

**FINDING OF NO SIGNIFICANT IMPACT  
FOR THE ISSUANCE OF AN INCIDENTAL HARASSMENT AUTHORIZATION  
TO APACHE ALASKA CORPORATION FOR THE TAKE OF MARINE MAMMALS  
INCIDENTAL TO A 3D SEISMIC SURVEY IN COOK INLET, ALASKA**

**NATIONAL MARINE FISHERIES SERVICE**

**BACKGROUND**

The National Marine Fisheries Service (NMFS) received an application from Apache Alaska Corporation (Apache) requesting an Incidental Harassment Authorization (Authorization) under the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1631 *et seq.*) for the incidental taking of marine mammals incidental to the conduct of a 3D seismic survey in Cook Inlet, Alaska, from March through December 2014.

Under the MMPA, NMFS, shall grant authorization for the incidental taking of small numbers of marine mammals if we find that the taking will have a negligible impact on the species or stock(s), and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant). The Authorization must prescribe, where applicable, the permissible methods of taking; other means of effecting the least practicable impact on the species or stock and its habitat; and requirements pertaining to the mitigation, monitoring and reporting of such taking.

The proposed action is a direct outcome of Apache requesting an Authorization to take marine mammals, by harassment, incidental to conducting a 3D seismic survey program in Cook Inlet. Apache's activities, which have the potential to behaviorally disturb marine mammals, warrant an incidental take authorization from us under section 101(a)(5)(D) of the MMPA.

In accordance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality (CEQ) regulations in 40 CFR §§ 1500-1508, and National Oceanographic and Atmospheric Administration (NOAA) Administrative Order (NAO) 216-6, we completed an Environmental Assessment (EA) titled, *Issuance of an Incidental Harassment Authorization to Apache Alaska Corporation for the Take of Marine Mammals Incidental to a 3D Seismic Survey in Cook Inlet, Alaska*. We incorporate this EA in its entirety by reference.

We have prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts of our selected alternative—Alternative 1 (Preferred Alternative) titled, “Issuance of an Authorization with Mitigation Measures,” and our conclusions regarding the impacts related to our proposed action. Under this Alternative, we would issue an Authorization under the MMPA with required mitigation, monitoring, and reporting measures. Based on our review of Apache's proposed action and the measures contained within Alternative 1, we have determined that no direct, indirect, or cumulatively significant impacts to the human environment would occur from implementing the Preferred Alternative.

## ANALYSIS

NAO 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the CEQ regulations at 40 CFR §1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below this section is relevant to making a finding of no significant impact. We have considered each criterion individually, as well as in combination with the others. We analyzed the significance of this action based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

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

*Response:* We do not expect that our action of issuing an Authorization to Apache or Apache’s proposed survey would cause substantial damage to the ocean and coastal habitats and/or essential fish habitat. The sounds produced by the airguns and pingers may affect marine mammals. These temporary acoustic activities would not affect physical habitat features, such as substrates and water quality. Additionally, the effects from vessel transit and the seismic operations of survey vessels would not result in substantial damage to ocean and coastal habitats that might constitute marine mammal habitats. The mitigation and monitoring measures required by the Authorization would not affect habitat or essential fish habitat (EFH).

EFH has been identified in upper Cook Inlet for salmonids in different stages of development. Effects on EFH by the seismic operations and issuance of the Authorization assessed here would be temporary and minor. The main effect would be short-term disturbance that might lead to temporary and localized relocation of the EFH species or their food. The actual physical and chemical properties of the EFH will not be impacted. Therefore, NMFS, Office of Protected Resources, Permits and Conservation Division has determined that the issuance of an Authorization for the taking of marine mammals incidental to a marine seismic survey in Cook Inlet will not have an adverse impact on EFH, and an EFH consultation is not required.

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

*Response:* We do not expect that our action of issuing an Authorization to Apache or Apache’s proposed survey would have a substantial impact on biodiversity and/or ecosystem function within the affected environment. The proposed action may temporarily disturb marine mammals in the proposed action areas, but the effects would be short-term and localized.

### **3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?**

*Response:* We do not expect that our action of issuing an Authorization to Apache or Apache’s proposed survey would have a substantial adverse impact on public health or safety, as the taking, by harassment, of marine mammals would pose no human risk.

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

**Response:** We have determined that our issuance of an Authorization and Apache’s proposed survey would likely result in limited adverse effects to Cook Inlet beluga whales, harbor porpoises, killer whales, harbor seals, and the western distinct population segment of Steller sea lions. The EA evaluates the affected environment and potential effects of both proposed actions, indicating that only the sounds produced during the seismic survey have the potential to affect marine mammals in a way that requires authorization under the MMPA. The activities and any required mitigation measures would not affect physical habitat features, such as substrates and water quality.

We have determined that the proposed activities may result in some Level B harassment (in the form of short-term and localized changes in behavior) of five species of marine mammals—two of which are listed as endangered under the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*) but will have a negligible impact on the species or stocks. Additionally, the proposed action falls within designated critical habitat for the Cook Inlet beluga whale. The NMFS Office of Protected Resources (OPR) Permits and Conservation Division (PR1) consulted with the NMFS Alaska Regional Office (AKRO) Protected Resources Division (PRD) on the issuance of this and other similar IHAs under Section 101(a)(5)(D) of the MMPA, including one issued in April 2012, because the action of issuing the IHA may affect endangered species under NMFS’ jurisdiction. On February 17, 2012, NMFS issued its Biological Opinion, which concluded that the proposed action is not likely to jeopardize the continued existence of Cook Inlet beluga whales or Steller sea lions, nor destroy or adversely modify Cook Inlet beluga whale critical habitat. On May 21, 2012, NMFS revised the February 17 Biological Opinion to clarify several sections, but the conclusions were unchanged. Due to a change in the size of the area for the second IHA, NMFS PR1 reinitiated consultation with the AKRO PRD on the proposed issuance of an IHA for Area 2. On February 14, 2013, NMFS issued a Biological Opinion, which concluded that the proposed action is not likely to jeopardize the continued existence of Cook Inlet beluga whales or Steller sea lions, nor destroy or adversely modify Cook Inlet beluga whale critical habitat. The information and analyses presented in the Biological Opinion are hereby incorporated by reference. PR1 discussed the proposed action of issuing this third Authorization with AKRO PRD and determined that the action falls within the scope and analysis of the February 2013 Biological Opinion. The proposed action described in this EA does not trigger any of the factors requiring a reinitiation of consultation. Therefore, a new section 7 consultation will not be conducted.

To reduce the potential for disturbance from acoustic stimuli associated with the activities, Apache will implement several monitoring and mitigation measures for marine mammals, which are outlined in the EA. Taking these measures into consideration, we expect that the responses of marine mammals from the Preferred Alternative would be limited to temporary avoidance of the area, short-term behavioral changes, and/or low-level physiological effects, falling within the MMPA definition of “Level B harassment.” We do not anticipate that take by injury (Level A harassment), serious injury, or mortality would occur, nor would we authorize take by injury, serious injury, or mortality. We expect that harassment takes would be at the lowest level practicable due to the incorporation of the proposed mitigation measures.

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

**Response:** No significant social or economic effects are expected to result from issuance of the Authorization or the proposed seismic survey. The seismic survey would provide information valuable

for exploring and developing oil fields in Cook Inlet. The primary impacts to the natural and physical environment are expected to be acoustic and temporary in nature, and not interrelated with significant social or economic impacts.

Marine mammals are hunted legally in Alaskan waters by coastal Alaska Natives. In Cook Inlet, native hunters historically have hunted beluga whales for food. Due to the dramatic decreases in the Cook Inlet beluga whale population, there is a moratorium on hunting for beluga whales currently in place, and the Authorization and underlying survey will not result in removal of beluga whales from the population or otherwise adversely affect annual rates of recruitment or survival. There is a low level of subsistence hunting for harbor seals in Cook Inlet. Seal hunting occurs opportunistically among Alaska Natives who may be fishing or travelling in the upper Inlet near the mouths of the Susitna River, Beluga River, and Little Susitna River. Considering the limited time and area for the planned seismic survey, the proposed project is not expected to have any significant impacts to the availability of harbor seals for subsistence harvest. Also, the planned seismic survey will not result in directed or lethal takes of marine mammals. Moreover, the following features are intended to reduce impacts to subsistence users: (1) In-water seismic activities will follow mitigation procedures to minimize effects on the behavior of marine mammals and, therefore, opportunities for harvest by Alaska Native communities; and (2) Regional subsistence representatives may support recording marine mammal observations along with marine mammal biologists during the monitoring programs and will be provided with annual reports.

NMFS anticipates that any effects from Apache's proposed seismic survey on marine mammals, especially harbor seals and Cook Inlet beluga whales, which are or have been taken for subsistence uses, would be short-term, site specific, and limited to inconsequential changes in behavior and mild stress responses. NMFS does not anticipate that the authorized taking of affected species or stocks will reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by: (1) Causing the marine mammals to abandon or avoid hunting areas; (2) directly displacing subsistence users; or (3) placing physical barriers between the marine mammals and the subsistence hunters; and that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

NMFS has determined (based on the foregoing) that Apache's activities will not have an unmitigable adverse impact on the availability of marine mammals for taking by subsistence users. The proposed seismic survey is not expected to result in any conflict between the industry and subsistence users. As a result of these measures and the mitigation measures that will be implemented to reduce the potential for natural and physical effects, no significant social and economic impacts are expected.

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

**Response:** NMFS has issued numerous Authorizations for seismic survey activities, including ones for similar projects in other parts of Alaska. The anticipated impacts on marine mammals are not highly controversial. There has been no substantial dispute with the size, nature, or effect of the proposed action. Nor is there any information to suggest that the Authorization may cause substantial degradation to any element of the human environment, including marine mammals. During the 30-day public comment period, NMFS received nine comment letters. In general, the comments focused on aspects of the seismic operations, the analysis of impacts on Cook Inlet beluga whales provided in the application and *Federal Register* notice announcing the proposed Authorization, and some of the proposed mitigation and monitoring measures. Based on these comments, NMFS included new mitigation measures and made some adjustments to its analysis but was still able to meet the requirements for issuing an Authorization (see also response to question 8).

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

*Response:* Issuance of the Authorization or Apache's proposed survey are not expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas as it would only authorize harassment to marine mammals. The action area does not contain, and is not adjacent to, areas of notable visual, scenic, historic, or aesthetic resources that would be substantially impacted. The surrounding water is primarily used for shipping traffic and is already impacted by human development. The impacts to EFH and habitat for Federally listed species, are likely to be minor, localized and short-term. (See responses to questions 1, 2 and 4.)

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

*Response:* The potential risks associated with seismic surveys are not unique or unknown, nor is there significant uncertainty about impacts. NMFS has issued numerous Authorizations for seismic activities in Alaskan waters and conducted NEPA analysis on those projects. Each Authorization required marine mammal monitoring, and monitoring reports have been reviewed by NMFS to ensure that activities have a negligible impact on marine mammals. In no case have impacts to marine mammals, as determined from monitoring reports, exceeded NMFS' analysis under the MMPA and NEPA. Therefore, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks.

**9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?**

*Response:* Issuance of an Authorization to Apache or Apache's proposed survey is not related to other actions with individually insignificant but cumulatively significant impacts. While other projects in Cook Inlet may result in harassment to marine mammals, we do not expect that the impacts would be cumulatively significant. Any future Authorizations would have to undergo the same permitting process and would take Apache's proposed action into consideration when addressing cumulative effects.

**10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?**

*Response:* We have determined that the issuance of an Authorization to Apache and Apache's proposed survey would not adversely affect entities listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural, or historical resources. The proposed action is limited to the authorization to harass marine mammals consistent with the MMPA definition of "Level B harassment." As described in question 5 above, there will not be significant social or economic impacts on the coastal inhabitants of the Alaska coast or an unmitigable adverse impact on the subsistence uses of marine mammals by these residents.

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

**Response:** The issuance of an Authorization to Apache is not expected to result in the introduction or spread of a non-indigenous species into the human environment, and Apache is responsible for ensuring that their ships are in compliance with all international and U.S. national ballast water requirements.

**12) Is the proposed action likely to establish a precedent for future actions with significant effects or does it represent a decision in principle about a future consideration?**

**Response:** Our proposed action of issuing an Authorization would not set a precedent for future actions with significant effects or represent a decision in principle. Each MMPA authorization applied for under 101(a)(5)(D) must contain information identified in our implementing regulations. We consider each activity specified in an application separately and, if we issue an Authorization to an applicant, we must determine that the impacts from the specified activity would result in a negligible impact to the affected species or stocks and would not have an unmitigable adverse impact on the availability of marine mammals for subsistence uses. Our issuance of an Authorization may inform the environmental review for future projects, but would not establish a precedent or represent a decision in principle about a future consideration.

**13) Can the proposed action reasonably be expected to violate any Federal, State, or local law or requirements imposed for the protection of the environment?**

**Response:** The issuance of an Authorization would not result in any violation of federal, state, or local laws for environmental protection. The applicant is required to obtain any additional federal, state and local permits necessary to carry out the proposed activities.

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

**Response:** The proposed action allows for the taking, by incidental harassment, of marine mammals during the proposed 3D seismic survey in Cook Inlet, Alaska. We have determined that marine mammals may exhibit behavioral changes such as avoidance of or changes in movement within the action area. However, we do not expect the authorized harassment to result in significant cumulative adverse effects on the affected species or stocks. We do not expect that the issuance of an Authorization would result in any significant cumulative adverse effects on target or non-target species incidentally taken by harassment due to elevated sound levels or human presence.

Cumulative effects refer to the impacts on the environment that result from a combination of past, existing, and reasonably foreseeable human activities and natural processes. Because of the relatively small area of potential ensonification and the temporary nature of the ensonification along with the corresponding mitigation measures, the action would not result in synergistic or cumulative adverse effects that could have a substantial effect on any species.

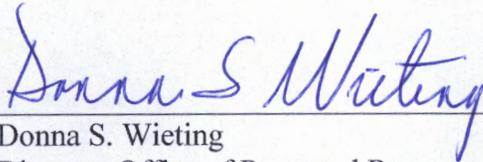
The proposed survey does not target any marine species, and we do not expect it to result in any individual, long-term, or cumulative adverse effects on the species incidentally taken by harassment due to these activities. The potential temporary behavioral disturbance of marine species might result

in short-term behavioral effects for these marine species within the disturbed areas, but we expect no long-term displacement of marine mammals as a result of the proposed action conducted under the requirements of the Authorization. Thus, we do not expect any cumulative adverse effects on any species as a result of our action.

**DETERMINATION**

In view of the information presented in this document and the analysis contained in the supporting EA titled, *Issuance of an Incidental Harassment Authorization to Apache Alaska Corporation for the Take of Marine Mammals Incidental to a 3D Seismic Survey in Cook Inlet, Alaska*, we, NMFS, have determined that issuance of an Incidental Harassment Authorization to Apache Alaska Corporation for the take, by Level B harassment only, of marine mammals incidental to conducting a 3D seismic survey program in Cook Inlet, Alaska, in accordance with Alternative 1 in the 2014 EA would not significantly impact the quality of the human environment, as described in this FONSI and in the EA.

In addition, we have addressed all beneficial and adverse impacts of the action to reach the conclusion of no significant impacts. Accordingly, the preparation of an Environmental Impact Statement for this action is not necessary.



Donna S. Wieting  
Director, Office of Protected Resources,  
National Marine Fisheries Service

**FEB 27 2014**

Date