation: The Commission recommended that the National Science Foundation issue the authorization, provided that it contacts the Center to confirm whether it expects to harass Antarctic fur seals, leopard seals, southern elephant seals, and Weddell seals incidental to census or survey activities, includes those takes in the permit, and advises the Center of the need to obtain all necessary permits under CITES before importing or exporting any marine mammal part.
Agency Response: The Foundation issued the authorization on 1 October 2011. It is unclear if the Foundation followed any of the Commission's recommendations.

19 August 2011

To: National Marine Fisheries Service
Issue: Policy for distinguishing serious from non-serious injuries of marine mammals
Recommendation: The Commission recommended that the National Marine Fisheries Service adopt the draft policy and procedure directives for determining when injuries to marine mammals should be considered serious, after making changes that require the Service to (1) count entangled large whales that are considered seriously injured for the purposes of triggering and guiding take reduction efforts, even if they are successfully disentangled; (2) review its available data on entanglements to (a) determine if females or dependent calves have become entangled and the entanglements were judged to be non-serious injuries, (b) characterize the outcome of any such cases in terms of risk to the associated calves, and (c) revise this criterion accordingly if the evidence suggests serious risk to the calves; (3) review its available data to determine how often injuries initially judged to be non-serious have evolved to a state that was considered serious and adjust its proposed new guidelines to account for the probability of escalating risks; (4) count entangled small cetaceans and pinnipeds that would be judged as seriously injured when categorizing each fishery and determining if additional take reduction efforts are needed, even when the affected individuals have been disentangled; and (5) expand its policy directives by including a list of research needed to improve injury prevention, response, and assessment efforts in the future.
Agency Response: The Service had not issued the final policy by the end of 2011.

19 August 2011

To: NOAA's Scientific Integrity Team
Issue: Its Scientific Integrity Policy
Recommendation: The Commission recommended that NOAA adopt and implement its Scientific Integrity Policy and Handbook, after making changes to (1) define, interpret, and discuss the terms "transparency" and "traceability" in its Policy; (2) fully describe the policies, procedures, guidelines, and mandates related to the development and dissemination of scientific and technical products; (3) identify the 'timely dissemination' of science as one of the principles of scientific integrity and include explicit guidelines for the timely dissemination of data, analyses, and scientific findings; (4) revise section 4.03 of the Policy to characterize its scientists' viewpoints on matters consistent with their expertise as "expert opinion" rather than "personal opinion"; and (5) specify in the Policy those special circumstances wherein NOAA anticipates the data and models underlying regulatory proposals or policy decisions might not be made available. The Commission also recommended that the Service expand its Policy to identify and address those external factors that might damage its scientific integrity, delineate the policies and procedures that will be necessary to mitigate those influences, and expand its Handbook to include descriptions of the structural changes that will be made, procedures that will be put in place, resources that will be allocated, and performance-assessment processes that will be used to ensure that its scientific integrity policies become integral to its culture and operations. In addition, the Commission recommended that the Service revise the Policy to

(1) require the use or development of streamlined, rapid, or otherwise customized, peer-review processes for situations in which the standard peer-review procedures would not be effective or timely and specify within the Policy the criteria to be used to delineate those situations in which modified peer review is to be used; (2) stipulate explicitly and in detail what whistleblower protections are or will be put in place and revise the Handbook to describe the procedures to be followed to ensure that whistleblowers are protected and treated justly and fairly; (3) require communication of information on scientific uncertainty, projections and/or expected best-/worse-case scenarios, and standard operating procedures and describe clearly the circumstances when this practice would not be necessary and/or appropriate; and (4) require communication of scientific integrity policies to employees, contractors, and grantees who assist with developing and applying the results of scientific activities and specify those circumstances in which it would not be appropriate to communicate that information.

Agency Response: NOAA issued the policy as an Administrative Order on 7 December 2012, consistent with a few of the Commission's recommendations. Although NOAA defined the terms "transparency" and "traceability", it did not interpret or discuss the significance of those terms. NOAA did add references to policies, procedures, and guidelines related to the development and dissemination of scientific and technical products but did not fully describe or address the situations in which prohibitions against such action would occur. In addition, NOAA did not expand upon the meaning of "timely" and apparently declined to make the "timely dissemination of science" one of their principles of scientific integrity. NOAA did not expand the handbook, nor did it specify the circumstances under which data and models would be available to the public. Lastly, NOAA declined to provide details regarding whistleblower protections.

22 August 2011

To: National Marine Fisheries Service

Issue: Application from Northeast Gateway Energy Bridge to take small numbers of marine mammals by harassment incidental to operation of a liquefied natural gas port facility in Massachusetts Bay

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, subject to inclusion of the proposed mitigation and monitoring measures, including a condition that requires suspension of the proposed activities if an injury or death of a marine mammal occurs that may have resulted from those activities, pending authorization from the Service to proceed.

Agency Response: The Service issued the incidental harassment authorization on 6 October 2011, consistent with the Commission's recommendation.

22 August 2011

To: U.S. Fish and Wildlife Service

Issue: Draft environmental assessment for issuing a proposed rule that establishes a manatee refuge in Kings Bay, Florida

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service adopt the proposed rule that would establish year-round slow-speed requirements in all areas of the refuge not otherwise designated as either idle speed zones or no-entry manatee sanctuaries; (1) adopt Alternative D in its draft environmental assessment, which would establish the proposed Kings Bay manatee refuge and (2) expand its list of prohibited activities to include petting, touching, rubbing, or attempting to pet, touch, or rub, any manatees and approaching them closer than 10 feet; and modify its draft environmental assessment by providing a more complete analysis of the no-touching and stand-off distance requirements.

Agency Response: The Service had not issued the final environmental assessment or final

rule by the end of 2011.

24 August 2011

To: U.S. Fish and Wildlife Service
Issue: Application for research permit from University of Florida, Iskande Larkin, Ph.D., to import samples from the West Indian manatee to determine baseline health parameters during a five-year period
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit but condition it to require that Dr. Larkin obtain authorization for reissuance of her permit under CITES before importing any manatee part in subsequent years.
Agency Response: The Service had not issued the permit by the end of 2011.

26 August 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from David Honig to import bones from two sperm whales and one minke whale to study the ecological importance of whales to invertebrate communities during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it advises Mr. Honig to obtain all necessary permits under CITES and the Antarctic Conservation Act before collecting, exporting, and/or importing the bones.
Agency Response: The Service issued the permit on 5 October 2011, consistent with the Commission's recommendation.

29 August 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from the Alaska Department of Fish and Game to conduct research on harbor seals in Alaska during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service condition the permit to require the Department to consult with the Service and the Commission regarding possible changes to the harbor seal capture protocols if two or more harbor porpoises are killed in one year or five harbor porpoises are killed incidental to those activities during the five-year period and advise the applicant of the need to obtain approval from its IACUC before initiating the proposed activities.
Agency Response: The Service issued the permit on 20 September 2011, consistent with one of the Commission's recommendations. The Service believed the level of harbor porpoise mortality is reasonable and noted that the Commission did not indicate that it believes the mortality was unreasonable. Thus, the Department does not have to consult with the Service unless it kills five harbor porpoises during the five-year period. At that time, the Service would consult with the Commission to assess whether harbor seal capture methods should be revised. The Service also noted that IACUC requirements are not a criterion for permit issuance under the Act; however, the information provided by the Department was sufficient for the Service to determine that the methods were considered humane under the Act.

29 August 2011

To: National Marine Fisheries Service
Issue: Application from the Scripps Institution of Oceanography to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the western tropical Pacific Ocean
Recommendation: The Commission recommended that the National Marine Fisheries Service require Scripps to re-estimate the proposed exclusion and buffer zones for the two-airgun array and associated numbers of marine mammal takes using operational and site-specific environmental parameters, and if the exclusion and buffer zones are not re-

estimated for the two-airgun array, require Scripps to provide a detailed justification for basing the exclusion and buffer zones for the proposed survey in the western tropical Pacific Ocean on modeling that relies on measurements from the Gulf of Mexico. The Commission also recommended that the Service require Scripps to use operational and site-specific environmental parameters to estimate the exclusion zone, buffer zone, and number of marine mammal takes associated with use of the sub-bottom profiler and to incorporate those exclusion and buffer zones into the same type of mitigation and monitoring measures for the sub-bottom profiler as are proposed for the two-airgun array. In addition, the Commission recommended that the Service condition the authorization to prohibit a 15-minute pause and require a longer pause before ramping up after a power-down or shut-down of the airguns, based on the presence of a mysticete or large odontocete in the exclusion zone and the *Thompson's* movement; extend the 30-minute period following a marine mammal sighting in the exclusion zone to cover the full dive times of all species likely to be encountered; condition the authorization to require Scripps to monitor, document, and report observations during all ramp-up procedures; and work with the National Science Foundation to analyze those data to help determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys after the data are compiled and quality control measures have been completed.

Agency Response: The Service issued the incidental harassment authorization on 5 November 2011, consistent with some of the Commission's recommendations. However, the Service was satisfied that the exclusion and buffer zone data were sufficient for it to conduct its analysis and make any determinations and therefore no further effort is needed by the applicant. The Service believed that it is unlikely that marine mammals would be affected by sub-bottom profiler signals whether operating alone or in conjunction with other acoustic devices, since the animals would need to swim adjacent to the vessel or directly under the vessel. Therefore, operation of the sub-bottom profiler did not warrant take requests, or consultation, under the Act. The Service did not prohibit a 15-minute pause, but rather explained that if ramp-up would occur, it would take longer than 15 minutes for the observers to be able to monitor for marine mammals. In addition, the Service did not extend the monitoring period to 1 hour because observations are made longer than 30 minutes during ramp-up procedures, observers are monitoring in many cases when the airguns are not firing, the majority of the species do not remain underwater for more than 30 minutes, and there is a one in three chance that an animal would surface before the 30-minute period and then not again during the 30-minute period. Lastly, the Service indicated that the Foundation is compiling all data associated with ramp-up, to be analyzed at a later date

30 August 2011

To: National Marine Fisheries Service

Issue: Application to amend a research permit from Daniel Costa, Ph.D., for a one-year extension that authorizes tagging studies and research on leopard, southern elephant, crabeater, Weddell, and Ross seals and California sea lions

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that it require Dr. Costa to obtain all necessary permits under CITES before importing or exporting any marine mammal part and the conditions contained in the permit as currently amended remain in effect.

Agency Response: The Service issued the permit amendment on 4 November 2011, consistent with the Commission's recommendations.

31 August 2011

To: U.S. Fish and Wildlife Service

Issue: Application for a research permit from Sea to Shore Alliance to conduct research on West Indian and West African manatees during a five-year period

Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the Service conditions the permit to require the Alliance to submit documentation demonstrating that all samples to be imported were taken in accordance with the laws of the country of origin and were not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws; requires the Alliance to obtain all necessary permits under CITES before exporting or importing any manatee part; and takes steps to ensure that activities to be conducted under this permit and those of other permit holders who might be conducting manatee research in the same areas are coordinated and data and samples shared to avoid duplicative research and unnecessary harassment of animals. The Commission also recommended that the Service condition the permit to (1) allow two unintentional serious injuries or deaths during the five-year period, but (2) require suspension of research activities, pending review by the Service, if any death or serious injury occurs and advise the applicant of the need to have the proposed activities reviewed and approved by IACUC before initiating the proposed activities.
Agency Response: The Service issued the permit on 22 December 2011, consistent with most of the Commission's recommendations. However, the Service did not authorize any unintentional injuries or deaths.

2 September 2011

To: U.S. Fish and Wildlife Service
Issue: Application for a photography permit from Red Rock Films to harass polar bears during filming activities in the North Slope region and Arctic National Wildlife Refuge, Alaska
Recommendation: The Commission recommended that the U.S. Fish and Wildlife Service issue the permit, provided that the applicant monitors all activities associated with filming and report all cases in which the activities lead to sufficient disturbance that a bear alters its behavior or otherwise exhibits a strong response to filming activities, the boats, or the camera crew; stops filming any bears that appear to be unduly disturbed by the activity; and obtains any necessary authorization to conduct filming activities from the Arctic National Wildlife Refuge and the U.S. Air Force.
Agency Response: The Service issued the permit on 14 September 2011, consistent with the Commission's recommendation.

6 September 2011

To: National Marine Fisheries Service
Issue: Application to amend a research permit from Michael Adkesson, D.V.M., to import an increased number of biological samples from live and dead South American fur seals in Punta San Juan de Marcona, Peru
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit amendment and advise the applicant of the need to obtain all necessary permits under CITES before importing any South American fur seal part.
Agency Response: The Service issued the permit amendment on 26 September 2011, consistent with the Commission's recommendation.

12 September 2011

To: National Marine Fisheries Service
Issue: Notice of intent to prepare an environmental impact statement for the Atlantic Large Whale Take Reduction Plan to help reduce entanglement of large whales in vertical lines associated with fishing along the Atlantic coast
Recommendation: The Commission recommended that the National Marine Fisheries Service consult with whale biologists on the Atlantic Large Whale Take Reduction Team to estimate occurrence rates greater than zero for right, humpback, and fin whales within 20 miles of the Maine coast, use those rates in the co-occurrence model to estimate the extent to which vertical lines in those waters contribute to overall entanglement risks for

each species, and prioritize the protection of right whales rather than humpback whales when developing proposed mitigation measures. The Commission also recommended that the Service analyze in the draft environmental impact statement alternatives for establishing large management areas off the New England coast including (1) the majority of the southern Gulf of Maine from January through July; (2) the majority of the offshore central Gulf of Maine from October through February; and (3) the small area off northeastern Maine near the edge of U.S. jurisdiction and the Bay of Fundy right whale feeding area from August through September. In addition, the Commission recommended that the Service analyze restrictions that could be imposed in seasonal management areas; amendments to the Plan that would allow for the immediate implementation of additional take reduction measures if documented serious injury and mortality levels for right whales or humpback whales exceed their potential biological removal levels for two consecutive years; and requirements that (1) all trap and gillnet fishermen in state and federal waters record and report in a consistent manner data on the location and number of endlines deployed and the number of traps or nets fished per set and per month and (2) those data are compiled and analyzed in timely fashion. Lastly, the Commission recommended that the Service include options for new gear marking requirements to better identify the fisheries, fishing areas, and gear components involved in large whale entanglements.
Agency Response: The Service had not published a draft environmental impact statement by the end of 2011 but anticipated its issuance in 2012.

12 September 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from Brent Stewart, Ph.D. to conduct research on harbor seals, northern elephant seals, and California sea lions throughout southern California during a five-year period
Recommendations: The Commission recommended that the National Marine Fisheries Service issue the permit but condition it to ensure that activities to be conducted under the 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.
Agency Response: The Service issued the permit on 24 October 2011, consistent with the Commission's recommendation.

12 September 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from Geo-Marine, Inc., to conduct systematic, vessel-based line transect surveys for marine mammals in coast waters from North Carolina to New Jersey during a five-year period
Recommendations: The Commission recommended that the National Marine Fisheries Service issue the permit, but condition it to require the applicant to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with female/calf behavior, feeding, or other vital functions.
Agency Response: The Service had not issued the permit by the end of 2011.

12 September 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from Robert DiGiovanni to conduct aerial, vessel-based, and land-based surveys for marine mammals in coastal and offshore waters from Virginia to Rhode Island during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit but condition it to require the applicant to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly

	female/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with female/calf behavior, feeding, or other vital functions. **Agency Response:** The Service had not issued the permit by the end of 2011.
19 September 2011	**To:** National Marine Fisheries Service **Issue:** Application from the Port of Vancouver to take small numbers of marine mammals by harassment incidental to pile driving and removal during construction of a bulk potash handling facility on the Columbia River in Vancouver, Washington **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided it requires the Port to measure in-situ sound propagation for driving and removing the various sizes and types of piles using the vibratory hammer, impact hammer, and both hammers concurrently at the beginning of the project and uses that information to establish appropriate exclusion and buffer zones. The Commission also recommended that the Service require the presence of Service-approved observers before, during, and after all soft-starts of pile-driving activities, including when the vibratory hammer is used, to gather the data needed to determine the effectiveness of this technique as a mitigation measure and require the Port to monitor the presence and behavior of marine mammals during all impact pile-driving and vibratory pile-driving and pile-removal activities. In addition, the Commission recommended that the Service condition the incidental harassment authorization to require the Port to (1) immediately report all injured or dead marine mammals to the Service and local stranding network and (2) suspend the construction activities if a marine mammal is seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh carcass). **Agency Response:** The Service had not issued the incidental harassment authorization by the end of 2011.
30 September 2011	**To:** National Marine Fisheries Service **Issue:** Application from the Navy to take marine mammals incidental to training, testing, and routine military operations using the Navy's Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar source during a five-year period **Recommendation:** The Commission agreed that the National Marine Fisheries Service should propose regulations to govern the taking of marine mammals incidental to operation of SURTASS LFA sonar for another five-year period and recommended that the Service take appropriate steps to compel the Navy to amend its application and related DSEIS/SOEIS to (1) request authority to take marine mammals by Level A harassment and (2) specify the numbers of marine mammals that could be taken by Level A and B harassment incidental to operating SURTASS LFA sonar, rather than providing only the probabilities of such takes. **Agency Response:** The Service had not issued the proposed rule by the end of 2011.
3 October 2011	**To:** Bureau of Ocean Energy Management **Issue:** Notice of intent to prepare an environmental assessment for commercial wind lease issuance and site characterization for activities in the waters off Rhode Island and Massachusetts **Recommendation:** The Commission recommended that the Bureau of Ocean Energy Management prepare an environmental impact statement, rather than an environmental assessment, to evaluate the potential biological and socioeconomic effects of issuing renewable energy leases in this area and include an alternative that would prohibit surveys, construction, and decommissioning of meteorological towers and buoys in the leasing area during migration of North Atlantic right whales (November through April) to minimize the

likelihood of noise-related injuries and vessel collisions with right whales and other marine mammals. The Commission also recommended that the Bureau consult with the National Marine Fisheries Service, the Fish and Wildlife Service, the Marine Mammal Commission, and other federal and state agencies to develop a set of standards for the collection of baseline information on marine mammals and their habitats; use this consultation to identify and address any significant data gaps before initiating the leasing process for offshore renewable energy operations; and provide a comprehensive analysis of the cumulative impacts of wind energy development and other human activities that impact the development area.

Agency Response: The Bureau posted comments received on regulations.gov website. It anticipated initiating a process for identifying potential lease sites in advance of a lease sale notice in 2012.

11 October 2011

To: National Marine Fisheries Service

Issue: Application from the Washington State Department of Natural Resources to take small numbers of harbor seals by harassment incidental to a habitat restoration project in the Woodard Bay Natural Resource Conservation Area in Puget Sound

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that it requires the Department to monitor the presence and behavior of marine mammals during all proposed activities (i.e., during vibratory pile-removal activities and during vessel and barge use) and requires the presence of Service-approved observers before, during, and after all soft-starts of pile-removal activities to gather the data needed to determine the effectiveness of this technique as a mitigation measure. The Commission further recommended that the Service condition the incidental harassment authorization to require the Department to (1) immediately report all injured or dead marine mammals to the Service and local stranding network and (2) suspend the construction activities if a marine mammal is seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh carcass).

Agency Response: The Service issued the incidental harassment authorization on 1 November 2011, consistent with one of the Commission's recommendations. However, the Service agrees that marine mammal responses to stimuli are not predictable but believes that monitoring 15 of the 40 days would not be haphazard but based on days when heightened activities would occur with the remaining 25 days being representative of typical levels of activity. Therefore, the Service believes monitoring during all activities is not warranted. Further, while dedicated observers would not be present during the non-monitored days, construction personnel and Department staff are on-site and did not observe significantly deviant behavior on non-monitored days during the previous year's authorization. The Service considers soft-starts to be a mitigation measure but did not attempt to quantify the level of mitigation that the technique may provide nor did it rely on any assumption of efficacy in reaching its negligible impact determination. It is unclear how expanded monitoring, in the absence of specific experimental design for which the Commission did not provide, would verify empirically the efficacy of this technique.

17 October 2011

To: U.S. Navy

Issue: DEIS regarding proposed training, testing, and routine military operations using the Navy's Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar source during a five-year period

Recommendation: The Commission recommended that the Navy amend its DEIS and related application for letters of authorization to (1) request authority to take marine mammals by Level A harassment and (2) specify the numbers of marine mammals that

could be taken by Level A and B harassment incidental to operating SURTASS LFA sonar, rather than providing only the probabilities of such takes. The Commission also recommended that the Navy work with the National Marine Fisheries Service to (1) describe fully the process used to select offshore biologically important areas (OBIAs) and provide an explanation for all deviations from it; (2) ensure that the outside expert group used to identify possible OBIAs is consulted on all the areas proposed for designation; (3) evaluate the potential for geographic bias in the OBIA selection process and develop a plan for addressing the sources of that bias; (4) provide a well-reasoned explanation for any area rejected for designation as an OBIA; and (5) provide support for the Service's claim that marine mammals other than mysticetes are not sensitive to LFA sonar and, therefore, need not be protected within OBIAs. In addition, the Commission recommended that the Navy work with the National Marine Fisheries Service to devise a plan for gathering the information needed to conduct a reliable review of candidate OBIAs rejected because of insufficient information; review the strengths and weaknesses of the current geographic mitigation measures involving the stand-off range and OBIAs; and develop a plan for collecting the information needed to refine or revise these mitigation measures to ensure that they are providing the necessary level of protection for marine mammals. Lastly, the Commission recommended that the Navy use a 60-minute clearance time before resuming SURTASS LFA sonar transmissions after a delay or suspension related to the sighting of a marine mammal in the mitigation zone.

Agency Response: The Navy had not issued the final supplemental environmental impact statement/supplemental overseas impact statement by the end of 2011.

17 October 2011

To: National Marine Fisheries Service

Issue: Proposed rule to implement the False Killer Whale Take Reduction Plan

Recommendation: The Commission recommended that the National Marine Fisheries Service adopt the proposed rule to implement the False Killer Whale Take Reduction Plan, provided it (1) considers defining weak hooks based not only on the diameter of the wire used to make them, but also on the force required to straighten them (e.g., an average 205 pounds); (2) adopt the proposed formula based on the potential biological removal level (PBR) for defining the trigger to close the southern exclusion zone and include in the regulations a corresponding PBR-based formula to determine when the zone should be reopened; (3) either (a) include all take reduction measures under authority of the Marine Mammal Protection Act in 50 C.F.R. part 229 or (b) require in the final rule that any changes to take reduction measures under 50 C.F.R. part 665 follow the same follow the same procedures as those required to change take reduction measures in 50 C.F.R. part 229, including advance review and consultation with the False Killer Whale Take Reduction Team; (4) (a) arrange for marine mammal observer coverage of the shortline fishery and (b) expand the Team to include a representative of that fishery; and (5) adopt and implement all of the proposed non-regulatory measures referenced in the preamble to the proposed rule.

Agency Response: The Service had not issued the final rule by the end of 2011 but anticipated issuance in 2012.

17 October 2011

To: National Marine Fisheries Service

Issue: Application by Cape Wind Associates to take small numbers of marine mammals by harassment incidental to geophysical and geotechnical surveys in Nantucket Sound off Massachusetts

Recommendation: The Commission recommended that the National Marine Fisheries Service require Cape Wind Associates to provide further justification for the use of 17 log R to calculate harassment zones for both shallow- and medium-penetration sub-bottom

profilers; recalculate the buffer zone for the shallow-penetration sub-bottom profiler based on the 120-dB re 1 μPa threshold and, if two or more survey vessels are used simultaneously, account for overlap of the ensonified areas in the calculation of the revised buffer zones; and specify the zone of exposure used to estimate the number of takes for each species and ensure that the zone is used consistently for all species. The Commission also recommended that the Service require Cape Wind Associates to re-estimate the number of the takes for each species using the revised harassment zone for the shallow-penetration sub-bottom profiler, accounting for the possibility that buffer zones from two or more vessels would overlap, and re-calculating density estimates based on haul-out counts. In addition, the Commission recommended that the Service require Cape Wind Associates to re-estimate the number of takes for each species from medium penetration sub-bottom profilers accounting for the sound that would be generated from multiple survey vessels and re-calculating density estimates based on haul-out counts. The Commission recommended that the Service require (1) Cape Wind Associates to monitor the presence and behavior of marine mammals during all proposed geophysical and geotechnical survey activities (i.e., operation of sub-bottom profilers, drilling, and vibracore sampling); (2) observers to gather the data needed to assess the effectiveness of soft-starts as a mitigation measure; and (3) Cape Wind Associates to cease all operations when the exclusion zone is obscured by fog or poor lighting conditions. Lastly, the Commission recommended that the Service provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion and buffer zones and condition the incidental harassment authorization to require Cape Wind Associates to (1) report immediately all injured or dead marine mammals to the Service and local stranding network and (2) suspend the construction activities if a marine mammal is seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh carcass).

Agency Response: The Service had not issued an incidental harassment authorization by the end of 2011 but anticipated issuance in early 2012.

19 October 2011

To: National Marine Fisheries Service

Issue: Application from the Lamont-Doherty Earth Observatory to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the central Pacific Ocean

Recommendation: The Commission recommended that the National Marine Fisheries Service require the Observatory to re-estimate the proposed exclusion and buffer zones and associated takes of marine mammals using site-specific information—if the exclusion and buffer zones and numbers of takes are not re-estimated, require the Observatory to provide a detailed justification (1) for basing the exclusion and buffer zones for the proposed survey in the central Pacific Ocean on empirical data collected in the Gulf of Mexico or on modeling that relies on measurements from the Gulf of Mexico and (2) that explains why simple ratios were used to adjust for tow depth. The Commission also recommended that the Service use species-specific maximum densities rather than the effort-weighted mean densities and re-estimate the anticipated number of takes. In addition, the Commission recommended that the Service condition the authorization to prohibit an 8-minute pause and require a longer pause before ramping up after a power-down or shut-down of the airguns, based on the presence of a marine mammal in the exclusion zone and the R/V *Langseth's* movement (speed and direction); extend the 30-minute period following a marine mammal sighting in the exclusion zone to cover the full dive times of all species likely to be encountered; and prior to issuing the incidental harassment authorization, provide additional justification for its preliminary determination that the proposed

monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion and buffer zones, including (1) identifying those species that it believes can be detected with a high degree of confidence using visual monitoring only, (2) describing detection probability as a function of distance from the vessel, (3) describing changes in detection probability under various sea state and weather conditions and light levels, and (4) explaining how close to the vessel marine mammals must be for observers to achieve high nighttime detection rates. The Commission recommended that the Service consult with the funding agency and individual applicants to develop, validate, and implement a monitoring program that provides a scientifically sound, reasonably accurate assessment of the types of marine mammal taking and the number of marine mammals taken; require the applicant to (1) report the number of marine mammals that were detected acoustically and for which a power-down or shut-down of the airguns was initiated, (2) specify if such animals also were detected visually, (3) compare the results from the two monitoring methods to help identify their respective strengths and weaknesses, and (4) use that information to improve mitigation and monitoring methods; condition the authorization to require the Observatory to monitor, document, and report observations during all ramp-up procedures; and work with the National Science Foundation to analyze those data to help determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys after the data are compiled and quality control measures have been completed.

Agency Response: The Service issued an incidental harassment authorization on 28 November 2011, consistent with some of the Commission's recommendations. However, the Service did not require modeling of site-specific information because it believes that the exclusion zone and density data are sufficient for the Service to conduct its analysis and make determinations and that the numbers of takes were estimated based on best available scientific information and estimation methodology. In addition, the Service did not require remodeling because of its analysis of the likely effects of the activity on the marine mammals and their habitat, the implementation of the mitigation and monitoring measures, and the appropriateness and sufficiency of the exclusion zones. The Service used effort-weighted mean densities because it is confident in the assumptions and calculations used to estimate densities for this survey area, even though it indicated in the proposed authorization that there was some uncertainty in those estimates. The Service also indicated that the monitoring program would be sufficient to detect marine mammals and account for the number of takes because the mitigation and monitoring measures are the most effective feasible measures available. The Service did not extend the monitoring period to 1 hour because observations are made longer than 30 minutes during ramp-up procedures, observers are monitoring in many cases when the airguns are not firing, the majority of the species do not remain underwater for more than 30 minutes, and there is a one in three chance that an animal would surface before the 30-minute period and then not again during the 30-minute period. Lastly, data from geophysical surveys are being compiled but are scant and will not be analyzed for some time.

21 October 2011

To: National Marine Fisheries Service

Issue: Application from Apache Alaska Corporation to take marine mammals by harassment incidental to a 3D seismic survey in Cook Inlet, Alaska

Recommendation: The Commission recommended that the National Marine Fisheries Service defer issuance of the proposed incidental harassment authorization until such time as the Service can support a conclusion that the proposed activities would have no more than a negligible impact on the Cook Inlet beluga whale population. However, if the Service decides to issue the incidental harassment authorization, the Commission further recommended that the Service require Apache Alaska Corporation to re-estimate the

ensonified areas for each sound threshold (i.e., 190, 180, and 160 dB re 1 μPa) and the expected number of marine mammal takes, accounting for the simultaneous, alternating use of two sound sources and the overlap of their acoustic footprints; describe and provide the rationale for the method used to determine the non-river density estimate for beluga whales and recalculate the density estimates accordingly; and recalculate the estimated number of takes for all species based on the modeled areas of ensonification for each sound threshold (i.e., 190, 180, and 160 dB re 1 μPa), using the full number of survey days rather than half that number. The Commission also recommended that the Service require that Apache Alaska Corporation either amend its application to seek authorization to take the full number of marine mammals that may be taken or provide sufficient justification for requesting lesser numbers of takes, particularly for beluga whales and harbor seals and ensure that the monitoring measures included in the authorization are sufficient to account for all takes of marine mammals and require Apache Alaska Corporation to provide timely reports of the number of marine mammals taken so that surveys can be stopped before the authorized takes are exceeded.

Agency Response: The Service had not issued an incidental harassment authorization by the end of 2011.

24 October 2011

To: National Marine Fisheries Service

Issue: Draft programmatic environmental impact statement on Hawaiian monk seal recovery actions

Recommendation: The Commission recommended that the Service adopt Alternative 4 of the programmatic environmental impact statement and move forward with its planned translocation program as quickly as possible. The Commission also recommended that the Service consult regularly with outside experts regarding the development and progress of the program; consider including in the final programmatic environmental impact statement a discussion of the issues surrounding ecosystem-based management measures to improve conditions for juvenile seals and enhance their survival; and (1) give high priority to further testing of a morbillivirus vaccine on captive monk seals to identify possible effects of the vaccine and (2) modify the first criterion for triggering morbillivirus vaccination efforts on wild seals to include the detection of canine distemper in any species outside of quarantine in the Main Hawaiian Islands.

Agency Response: The Service had not issued a final programmatic environmental impact statement by the end of 2011 but did anticipate issuance by the end of 2012.

31 October 2011

To: National Marine Fisheries Service

Issue: Application for a research permit from Thomas Jefferson, Ph.D., to conduct research on nine cetacean species in waters off California during a five-year period.

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit but advise Dr. Jefferson to have the proposed activities reviewed and approved by a IACUC prior to initiating those activities and obtain additional permits from the relevant National Marine Sanctuary or the National Park Service prior to conducting the proposed activities in a sanctuary or park.

Agency Response: The Service issued the permit on 22 December 2011, consistent with none of the Commission's recommendations. It did state that IACUC approval, marine sanctuary, and national park authorizations and/or permits are not criteria for issuance of a scientific research permit under the Marine Mammal Protection Act. However, Dr. Jefferson is aware of the need to obtain permits form the National Marine Sanctuary.

21

To: National Marine Fisheries Service

Issue: Application from the U.S. Army Corps of Engineers, on behalf of the Port of San

November 2011	Francisco, to take small numbers of marine mammals by harassment incidental to construction of the city's Brannan Street Wharf at Pier 36 **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided that it requires the Port to monitor the presence and behavior of marine mammals during all vibratory and impact pile-driving activities; monitor before, during, and after all soft-starts of vibratory and impact pile-driving activities to gather the data needed to determine the effectiveness of this technique as a mitigation measure; and implement soft-start procedures after 15 minutes for pinnipeds and 30 minutes for cetaceans, if pile driving was delayed or shut down due to the presence of a marine mammal within or approaching the Level A harassment zone. **Agency Response:** The Service had not issued an incidental harassment authorization by the end of 2011.
21 November 2011	**To:** National Marine Fisheries Service **Issue:** Application for a research permit from John Wise, Ph.D., to receive, import, and export samples from cetaceans and pinnipeds during a five-year period **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it requires Dr. Wise to maintain detailed records indicating the source of each specimen, the circumstances under which it was collected, and the researchers and associated institutions that received cell lines. It also advised Dr. Wise of the need to obtain all necessary permits under CITES before importing or exporting any marine mammal part. **Agency Response:** The Service had not issued a permit by the end of 2011.
21 November 2011	**To:** National Marine Fisheries Service **Issue:** Application to amend a research permit from Paul Ponganis, Ph.D., to conduct research on California sea lions on San Nicolas Island, California **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the conditions contained in the original permit remain in effect and it advises Dr. Ponganis of the need to have his IACUC review and approve the research activities before initiation of those activities. **Agency Response:** The Service had not issued the permit by the end of 2011.
21 November 2011	**To:** National Marine Fisheries Service **Issue:** Application for a research permit from The Whale Museum to monitor vessel activities around marine mammals, primarily southern resident killers, in Washington, during a five-year period **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it conditions the permit to require The Whale Museum to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with female/calf behavior, feeding, or other vital functions and advises 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. **Agency Response:** The Service had not issued the permit by the end of 2011.
22 November 2011	**To:** National Marine Fisheries Service **Issue:** Review of the draft 2011 stock assessment reports for marine mammals occurring in U.S. waters

Recommendation: To improve stock assessment efforts generally, the Commission recommended that the National Marine Fisheries Service (1)
develop a nation-wide, five-year schedule for carrying out stock assessments that reflects projections and priorities for available ship and aircraft time and identifies the funding necessary to complete marine mammal population surveys; (2) review its observer programs nationwide, set standards for observer coverage, identify gaps in existing coverage, and determine the resources needed to (a) observe all fisheries that do or may directly interact with marine mammals and (b) provide reasonably accurate and precise estimates of serious injury and mortality levels; (3) partner with state fishery management agencies, the fishing industry, and other stakeholders to develop a funding strategy in 2012 that will improve substantially the extent and level of observer coverage and data collection concerning incidental serious injury and mortality of marine mammals within five years; (4) develop alternative strategies for collecting information on mortality and serious injury levels in fisheries for which entanglements are difficult to detect or quantify using traditional observer programs; (5) collaborate with other nations and international fishery management organizations to develop and implement cooperative or complementary strategies for assessing the status of transboundary marine mammal stocks, and the rate of serious injury and mortality of such stocks in fisheries; and (6) consider the various approaches that are available for integrating all human-related risk factors into stock assessments and adopt an integration method that will produce, at a minimum, reasonable estimates of the lower and upper bounds of serious injury and mortality rates for every stock.

To improve stock assessment efforts in the Atlantic and Gulf of Mexico, the Commission recommended that the National Marine Fisheries Service (1) conduct the required surveys of North Atlantic pinniped stocks, incorporate the results into stock assessment reports, and use that information to manage those stocks and the risk factors affecting them; (2) improve stock assessments for bottlenose dolphins in both the Atlantic and Gulf of Mexico by conducting the research needed to resolve questions concerning stock structure, provide more accurate and precise estimates of the abundance and trends of the various stocks, and provide more accurate and precise estimates of the level of serious injury and mortality in fisheries and from other human activities; and (3) develop a stock assessment plan for the Gulf of Mexico that describes (a) a feasible strategy for assessing the Gulf's marine mammal stocks and (a) the infrastructure, expertise, and funding needed to implement it.

To improve stock assessment efforts in the Alaska region, the Commission recommended that the National Marine Fisheries Service (1) consider the impending changes in the Arctic and develop a long-term assessment strategy that will provide a reliable basis for characterizing population abundance, stock status, and trends and for implementing protective measures that will minimize the effects of Arctic climate disruption on the viability of marine mammal stocks; (2) substantially increase its efforts to (a) collaborate with the Alaska Native community to monitor the abundance and distribution of ice seals and (b) use seals taken in the subsistence harvest to obtain data on demography, ecology, life history, behavior, health status, and other pertinent topics; (3) do everything it can to ensure that all vessels operating in the area are aware of the need to protect the North Pacific right whale, and that every practicable step be taken to minimize the probability of entanglements and ship strikes; and (4) continue its efforts to better describe the distribution and movement patterns of North Pacific right whales, especially with respect to their distribution during those periods when they are outside designated critical habitat.

To improve stock assessment efforts in the Pacific, the Marine Mammal Commission recommended that the National Marine Fisheries Service (1) conduct the necessary surveys to update stock assessment reports for harbor seals along the Oregon and Washington coasts and in Washington inland waters and (2) maintain and enhance existing collaborations to obtain the data necessary to generate stock assessments for all Pacific Island cetaceans within U.S. jurisdiction, and to seek new opportunities, such as collaborating with the Navy, to leverage resources for accomplishing this challenging task.
Agency Response: The Service had not issued the final stock assessment reports by the end of 2011.

7 December 2011

To: National Science Foundation
Issue: Application for authorization from Daniel Costa, Ph.D., to collect samples from dead pinnipeds at Cape Evans, Backdoor Bay, and Hut Point, Antarctica
Recommendation: The Commission recommended that the National Science Foundation issue the authorization as requested.
Agency Response: The Foundation had not issued the authorization by the end of 2011.

7 December 2011

To: National Marine Fisheries Service
Issue: Applications for modifications to letters of authorization issued to the Navy to govern the taking of marine mammals incidental to military training operations at Virginia Capes, Cherry Point, and Jacksonville Range Complexes
Recommendation: The Commission recommended that the National Marine Fisheries Service and the Navy (1) investigate the underlying cause of the high rate of non-compliance with the respective letters of authorization and determine why it was not detected earlier and (2) jointly review the full scope of the applicable regulations and letters of authorization to ensure that the responsible Navy officials are aware of, understand, and are in compliance with all mitigation, monitoring, and reporting requirements. The Commission further recommended that the Service require the Navy to conduct empirical sound propagation measurements to verify the adequacy of the sizes of the exclusion zones for 5-, 10-, and 20-lb charges and to expand those zones and the buffer zones derived from those zones as necessary; require the Navy to re-estimate the sizes of the buffer zones using the mean average swim speeds plus at least one standard deviation for marine mammals that inhabit the shallow-water areas where time-delay firing devices would be used, prior to amending the letters of authorization; and consider whether modifications to the letters of authorization alone are sufficient to satisfy the requirements of the Marine Mammal Protection Act and provide a thorough explanation of its rationale in the *Federal Register* notice taking final action on the proposed modifications, if it believes that regulatory modifications are not needed.
Agency Response: The Service had not issued the letters of authorization by the end of 2011.

9 December 2011

To: National Marine Fisheries Service
Issue: Application from Shell Offshore, Inc., to take small numbers of marine mammals by harassment incidental to offshore exploratory drilling in Camden Bay, Beaufort Sea, Alaska, during the 2012 Arctic open-water season
Recommendations: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, contingent upon the successful negotiation of a conflict avoidance agreement between Shell and the Alaska Eskimo Whaling Commission and the bowhead whale hunters it represents and facilitate development of more comprehensive conflict avoidance agreements that involve other

species and potentially affected communities and co-management organizations and take into account all potential adverse effects on all marine mammal species taken for subsistence purposes. The Commission also recommended that the Service require Shell to (1) evaluate the source levels of the available drilling rigs at the proposed drilling locations, (2) recalculate the 120-dB re 1μPa harassment zones and estimated takes as appropriate, and (3) use the rig best suited for the proposed drilling locations based, in part, on consideration of the size of the harassment zones and the requirements of the Marine Mammal Protection Act to reduce impacts of the proposed activity to the least practicable level. In addition, the Commission recommended that the Service require Shell to develop and employ a more effective means to monitor the entire corrected 120-dB re 1μPa harassment zone associated with the drilling rig and support vessels for the presence and movements of bowhead whales and other marine mammals and for estimating the actual number of takes that occur; to track and enforce Shell's implementation of mitigation and monitoring measures to ensure that they are executed as expected; to cease drilling operations in mid- to late-September to reduce the possibility of having to respond to a large oil spill in ice conditions; and to develop and implement a detailed, comprehensive and coordinated Wildlife Protection Plan that includes strategies and sufficient resources for minimizing contamination of sensitive marine mammal habitats and that provides a realistic description of the actions that Shell can take, if any, to respond to oiled or otherwise affected marine mammals.

Agency Response: The Service had not issued the incidental harassment authorization by the end of 2011.

9 December 2011

To: National Marine Fisheries Service

Issue: Application from Shell Offshore, Inc., to take small numbers of marine mammals by harassment incidental to offshore exploratory drilling in the Chukchi Sea, Alaska, during the 2012 Arctic open-water season

Recommendation: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization but also facilitate development of conflict avoidance agreements that involve all potentially affected communities and co-management organizations and take into account potential adverse impacts on all marine mammal species taken for subsistence purposes including, but not limited to, bowhead whales. The Commission also recommended that the Service require Shell to collect all new and used drilling muds and cuttings and either reinject them or transport them to an Environmental Protection Agency licensed treatment/disposal site outside the Arctic. In addition, the Commission recommended that the Service require Shell to evaluate the source levels of the *Discoverer* at the proposed drilling location and recalculate the 120-dB re 1μPa harassment zone and estimated takes as appropriate; to develop and employ a more effective means for monitoring the entire corrected 120-dB re 1μPa harassment zone for the presence and movements of all marine mammals and for estimating the actual number of takes; to track and enforce Shell's implementation of mitigation and monitoring measures to ensure that they are executed as expected; to cease drilling operations in mid- to late-September to reduce the possibility of having to respond to a large oil spill in ice conditions; and to develop and implement a detailed, comprehensive, and coordinated Wildlife Protection Plan that includes strategies and sufficient resources for minimizing contamination of sensitive marine mammal habitats and that provides a realistic description of the actions that Shell can take, if any, to respond to oiled or otherwise affected marine mammals.

Agency Response: The Service had not issued the incidental harassment authorization by the end of 2011.

12 December 2011	**To:** National Marine Fisheries Service **Issue:** Application for a research permit from Daniela Maldini, Ph.D., to study humpback whales in Hawaii during a five-year period **Recommendation:** The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it require Dr. Maldini to minimize disturbance to the animals by exercising caution when approaching them, especially female/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with female/calf behavior, feeding, or other vital functions. **Agency Response:** The Service had not issue the permit by the end of 2011.
12 December 2011	**To:** National Marine Fisheries Service **Issue:** Applications to amend the final rules governing the taking of marine mammals incidental to training and testing conducted in 12 Navy range complexes and at one Air Force Base **Recommendation:** The Commission recommended that the National Marine Fisheries Service amend the final rules as requested. **Agency Response:** The Service had not amended the final rules by the end of 2011.
13 December 2011	**To:** National Marine Fisheries Service **Issue:** Application from the U.S. Navy to take small numbers of marine mammals by harassment incidental to a seismic oceanographic survey in the southwestern Indian Ocean **Recommendation:** The Commission recommended that the National Marine Fisheries Service (1) require the Navy to re-estimate the proposed exclusion and buffer zones for the two-airgun array and associated number of marine mammal takes using operational and site-specific environmental parameters---if the exclusion and buffer zones are not re-estimated for the two-airgun array, require the Navy to provide a detailed justification for basing the exclusion and buffer zones for the proposed survey in the southwestern Indian Ocean on modeling that relies on measurements from the Gulf of Mexico; (2) require the Navy to use species-specific mean maximum densities rather than the mean average densities and then re-estimate the anticipated number of takes; and (3) extend the pause in airgun activity following a marine mammal sighting in the exclusion zone to cover the full dive times of all species likely to be encountered. **Agency Response:** The Service had not issued the incidental harassment authorization by the end of 2011.
13 December 2011	**To:** National Marine Fisheries Service **Issue:** Application from the U.S. Marine Corps to take Atlantic bottlenose dolphins by harassment incidental to training exercises at the Cherry Point Range Complex, North Carolina **Recommendation:** The Commission recommended that the National Marine Fisheries Service require the Marine Corps to describe in detail the environmental and operational parameters and methods used to determine the zones of exposure and to estimate the associated number of takes and ensure that the Marine Corps has determined the zones of exposure and associated number of takes for all types of ordnance (including practice bombs and 25-mm live rounds) prior to issuing the incidental harassment authorization. The Commission also recommended that the Service require the Marine Corps to specify in detail its mitigation, monitoring, and reporting measures before the Service considers the application to be complete; withhold the authorization until the Marine Corps develops and is prepared to implement a plan to evaluate the effectiveness of its mitigation and monitoring measures before initiating or, at the very latest, in conjunction with the exercises covered by the proposed incidental harassment authorization; and require the

Marine Corps to use either direct strike or dynamic Monte Carlo models to determine probability of ordnance strike for future authorizations.
Agency Response: The Service had not issued the incidental harassment authorization by the end of 2011.

14 December 2011

To: National Marine Fisheries Service
Issue: Application for modifications to a letter of authorization issued to the Navy to govern the taking of marine mammals incidental to military training operations in the Hawaii Range Complex
Recommendations: The Commission recommended that the National Marine Fisheries Service ensure the regulations that govern the taking of marine mammals in the Hawaii Range Complex are amended to allow for multi-year letters of authorization prior to renewing the letter of authorization in question for a two-year period; work with the Navy to investigate the underlying cause of the high rate of non-compliance with the respective letters of authorization and determine why it was not detected earlier; and work with the Navy to review the full scope of the applicable regulations and letters of authorization to ensure that the responsible Navy officials are aware of, understand, and are in compliance with all mitigation, monitoring, and reporting requirements. The Commission also recommended that the Service require the Navy to conduct empirical sound propagation measurements to verify the adequacy of the sizes of the exclusion zones for 5-, 10-, and 20-lb charges and to expand those zones and the buffer zones derived from those zones as necessary, if the National Marine Fisheries Service amends the letter of authorization as proposed; require the Navy to re-estimate the sizes of the buffer zones using the mean average swim speeds plus at least one standard deviation for marine mammals that inhabit the shallow-water areas where time-delay firing devices would be used, prior to amending the letter of authorization; and consider whether modifications to the letter of authorization alone are sufficient to satisfy the requirements of the Marine Mammal Protection Act and provide a thorough explanation of its rationale in the *Federal Register* notice taking final action on the proposed modifications, if it believes that regulatory modifications are not needed. Further, the Commission recommended that, with respect to false killer whales, the Service ask the Navy to enter into a conference pursuant to 50 C.F.R. § 402.10 and to consider requesting that the conference follow formal consultation procedures so that that opinion can be adopted as the biological opinion if the species is listed.
Agency Response: The Service had not issued the letter of authorization by the end of 2011.

15 December 2011

To: National Marine Fisheries Service
Issue: Application for a research and enhancement permit from SeaWorld, Inc., to conduct research on captive Hawaiian monk seals and to continue its related enhancement efforts
Recommendations: The Commission recommended that the National Marine Fisheries Service (1) issue the research permit, provided it advises SeaWorld of the need to have its IACUC review and approve its research protocol prior to initiating the proposed activities and (2) issue the enhancement permit under section 10(a)(1)(A) of the endangered Species Act, but clarify that authorization for continued maintenance of the non-releasable monk seals stems from section 109(h)(1) of the Marine Mammal Protection Act, rather than section 104(c)(4).
Agency Response: The Service had not issued the permit by the end of 2011.

19 December 2011

To: National Marine Fisheries Service
Issue: Application to amend a research permit from Rachel Cartwright, Ph.D., to allow tagging of female humpback whales with calves and yearlings in Hawaii

Recommendation: The Commission recommended that the National Marine Fisheries Service require Dr. Cartwright to (1) report her data regarding possible short- and long-term effects from tagging to the Permit Office and (2) consult with Dr. Robin Baird regarding co-principal investigator Mark Deakos's experience instrumenting cetaceans with suction-cup and satellite tags prior to issuing the permit amendment and condition the permit amendment to allow tagging by either method only if Mr. Deakos has demonstrated a proficiency with said method; otherwise, the Service should require Mr. Deakos to gain experience with marine mammal biologists adept at the proposed method before authorizing him to tag cetaceans using that method. The Commission also recommended that the Service 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; advise Dr. Cartwright of the need to have an IACUC review and approve the research protocol prior to initiating the proposed tagging activities; and advise Dr. Cartwright of the need to consult with the National Marine Sanctuary to determine if a permit is required before conducting the proposed activities.
Agency Response: The Service had not issued the permit amendment by the end of 2011.

19 December 2011

To: National Marine Fisheries Service
Issue: Application to amend a research permit from Brandon Southall, Ph.D., to add potential focal species and increase the number of controlled exposure experiments on cetaceans and pinnipeds in waters off Southern California
Recommendations: The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the conditions currently contained in the permit as amended remain in effect and the Service advises Dr. Southall of the need to have his IACUC approve the research protocol modifications prior to initiating those activities.
Agency Response: The Service had not issued the permit amendment by the end of 2011.

19 December 2011

To: National Marine Fisheries Service
Issue: Application from the U.S. Army Corps of Engineers to take small numbers of Atlantic bottlenose dolphins by harassment incidental to blasting operations in the Port of Miami, Florida
Recommendations: The Commission recommended that the National Marine Fisheries Service issue the incidental harassment authorization, provided it require the Army Corps of Engineers to conduct empirical sound propagation measurements during two detonation events per day using various delay weights and numbers of delays to verify that the danger and exclusion zones are sufficient to protect marine mammals from sound exposure levels, including the 182- and 177-dB re 1 μPa^2-sec thresholds—the zones then should be adjusted accordingly and all activities should be suspended if the authorized number of takes is reached.
Agency Response: The Service had not issued the incidental harassment authorization by the end of 2011.

20 December 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from Ann Pabst, Ph.D., to conduct systematic line transect surveys for marine mammals off the U.S. east coast during a five-year period
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, but require the applicant to minimize disturbing the animals by using caution when approaching them, especially female/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with female/calf behavior,

feeding, or other vital functions
Agency Response: The Service had not issued the permit by the end of 2011.

20 December 2011

To: National Marine Fisheries Service
Issue: Application for a research permit from the Northwest Fisheries Science Center to conduct research on numerous cetacean and pinniped species
Recommendation: The Commission recommended that the National Marine Fisheries Service issue the permit, provided that it 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. The Commission also recommended that the Service advise the Center of the need to (1) obtain IACUC approval of the amended protocols prior to initiating the proposed activities; (2) obtain permits under the CITES to import or export parts of marine mammals listed in the Convention's appendices; and (3) 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.
Agency Response: The Service had not issued the permit by the end of 2011.

22 December 2011

To: National Marine Fisheries Service
Issue: Application from the Lamont-Doherty Earth Observatory to take small numbers of marine mammals by harassment incidental to a marine geophysical survey in the waters of the Northern Mariana Islands
Recommendations: The Commission recommended that, before issuing the incidental harassment authorization, the National Marine Fisheries Service (1) require the Observatory to re-estimate the proposed exclusion and buffer zones and associated takes of marine mammals using site-specific information—if the exclusion and buffer zones and numbers of takes are not re-estimated, require the Observatory to provide a detailed justification (a) for basing the exclusion and buffer zones for the proposed survey in the Northern Mariana Islands on empirical data collected in the Gulf of Mexico or on modeling that relies on measurements from the Gulf of Mexico and (b) that explains why simple ratios were used to adjust for tow depth and (2) use species-specific maximum densities (i.e., estimated by multiplying the existing best density estimates by a precautionary correction factor) and then re-estimate the anticipated number of takes. The Commission also recommended that the Service condition the authorization to prohibit the use of a shortened pause before ramping up after a power-down or shut-down of the airguns based on the presence of a marine mammal in the exclusion zone and the R/V *Langseth's* movement (speed and direction); extend the 30-minute period following a marine mammal sighting in the exclusion zone to cover the maximum dive times of all species likely to be encountered; and provide additional justification for its preliminary determination that the proposed monitoring program will be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified exclusion and buffer zones. In addition, the Commission recommended that the Service consult with the funding agency (i.e., the National Science Foundation) and individual applicants (e.g., Lamont-Doherty Earth Observatory and the U.S. Geological Survey) to develop, validate, and implement a monitoring program that provides a scientifically sound, reasonably accurate assessment of the types of marine mammal taking and the number of marine mammals taken. Lastly, the Commission recommended that the Service require the applicant to (1) report the number of marine mammals that were detected acoustically and for which a power-down or shut-down of the airguns was initiated, (2) specify if such

	animals also were detected visually, (3) compare the results from the two monitoring methods (visual versus acoustic) to help identify their respective strengths and weaknesses, and (4) use that information to improve mitigation and monitoring methods and work with the National Science Foundation to analyze those data to help determine the effectiveness of ramp-up procedures as a mitigation measure for geophysical surveys after the data are compiled and quality control measures have been completed. **Agency Response:** The Service had not issued an incidental harassment authorization by the end of 2011.
23 December 2011	**To:** National Marine Fisheries Service **Issue:** Application to amend a research permit from Peter Tyack, Ph.D., to add procedures and focal species to projects in the Atlantic Ocean and Mediterranean Sea and to add a new project in the Pacific Ocean **Recommendations:** The Commission recommended that the National Marine Fisheries Service issue the permit amendment, provided that the conditions currently contained in the permit as amended remain in effect and the Service advise Dr. Tyack of the need to have his IACUC review and approve the research protocol modifications prior to initiating those activities. **Agency Response:** The Service had not issue the permit by the end of 2011.