

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

AUG 3 1 2015

# MEMORANDUM FOR:

FROM:

The Record Donna S. Wieting, Director Office of Protected Resources

SUBJECT:

Adoption of the Southwest Fisheries Science Center's Programmatic Environmental Assessment for Fisheries Research Conducted and Funded by the Southwest Fisheries Science Center -- DECISION MEMORANDUM

## I. Background

In April 2013, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS), Office of Protected Resources (OPR) received an application from the NMFS Southwest Fisheries Science Center (SWFSC) requesting incidental take authorizations (ITA) for the take of multiple species of marine mammals incidental to fisheries research conducted in three specified geographical regions (California Current [CC], Eastern Tropical Pacific [ETP], and Antarctic [AMLR]). The adopted SWFSC Programmatic Environmental Assessment (PEA) provides analysis required under the National Environmental Policy Act for OPR's issuance of regulations and subsequent Letters of Authorization specific to each of the three regions. The SWFSC requested authorization to take marine mammals by Level A harassment, serious injury, or mortality; as a result of incidental interactions with research fishing gear (CC and ETP only); and by Level B harassment, as a result of sound produced by use of active acoustic sources (all areas) and by incidental disturbance of pinnipeds (AMLR only).

# I.A. NMFS OPR's Proposed Action

OPR is proposing to issue three ITAs pursuant to Section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA) for the unintentional taking of marine mammals incidental to the SWFSC's fisheries research activities in the CC, ETP, and AMLR for five years from the date of issuance.

Under the MMPA, the Secretary of Commerce shall allow the incidental taking of marine mammals if the Secretary finds that the total of such taking will have a negligible impact on the species or stock, and will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses, provided that methods of take from the specified activity and means of effecting the least practicable adverse impact on the species or stock and its habitat are prescribed. In addition, requirements related to monitoring and reporting must be established.





The ITAs would allow for the incidental take of marine mammals during the described activities and specified timeframes, and would prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking. OPR's determinations under the MMPA were made after analyzing the SWFSC's proposed action, as presented in the SWFSC's PEA and application for ITAs.

### I.B. SWFSC's Proposed Action

In order to support NMFS' responsibilities to manage marine fin and shellfish species, as well as other protected species, and their habitats, and to support U.S. responsibilities under international treaties and agreements, the SWFSC plans to continue conducting fisheries research in the three specified geographic regions, involving use of research vessels, deployment of research fishing gear (e.g., trawl nets, longlines, environmental sensors), and use of active acoustic systems (e.g., echosounders).

### I.C. Comparison of NMFS SWFSC's Proposed Action to NMFS OPR's Proposed Action

OPR's proposed action (issuance of ITAs) would authorize take of marine mammals incidental to a subset of the activities analyzed in the SWFSC's PEA that are anticipated to result in the take of marine mammals, i.e., deployment of certain research fishing gear, use of active acoustic systems, and disturbance of pinnipeds on ice (AMLR only). Thus, these components of the SWFSC's proposed action are the subject of OPR's proposed MMPA regulatory action. Any additional activities described in the PEA are not a component of OPR's proposed action. The SWFSC's PEA contains a thorough analysis of the environmental consequences of their proposed action on the human environment, including specific sections addressing the effects of gear interactions and underwater sound on marine mammals.

OPR participated in the development of the SWFSC's PEA to ensure that the necessary information and analyses were included in the PEA to support OPR's proposed action and allow for consideration of adoption of the document as an EA for OPR NEPA purposes.

#### II. Alternatives and Impact Assessment

## II.A. Summary of the Alternatives Considered by the SWFSC

Four Alternatives were evaluated in the SWFSC's PEA: (1) to conduct fisheries and ecosystem research with scope and protocols similar to past effort (No-Action/Status Quo Alternative); (2) to conduct a new suite of fisheries and ecosystem research with mitigation (Preferred Alternative); (3) to conduct fisheries and ecosystem research with additional mitigation (Modified Research Alternative); and (4) no field research conducted or funded (No Research Alternative).

<u>No-Action/Status Quo Alternative</u>: The Status Quo Alternative includes the same scope of fisheries research as in recent years, using the same protocols and with current mitigation measures. This Alternative considers fourteen scientific research surveys in the CC and one

research survey each in the ETP and AMLR; these past activities are considered as the basis for analysis of future activities. The Status Quo Alternative research activities include a suite of mitigation measures that were developed by the SWFSC in consultation with marine mammal scientists and other protected species experts.

<u>Preferred Alternative</u>: The Preferred Alternative includes the same set of research surveys as the Status Quo Alternative with the addition of a new pelagic longline survey in the ETP. This Alternative includes the same suite of mitigation measures as the Status Quo Alternative to reduce the risk of adverse interactions with protected species, but also includes two new mitigation measures. The Preferred Alternative also includes new research efforts to test the efficacy, safety, and practicability of new equipment and procedures designed to reduce potentially adverse impacts on protected species, while maintaining the utility of survey results with regard to research objectives (conservation engineering and analysis). If these programs are successful, the SWFSC would incorporate new mitigation protocols into their research programs.

<u>Modified Research Alternative</u>: Under the Modified Research Alternative, the SWFSC would conduct and fund the same scope of fisheries research as described in the Preferred Alternative and would include all of the same mitigation measures considered under the Preferred Alternative. However, the Modified Research Alternative includes consideration of a number of additional mitigation measures. In some cases, implementation of these measures would not allow survey results to remain consistent with previous data sets and would essentially prevent the SWFSC from collecting data required to provide for fisheries management purposes.

<u>No Research Alternative</u>: Under the No Research Alternative, no direct impacts on the marine environment would occur, as the SWFSC would no longer conduct or fund fieldwork for the fisheries and ecosystem research considered within scope of the PEA.

#### II.B. Summary of Alternatives Considered by OPR

For the Preferred Alternative identified above, the SWFSC includes an associated list of standard protective measures specifically developed to minimize adverse impacts on marine mammals. OPR worked closely with the SWFSC throughout the development of the PEA to identify additional mitigation measures (for marine mammals) that the SWFSC should consider in their analysis. As a result of this interaction, the SWFSC discussed and considered additional mitigation measures in its PEA that will reduce impacts to marine mammals to the least practicable adverse impact. The inclusion of the analysis of these mitigation measures strengthens the PEA support and coverage of OPR alternatives, which are listed below.

- OPR is unable to reach the required determinations under the MMPA, and denies the SWFSC's request for ITAs (for OPR, this constitutes the NEPA-required No Action Alternative).
- OPR issues ITAs authorizing take of marine mammals incidental to activities described in SWFSC's Preferred Alternative, with the mitigation, monitoring and reporting measures presented in that Alternative.
- OPR issues ITAs authorizing take of marine mammals incidental to activities described in SWFSC's Preferred Alternative, but with additional mitigation

requirements for marine mammals, potentially including measures presented in the Modified Research Alternative or suggested to OPR via public comment on the proposed ITAs.

#### II.C. Environmental Consequences

The anticipated impacts of the proposed activities are primarily from incidental gear interactions with protected species, removals of target and non-target fish species, and increased levels of underwater sound resulting from use of active acoustic sources and from vessel noise. The analysis shows that the potential direct and indirect impacts on the physical and biological environments under the three research alternatives are similar and have minor adverse effects. The three research alternatives would have moderate beneficial economic effects on commercial and recreational fishermen and fishing communities by providing the scientific information needed for sustainable fisheries management and by providing funding, employment, and services. The similarity of impacts among the three research alternatives is due to the fact that the scope of research activities under these alternatives is similar; they differ primarily in the type of mitigation measures included for protected species. The No Research Alternative, in contrast, would eliminate the direct adverse effects of the research alternatives on the marine environment but would have minor to moderate adverse, indirect effects on several biological and socioeconomic resources due to increasing uncertainty in future resource management decisions caused by the loss of scientific information from the SWFSC on the marine environment.

All resource areas analyzed in the SWFSC's PEA have been evaluated for cumulative impacts including past, present and reasonably foreseeable future actions. The analysis indicates that the contribution of the three research alternatives to cumulative adverse effects on fish, marine mammal, and other species and resource areas is very small. The proposed SWFSC scientific research activities will also have beneficial contributions to the cumulative effects on both biological and socioeconomic resources. The research alternatives contribute substantially to the science that feeds into federal fishery management measures aimed at rebuilding and managing fish stocks in a sustainable manner. The No Research Alternative would not contribute to direct adverse effects on the marine environment but would contribute indirect adverse effects on both the biological and socioeconomic environments based on the lack of scientific information to inform future resource management decisions. The SWFSC's analysis indicates that the planned research activities would not result in significant impacts to the human environment; however, mitigation measures have been designed by the SWFSC and OPR to further reduce project impacts to marine mammals, birds, and fish.

#### III. OPR Review

OPR has reviewed the SWFSC's PEA and concludes that the impacts evaluated by the SWFSC are substantially the same as the impacts of OPR's proposed action to issue ITAs to the SWFSC. In addition, OPR has evaluated the SWFSC's PEA and found that it includes all required components for adoption:

• sufficient evidence and analysis for determining whether to prepare an environmental impact statement or finding of no significant impact (FONSI);

- brief discussion of need for the proposed action;
- a listing of the alternatives to the proposed action;
- brief discussion of the environmental impacts of the proposed action and alternatives; and
- list of agencies and persons consulted.

As a result of this review, OPR has determined that it is not necessary to prepare a separate EA or environmental impact statement to issue ITAs to the SWFSC and that adoption of the SWFSC's PEA is appropriate.

#### IV. Conclusion and Findings

OPR's proposed action is to issue ITAs to the SWFSC for the incidental take of marine mammals related to the specified activities. OPR'S issuance of the ITAs is conditioned upon the implementation of mitigation and monitoring measures as described in the SWFSC's PEA and application.

These measures include required monitoring of the sampling areas to detect the presence of marine mammals before deployment of pelagic trawl nets or pelagic longline gear, required use of marine mammal excluder devices on one type of pelagic trawl net and required use of acoustic deterrent devices on all pelagic trawl nets, and required implementation of the mitigation strategy known as the "move-on rule," which incorporates best professional judgment, when necessary during pelagic trawl and pelagic longline operations.

Based on this review and analysis, OPR has adopted the PEA under the Council on Environmental Quality's Regulations for Implementing the National Environmental Policy Act (40 CFR 1506.3) and issued a separate FONSI.