UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910

THE DIRECTOR

RECORD OF DECISION

Final Programmatic Environmental Impact Statement For Hawaiian Monk Seal Recovery Actions

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Silver Spring, Maryland

INTRODUCTION

The National Oceanic and Atmospheric Administration (NOAA) , National Marine Fisheries Service (NMFS), is the federal agency responsible for the management, conservation and recovery of Hawaiian monk seals (*Monachus schauinslandi*) under the Endangered Species Act (ESA) (16 United States Code [U.S.C.] 1531 *et seq.*), and the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 *et seq.*). NMFS listed Hawaiian monk seals as "endangered" under the ESA (41 Federal Register [FR] 51611) and "depleted" under the MMPA in 1976.

NMFS published a Recovery Plan for the species in 1983, which was revised in 2007. NMFS funds, permits, and conducts research and enhancement activities on monk seals throughout their range in the Northwestern Hawaiian Islands (NWHI), the main Hawaiian Islands (MHI), and at Johnston Atoll.

Hawaiian monk seals have experienced a prolonged population decline, which continues to the present. While the population is increasing in the MHI, most monk seals inhabit the NWHI, where the number of seals is decreasing. Numerous threats to Hawaiian monk seals were identified in the Recovery Plan including but not limited to starvation, shark predation, entanglement in marine debris, male seal aggression, and disease. Low survival of juvenile monk seals is the primary cause of the population's prolonged decline.

NMFS is proposing to issue scientific research and enhancement permits consistent with the requirements of the ESA, MMPA and the criteria in NMFS implementing regulations, and to fund and carry out research and enhancement activities under these permits. Enhancement activities comprise a variety of measures designed to improve the survival of individual seals, ultimately promoting the species recovery. A comprehensive research program enables NMFS to recognize, and possibly quantify, factors limiting the population. Research leads to improved decision-making, strategic management and the design of effective enhancement strategies. Research and monitoring will continue to play a key role in determining whether enhancement activities achieve their desired outcomes.

The Final Programmatic Environmental Impact Statement (PEIS) for Hawaiian Monk Seal Recovery Actions provides decision-makers and the public with an evaluation of the environmental, social, and economic effects of the proposed program and alternatives. As a result, this Final PEIS serves as the central planning document for NMFS' Office of Protected Resources (OPR), Pacific Islands Fisheries Science Center (PIFSC), and Pacific Islands Regional Office (PIRO) to implement Hawaiian monk seal recovery.

ALTERNATIVES

Four alternatives were considered in the Final PEIS, including a 'no action' alternative. The alternatives vary in the range and level (*i.e.,* number of animals or procedures) of research and enhancement activities that would be permitted and implemented.

Alternative 1: Status Quo: Under Alternative 1 (Status Quo) NMFS would continue its research and enhancement program on Hawaiian monk seals until the current permit expires in June 2014, and subsequent permits would be issued to continue activities according to the scope and methods currently permitted.

Activities allowed under the Status Quo Alternative include:

- Monitoring via ground, vessel, and aerial surveys;
- Marking and photo ID;
- Health screening and telemetry instrumentation;
- De-worming research;
- Specimen collection and import/export of specimens;
- Disentanglement and dehooking;
- Removal of aggressive males; and
- Translocation of pups *within the NWHI, within the MHI, or within Johnston Atoll*, in the following circumstances:
    - Taking abandoned nursing pups to a foster mother or the natural mother within their birth island or atoll;
    - Moving weaned pups from a high risk area (e.g., known shark predation) to a low risk area within the same island or atoll; and
    - Translocating weaned pups from subpopulations where juvenile survival is low to locations with higher survival, *within the NWHI*.

No new activities or expanded scope of existing activities would occur under the Status Quo Alternative.

Alternative 2: No Action: The No Action Alternative must be considered in an EIS according to CEQ regulations (40 CFR 1502.14). This alternative would allow NMFS to continue research and enhancement activities (under Alternative 1: Status Quo) on Hawaiian monk seals until the current permit expires in June 2014. Thereafter, no new permit would be issued to replace the current permit, nor would the current permit be extended or amended to allow modifications in research or enhancement activities, sample sizes, or objectives.

Under Alternative 2, NMFS would no longer do basic research (such as population monitoring, health assessments, and foraging studies) on the wild population once the current permit expires. The only activities that could then be conducted would be those that do not require a permit and activities allowed under the provisions of the MMPA's Marine Mammal Health and

Stranding Response Program's (MMHSRP) (Title IV, 16 U.S.C. 1421) permit as described in Sections 1.7 and 1.9.3 of the Final PEIS. These activities would mostly be associated with response to stranded monk seals. Analysis of previously collected samples and data could be conducted.

Alternative 3: Limited Translocation (Preferred Alternative): Alternative 3 would include Status Quo (Alternative 1) activities as well as research and enhancement activities not currently permitted but deemed necessary to implement recommendations of the 2007 Hawaiian Monk Seal Recovery Plan. Also, the number of animals taken during some activities currently permitted under Alternative 1 would be increased under Alternative 3. Examples of new activities that could occur under Alternative 3 include:

- Vaccination research and implementation of a vaccination plan to mitigate infectious disease risk;
- Potential implementation of de-worming as a tool to improve juvenile Hawaiian monk seal survival;
- Potential supplemental feeding of monk seals released following rehabilitation in captivity;
- Development and implementation of methods for modifying undesirable Hawaiian monk seal behavior related to interactions with humans and fishing gear in the MHI;
- Chemical alteration of aggressive male monk seal behavior using a testosterone agonist;
- Expanded translocation compared to Alternative 1, but limited compared to Alternative 4. In addition to translocations allowed under Alternative 1, the following could be conducted under Alternative 3:
    - Taking seals with unmanageable human interactions from the MHI to NWHI;
    - Experimental translocations of juvenile and older seals from the MHI to NWHI to examine their subsequent survival; and
    - Implementing a two-stage translocation program whereby weaned pups are taken from areas of lower survival to areas of higher survival (within the NWHI, within the MHI, or from the MHI to NWHI, ***but not from the NWHI to MHI***), with the option of returning them to their natal location or nearest appropriate site at age 2 years and older. Seals born in the MHI and previously taken to the NWHI could be returned to the MHI in the second stage of two-stage translocations.

Alternative 4: Enhanced Implementation: Alternative 4 encompasses all activities permitted under Alternative 3 (Preferred), but would also allow NMFS to temporarily translocate weaned pups from the NWHI to the MHI as part of two-stage translocation. Surviving seals translocated under this alternative would be returned to the NWHI at age 2 years or older. Alternative 4 would allow for maximal flexibility to take advantage of the potential benefits of two-stage translocation, because weaned pups could be moved to wherever their survival chances are best.

The Environmentally Preferable Alternative: The environmentally preferable alternative (40 CFR 1505.2(b)) promotes the national environmental policy as expressed in Section 101 of NEPA. This is characterized as the alternative that causes the least damage to the physical and biological environment and is the alternative that best protects, preserves, and enhances historic, cultural, and natural resources. As the agency responsible for the species recovery, NMFS must be able to respond effectively and completely to the challenges necessary to recover

the Hawaiian monk seal population. Under Alternatives 3, NMFS would be able to use the most effective research and management tools currently available to enhance recovery of monk seals. Alternative 3 is therefore consistent with the mandate to execute its trust responsibilities to the Hawaiian monk seal and its environment and is considered environmentally preferable.

Alternatives Not Carried Forward For Analysis: Any alternative that fails to meet the agency's purpose and need or federal environmental statutes and regulations, need not be carried forward for further consideration in an EIS. NEPA requires that for any alternative eliminated from detailed study in an EIS, the agency must describe the reasons why alternatives were eliminated (Section 2.11). The public comment process highlighted two alternatives that were considered but were not carried forward for analysis.

Reducing Competition and Predation in the Northwestern Hawaiian Islands:
One alternative not carried forward was to reduce populations of large predatory fish in the NWHI as a way to increase survival of Hawaiian monk seals. This proposal is based on the hypothesis that one of the primary factors limiting monk seal recovery in the NWHI is predation and direct or indirect competition with other predatory species such as sharks and jacks. NMFS currently lacks sufficient information on NWHI food web dynamics to make a reliable prediction whether predator reduction would be an effective method for improving juvenile monk seal survival without unintended consequences. Compared to all other actions proposed in the preferred alternative, the results of large-scale predator management/removal is far more uncertain. It is not the ability to remove fish that is uncertain, but rather whether it would benefit monk seals without having unanticipated and undesirable environmental consequences. NMFS is not dismissing this concept indefinitely and plans to investigate it further with other agency and independent scientists outside the context of the PEIS.

Building a Hawaiian Monk Seal Research Facility or Aquarium in the NWHI: Another alternative considered but not carried forward was to construct a research facility or aquarium for breeding, rearing, and feeding monk seals in the NWHI. Human impacts in the Monument are minimized and heavily regulated to protect the native ecosystem. Construction, operation, and maintenance of such a facility in the NWHI would be logistically challenging and several orders of magnitude more costly, making this alternative not reasonable.

DECISION
NMFS hereby adopts and implements the actions described under Alternative 3 (Limited Translocation), the Preferred Alternative. This alternative is summarized above and described in greater detail in Chapter 2 and Appendix I of the Final PEIS.

RATIONALE FOR SELECTING THE PREFERRED ALTERNATIVE
NMFS selected Alternative 3 (Limited Translocation) after a comprehensive review of the relevant environmental, economic, and social consequences of all alternatives. In making this decision, NMFS fully considered the goals of the MMPA and the ESA as well as public comments received during the PEIS process.

Alternative 1 (Status Quo) does not meet the purpose and need of this PEIS. Recent and ongoing research and enhancement activities (i.e., status quo), while they have demonstrable conservation benefits, have not been sufficient to ensure recovery of the Hawaiian monk seal.

The expanded suite of actions allowed under Alternative 3 (Limited Translocation) would achieve much greater conservation benefits.

Alternative 3 (Preferred) includes all currently permitted activities and addresses the recommendations of the 2007 Hawaiian Monk Seal Recovery Plan by including new research and enhancement activities not currently permitted. While Alternative 4 (Enhanced Implementation) was formerly identified as the Preferred Alternative in the Draft PEIS, Alternative 3 has been selected as the Preferred Alternative in the Final PEIS. **The distinction between these two Alternatives is that Alternative 3 (Preferred) does not include any two-stage translocation option that would involve taking weaned pups born in the NWHI and releasing them in the MHI.**

The change in Preferred Alternative from Alternative 4 to Alternative 3 was based upon current information indicating that monk seal monitoring and intervention capabilities, which would be essential for successful two-stage translocation of seals from the NWHI to the MHI (as proposed under Alternative 4) require further development and refinement. Alternative 3 will allow NMFS the opportunity to further develop and refine the necessary monitoring and intervention capabilities. During this time, NMFS also intends to conduct other important seal research and enhancement activities and to engage the public in an effort to address concerns raised during the Draft PEIS public comment process, especially concerns related to the two-stage translocation process.

Since NMFS proposed the two-stage translocation action during the development of the Draft PEIS, seal research and response work in the MHI have provided a better understanding of the complexities of tracking, monitoring, and responding to seals that require assistance or intervention. For example, numerous seals get hooked while interacting with nearshore fisheries each year, or may be injured in other ways and require care. Also, some seals develop undesirable behaviors, such as interacting with people in the water, with fishermen, their gear or their catch. NMFS does not expect that seals which might be translocated from the NWHI to the MHI as proposed under Alternative 4 would be any more likely to require intervention than seals that were born in the MHI. Still, some translocated seals likely would occasionally require response activities and if NMFS were unable to fulfill that need, it could have both negative effects on the seals involved and potentially degrade support for monk seal recovery among the MHI public. Therefore, until such time that NMFS and its partners have built sufficient capacity to adequately monitor and respond to seals requiring attention in a timely and effective manner, NMFS has decided it would be better not to bring additional seals from the NWHI to the MHI, even temporarily.

It is important to emphasize that NMFS maintains that two-stage translocation will be a very promising science-based tool for monk seal recovery. Indeed, this tool may be actively employed under Alternative 3 within the NWHI, within the MHI, or from the MHI to NWHI, ***but not from the NWHI to MHI***. For the reasons described above, NMFS believes the latter option, which would be allowed under Alternative 4, is not feasible to implement at the present. As such, Alternative 3 (Limited Translocation) has been selected.

MITIGATION MEASURES AND MONITORING

Section 1505.2(c) of the CEQ regulations state that the Record of Decision (ROD) shall state whether all practicable means to avoid or minimize environmental harm from the alternative(s) selected have been adopted, and if not, why they were not. To improve NEPA effectiveness, CEQ also recommends that federal agencies conduct extensive monitoring to confirm their predictions of impact, to ensure the effectiveness of their mitigation measures, and to adapt projects to account for uncertainties in impact prediction. Neither NEPA nor CEQ provides specific guidance on how to develop monitoring programs but do state that such monitoring should be reflected in the ROD when an EIS is prepared.

Mitigation and Monitoring of Permitted Actions on Hawaiian Monk Seals

The NMFS PIFSC has a long history of conducting research on, and enhancement for, Hawaiian monk seals using a highly trained staff that adheres to protocols designed to minimize the risk of all activities to monk seals. Details of mitigation measures that have been employed for ongoing activities and those that will be implemented for new activities are in Section 2.5 of the Final PEIS. In that section, descriptions of mitigation measures specific to each type of activity are provided. Additional detail is provided regarding vaccination (Appendix D), a decision framework for two-stage translocation (Appendix E), health screening and quarantine procedures (Appendix F), and development of a behavioral modification program (Section 5.4). In addition to these mitigation measures, the NMFS PIFSC maintains a long-term monitoring program where researchers record whenever a seal is disturbed in association with research and enhancement activities and keep detailed records on all events that involve capturing and handling of monk seals. These records, along with the long-term marking and resighting of individually identifiable seals, have been, and will continue to be, reviewed to evaluate whether research and enhancement activities have deleterious effects on monk seals. This mitigation and monitoring is an important component of Alternative 3 (Preferred).

Mitigation to Avoid Potential Negative Effects of Issuing a Research and Enhancement Permit

Further description of how mitigation measures would be implemented in monk seal research and enhancement is presented in Section 2.6 of the Final PEIS. Mitigation of potential effects occurs as a matter of following protocols as described above. Moreover, mitigation is required by general terms and conditions specified in the research and enhancement permits issued by the NMFS OPR. In addition to general terms and conditions common to all research and enhancement permits, there are a number of special conditions for activities conducted on Hawaiian monk seals. All permits issued by NMFS for research on marine mammals and ESA-listed species require annual, incident, and final reports from permit holders to monitor permit compliance. These reports include data on how many seals are "taken" by different activities each year, how the seals reacted, and if any seals were injured or died during the permitted activities. Regulatory requirements for issuance of research and enhancement permits, general terms and conditions, and special conditions can be found in Section 2.11 of the Final PEIS. Such requirements and terms and conditions would be included in all permits issued under the Preferred Alternative 3.

Mitigating Potential Impacts to Cultural Resources, Cultural Practices, and Historical Properties

NMFS intends to implement mitigation measures designed to mitigate potential adverse impacts to cultural resources and practices, and historic properties, including traditional cultural properties under Alternative 3 (Preferred). An overview of these mitigation measures can be found in Section 5.5 of the PEIS and further description is provided in Appendices L and M. Mitigation will include coordination with the Hawai'i State Historic Preservation Division, in order to avoid impacting known historic properties when planning and conducting Hawaiian monk seal research and enhancement activities. NMFS staff and volunteers conducting monk seal recovery actions will also receive training as needed in the recognition and avoidance of archaeological and cultural sites. NMFS will also develop protocols for dealing with the removal of Hawaiian monk seals if they should enter traditional fishponds.

In the NWHI, permits are required for access to conduct Hawaiian monk seal research and enhancement activities within the Papahānaumokuākea Marine National Monument. Any activities associated with monk seal recovery actions undertaken within the NWHI must therefore comply with Monument regulations and procedures regarding the significance of Monument resources to Native Hawaiians and prohibitions against disturbing any cultural or historic property.

Consultation under Section 7 of the Endangered Species Act

The NMFS Endangered Species Interagency Consultation Division (ESA Division) issued a Biological Opinion on February 27, 2014. The Biological Opinion concluded that the proposed action (permitting and implementing activities described in Alternative 3) is not likely to jeopardize the continued existence of the Hawaiian monk seal, and is not likely to destroy or adversely modify designated critical habitat of the Hawaiian monk seal. The Biological Opinion stated that the research and enhancement program addresses nearly every aspect of the Hawaiian monk seal recovery plan, the monitoring efforts are extensive, and the program makes every effort to minimize impact to the species. Therefore, the NMFS ESA Division provided no conservation recommendations.

The NMFS Biological Opinion also concluded that the proposed action may affect, but is not likely to adversely affect the following ESA-listed cetacean species: sperm whale (*Physeter macrocephalus*), blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), humpback whale (*Megaptera novaeangliae*), sei whale (*Balaenoptera borealis*), and main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*); and turtle species (in-water): green sea turtle (*Chelonia mydas*), hawksbill sea turtle (*Eretmochelys imbricate*), leatherback sea turtle (*Dermochelys coriacea*), loggerhead sea turtle (*Caretta caretta*), and olive ridley sea turtle (*Lepidochelys olivacea*).

The NMFS ESA Division also issued a Conference Opinion for coral species proposed to be listed under the ESA and concluded that the PIFSC and OPR have insured that their action is not likely to jeopardize the continued existence of the following ESA-proposed threatened species: fuzzy table coral (*Acropora paniculata)*, blue rice corals (*Monitpora flabellate*, *M. dilatata*, *M. turgescens*) and sandpaper rice corals (*M. patula* and *M. verrilli*).

The U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion on February 20, 2014. The Biological Opinion concluded that the proposed action is not likely to jeopardize the continued existence of Laysan finch (*Telespyza cantans*). No critical habitat has been designated

for this species. A reasonable and prudent measure and terms and conditions were identified to mitigate incidental take of Laysan finch. These include requirements such as:

- Minimizing the potential for harassment, harm, or mortality of Laysan finch by securing field camp gear and tents to prevent finch entrapment and following quarantine protocols to minimize invasive species and disease;
- Reporting to the USFWS if take occurs by harm or mortality and apply avoidance or minimization measures to reduce future risks; and
- Submitting dead Laysan finches for appropriate sampling.

These measures, as described in the Biological Opinion, will be adopted under Alternative 3 (Preferred).

The USFWS also concurred that the proposed action may affect, but is not likely to adversely affect, the green turtle (*Chelonia mydas*) on land, the Nihoa Miller bird (*Acrocephalus familiaris kingi*), the Laysan duck (*Anas laysanensis*), and the short-tail albatross (*Phoebastria albatrus*). These determinations were made in consideration of researchers following best management practices as described in the Biological Opinion. These best management practices will be adopted under Alternative 3.

All practicable means to avoid or minimize impacts associated with implementation of Alternative 3 (Preferred) have been adopted.

CONCLUSION

Through the NEPA process and as documented in this ROD, NMFS has considered the objectives of the proposed actions and analyzed a reasonable range of alternatives to address these objectives. The impacts of these alternatives on the human environment were evaluated. NMFS considered public and agency comments throughout the NEPA process. Taking all these factors into account, NMFS has decided to implement the Hawaiian monk seal research and enhancement activities included in the Final PEIS under Alternative 3 (Limited Translocation). The actions conducted under this alternative effectively meet NMFS's mandates under the MMPA and ESA while minimizing potential environmental impacts from the proposed actions.

Contact Person

Further information concerning this ROD may be obtained by contacting Amy Sloan, NMFS, OPR, Silver Spring, MD 20910, (301) 427-8401.

Signed _____ Date 6-10-14

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