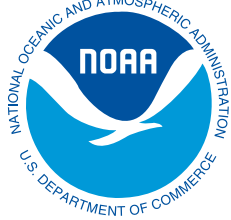


Prepared for:



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## Programmatic Environmental Impact Statement Executive Summary

Hawaiian Monk Seal Recovery Actions

August 2011



**Hawaiian Monk Seal Recovery Actions Programmatic  
Environmental Impact Statement  
Executive Summary**

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National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
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Abstract: The National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Services (NMFS) is the Federal agency responsible for management of Hawaiian monk seals under the Endangered Species Act (16 United States Code [U.S.C.] 1531 et seq.) and the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.). As part of their management responsibilities, NMFS funds and conducts research and enhancement activities on endangered Hawaiian monk seals in the Northwestern Hawaiian Islands and Main Hawaiian Islands. NMFS proposes to implement research and enhancement actions identified in the Hawaiian Monk Seal Recovery Plan (NMFS 2007), with the goal of conserving and recovering the species. This Programmatic Environmental Impact Statement (PEIS) provides decision-makers and the public with an evaluation of the environmental, social, and economic effects of the proposed program and alternatives to the proposed action. The agency's recommended Preferred Alternative (Alternative 4) encompasses a broad scope of research and enhancement activities that would yield greater survival benefits to the species over the long-term than would be expected under the other alternatives.

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## *LIST OF ACRONYMS*

ESA	Endangered Species Act
FR	Federal Register
MHI	Main Hawaiian Islands
MMPA	Marine Mammal Protection Act
Monument	Papahānaumokuākea National Monument
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NWHI	Northwestern Hawaiian Islands
PEIS	Programmatic Environmental Impact Statement
U.S.	United States
U.S.C.	United States Code
UDP	Unanticipated Discovery Plan
WNV	West Nile Virus

This executive summary provides an overview of the Hawaiian Monk Seal Recovery Actions Programmatic Environmental Impact Statement (PEIS). The PEIS presents:

- The purpose and need for action;
- A reasonable range of alternatives that fulfill the purpose and need for this proposed federal action;
- An overview of public scoping comments received during the October 2010 scoping period;
- An evaluation of the type and range of direct and indirect effects associated with Hawaiian monk seal research and enhancement activities that may be implemented in future research permits;
- The contribution of research activities to the cumulative effects on species and resources likely to be affected by these activities, including effects from past, present, and reasonably foreseeable future events and activities that are external to the research activities; and
- Recommendations, monitoring plans, and processes for proposed new research and enhancement activities that include considerations for continued and improved stakeholder and community involvement.



The National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Services (NMFS) is the Federal agency responsible for management of Hawaiian monk seals under the ESA (16 United States Code [U.S.C.] 1531 *et seq.*) and the Marine Mammal Protection Agency (MMPA) (16 U.S.C. 1361 *et seq.*). As part of their management responsibilities,

NMFS funds and conducts research and enhancement activities on Hawaiian monk seals in the Northwestern Hawaiian Islands (NWHI) and Main Hawaiian Islands (MHI).

Hawaiian monk seals have experienced a prolonged population decline. Thus, in 1976, Hawaiian monk seals were listed as “endangered” under the Endangered Species Act (ESA) (41 Federal Register [FR] 51611) and “depleted” under the MMPA. The Hawaiian monk seal is the most endangered pinniped species in United States (U.S.) waters and the second most endangered pinniped in the world. The most recent (2009) and best estimate of total abundance is 1,125 seals

(Carretta *et al.* in prep.), and the number is declining at approximately 4.5% per year. The population is many times larger in the NWHI than in the MHI. However, the MHI population is increasing and juvenile survival rates are higher than in the NWHI.

Hawaiian monk seals occur on islands, atolls, and emergent reefs throughout the Hawaiian Archipelago, from Kure Atoll to Hawai'i Island, a distance of over 2,500 km (approximately 1,553 miles). The seals forage in (search for food) and transit, the waters surrounding and between all land areas. Intermittent sightings of Hawaiian monk seals have also occurred at Johnston Atoll, approximately 800 km (approximately 497 miles) south of the Hawaiian Archipelago.



**ES-2.0**      **PROPOSED ACTION**

Section 4(f) of the ESA requires NMFS to develop and implement a recovery plan for the conservation and survival of this critically endangered species. NMFS' proposed action includes implementation of research and enhancement actions (as described in Section ES-5.0, below) identified in the Hawaiian Monk Seal Recovery Plan (NMFS 2007), with the goal of conserving and recovering the species.

**ES-3.0**      **PURPOSE AND NEED**

The purpose of implementing recovery activities (research and enhancement) for Hawaiian monk seals is to promote the recovery of the species population to levels at which ESA protection is no longer needed.

The need for this action is rooted in fundamental biological and ecological factors that are now limiting the population. A comprehensive research program enables NMFS to recognize, and possibly quantify, factors limiting the population in order to designate appropriate actions to minimize human-induced impacts and other factors affecting seal survival. Data and analyses derived from research lead to improved decision-making, and strategic management and enhancement activities that promote population recovery, prevent harm, and avoid jeopardy or continued disadvantage to the species. Research and monitoring will continue to play a key role in determining whether enhancement activities achieve their desired outcomes.



#### ES-4.0

### ISSUES RAISED DURING SCOPING AND ADDRESSED THROUGHOUT THE PEIS

The National Environmental Policy Act (NEPA) scoping process for this PEIS was initiated when the Notice of Intent (NOI) was published in the Federal Register on October 1, 2010 (75 FR 60721). The NOI requested public participation in the scoping process and presented information to stimulate public discussion, such as a statement of purpose and need for the proposed action and preliminary alternatives.



The preliminary alternatives were initial concepts developed by the PEIS project team prior to scoping and were to serve as the basis to begin a discussion. These preliminary alternatives were presented during scoping and the project team collected comments and insight about potential effects of these alternatives as well as ideas for different alternatives. Substantive comments received

during the scoping process raised issues that have been addressed and incorporated throughout this PEIS. A Scoping Summary Report was published on the project website in January 2011 and is included as Appendix B to this PEIS.

#### ES-5.0

### ALTERNATIVES

Three action alternatives and a no action alternative were developed and analyzed in this PEIS. The four alternatives carried forward for detailed analysis vary by management policy, including the types and level (*i.e.*, number of animals or procedures) of research and enhancement activities that would be permitted under each alternative. Different thresholds for “acceptable” levels of mortality are also associated with the range of research activities. Additional detail about the alternatives can be found in Chapter 2.

#### Alternative 1: Status Quo

Under the Status Quo Alternative, the current NMFS Research and Enhancement Permit (permit number 10137) would continue until its expiration in 2014.

New permits or permit amendments for levels and types of research the same as currently permitted would be approved. New permits or amendments would not be approved if it were determined that issuance would exceed ESA jeopardy or

adverse modification thresholds when expected effects were added to existing research, enhancement, and other activities in the baseline at the time the application was received.

Research and enhancement activities allowed under the Status Quo Alternative are listed in Table 2.10-1 and include those that have been carried out consistently for decades (*e.g.*, land-based surveys and marking), newer research (*e.g.*, de-worming studies), and ongoing mitigation for mortality (*e.g.*, disentanglement). No new activities nor an expansion of the scope of existing activities would occur under the Status Quo Alternative.

### **Alternative 2: No Action**

The No Action Alternative would only allow Hawaiian monk seal research and enhancement activities to continue until the existing permit expires in 2014. No new permit would be issued to replace permit 10137 when it expires, nor could that permit be amended to allow modifications in research or enhancement activities, sample sizes, or objectives. After expiration of the permit, all research and enhancement activities requiring a permit would cease.

### **Alternative 3: Limited Translocation**

Alternative 3 would include all currently permitted activities and address the recommendations of the Hawaiian Monk Seal Recovery Plan (2007) by including some new research and enhancement activities not currently permitted. Activities not currently permitted that would occur under Alternative 3 are provided in Table 2.10-1 and include, but are not limited to:

- Expanded surveys and utilization of new tools (such as remote cameras, and unmanned remotely operated aircraft).
- Vaccination studies and potential implementation of vaccines to mitigate infectious disease.
- Potential implementation of de-worming as a tool to improve juvenile Hawaiian monk seal survival.
- Expanded scope and number of seal translocations, including:
  - Taking seals with unmanageable human interactions from the MHI to NWHI;
  - Taking seals age 3 years and older 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 (excluding from the NWHI to the MHI). This translocation would include the option of returning the translocated seals to their birth location or nearest appropriate site (excluding returning seals from the NWHI to the MHI) at age 3 years and older. Details of the translocations would be

determined by a decision framework that is described in Section 5.3 and Appendix E.

- Supplement monk seal diet using feeding stations in NWHI locations where seals are released after being cared for in captivity.
- Research to develop tools for modifying undesirable Hawaiian monk seal behavior (referred to as behavior modification) related to interactions with humans and fishing gear in the MHI. If proven effective by research, these tools would be implemented.
- Chemical alteration of aggressive male monk seal behavior using a testosterone agonist.

In anticipation of a variety of public concerns about bringing seals to the MHI, such as interactions with fisheries and increased human-seal encounters, NMFS has designed Alternative 3 such that translocations of young animals from the NWHI to the MHI would not be permitted. This feature distinguishes Alternative 3 from Alternative 4.

#### ***Alternative 4: Enhanced Implementation (Preferred Alternative)***



Alternative 4, the enhanced implementation alternative, is the Preferred Alternative. This alternative would encompass all the activities permitted under Alternative 3, with the addition of the option for temporary translocation of weaned pups from the NWHI to the MHI. At age 3 years, any surviving translocatees would be returned to

the NWHI. The decision framework (Section 5.3 and Appendix E) used in Alternative 3 for conducting translocations would also be used under this alternative. A distinguishing factor of this alternative is that seals may be temporarily translocated from the NWHI to the MHI during the first few years of their lives.

Alternative 4 encompasses the range of actions considered most promising to prevent the extinction of the species. It encompasses a very broad and ambitious research and enhancement program, including research on population biology, ecology, health studies, foraging research, and a suite of enhancement tools designed to mitigate existing and emerging threats to the species. Full implementation of this alternative would require more funding and additional support of new and existing partners in monk seal recovery.

#### ***Alternatives Not Carried Forward for Analysis***

The scoping process highlighted additional considerations for alternatives. Two alternatives were considered that were not carried forward for analysis in this

PEIS. One alternative considered but discarded was to reduce populations of large predatory fish in the NWHI (Papahānaumokuākea Marine National Monument [Monument]) 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.

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. Construction, operation, and maintenance of such a facility in the NWHI would be cost prohibitive and logistically challenging, making this alternative not reasonable.

## ES-6.0

### SUMMARY OF ENVIRONMENTAL CONSEQUENCES

The direct and indirect effects, or environmental consequences, of the alternatives to the human environment were analyzed for each alternative. Each alternative was also evaluated to determine its contribution to cumulative effects on each resource.

Table ES-1 summarizes the direct, indirect, and cumulative effects under each alternative for all resources where environmental consequences were evaluated. Detailed analyses and discussions of effects can be found in Chapter 4.

The effects (both beneficial and adverse) of each alternative on a range of biological and socio-economic resources was analyzed and categorized on a scale ranging from *negligible* through *major*. A summary of the analysis results is presented in Table ES-1. The totality of these analyses was very complex; for some resources several types of effects (for example, on mortality, reproduction, habitat, *etc.*) were analyzed, and for each resource direct, indirect and cumulative effects were evaluated. Because of this complexity, it can be a challenge to sort out the main conclusions. In order to do so, it is useful to first dispense with all the effects that were found not to differ among alternatives, and then to focus on just how the alternatives were distinct in terms of their effects.

Among the biological resources, all effects on sea turtles, cetaceans, and fish species were found to be *negligible* for all alternatives. Likewise, among socio-economic resources, all effects on fishing (commercial, subsistence and recreational), environmental justice, and military resources were determined to be *negligible* for all alternatives. Effects on birds and invasive species ranged from *negligible* to *minor adverse* and were identical for Alternatives 1, 3 and 4. A distinction was that under Alternative 2 (No Action), all effects on birds and invasive species were found to be negligible. Similarly, effects on cultural and

historic properties were deemed *minor adverse to negligible* and were identical for all the Action Alternatives (1, 3, and 4), and *negligible* for the No Action Alternative (2). Recreation and Tourism effects were *negligible* for Alternatives 1 and 2, but were *moderate beneficial* for Alternative 3 and 4. The latter result was due to potentially increased wildlife viewing alternatives coupled with reduced negative human-seal interactions as a result of seal behavioral modification and translocation of seals that may become socialized to people.

The greatest distinction among the alternatives was their effects on the Hawaiian monk seal, the species which is the subject of the research and enhancement activities proposed. Three types of effects on Hawaiian monk seals were analyzed for each alternative:

- Effects on Mortality;
- Effects on Reproduction; and
- Contributions to Conservation Objectives.

The mortality and reproductive effects are adverse effects to the species, and those are counter-balanced by the beneficial effects of contributing to conservation objectives and recovery of the species in the long-term.

Mortality effects were analyzed by evaluating how much the proposed lethal takes of seals allowable under each alternative



would likely affect the species population in the future. Because Alternatives 3 and 4 involve a broader array of research and, especially, enhancement activities, there are greater associated risks of mortality. For that reason, mortality effects of Alternatives 3 and 4 were found to be *minor to moderate adverse*, slightly greater than the *minor adverse* effects under Alternative 1. Alternative 2 had *negligible* mortality effects because all permitted take of seals, including accidental lethal take, would cease after 2014. In the context of the many other natural and human-caused sources of monk seal mortality, the cumulative effects of Alternative 1, 3 and 4 mortality was determined to be *minor adverse*.

Reproductive effects under all alternatives were determined to be negligible. This was concluded based upon past research and publications that show the types of activities proposed have not had any detectable reproductive effects on Hawaiian monk seals or other seal species. Also, very cautious protocols that would be used by NMFS (for example, not capturing pregnant or nursing females and minimizing disturbance of mother-pup pairs), make any reproductive impacts exceedingly unlikely.

Contributions to conservation benefits varied among the alternatives. Under Alternative 1, status quo activities would continue to make *moderate beneficial*

contributions, but not at a level that would be expected to make significant progress toward recovery. Alternative 2 would clearly lead to *major adverse* effects on conservation, because nearly all research and enhancement activities would cease after 2014. The broader scope of research and enhancement under Alternatives 3 and 4 led to both being categorized as resulting in *major beneficial* effects for conservation. Among those two alternatives, the only distinction is that Alternative 4 would allow for the option of temporary translocation of weaned pups from the NWHI to the MHI, followed by a return to the NWHI after age 3 yr. Given recent differences in survival between the NWHI and the MHI, Alternative 4 would yield greater survival benefits to the species over the long-term than would be expected under Alternative 3. Perhaps more importantly, due to uncertainties associated with environmental conditions, Alternative 4 is also preferred because it allows NMFS the greatest flexibility to design optimal translocation strategies adapted to future conditions.

Table ES-1 Summary of Direct/Indirect and Cumulative Effects

		Alternative 1: Status Quo	Alternative 2: No Action No Permit After 2014	Alternative 3: Limited Translocation (only MHI to NWHI or within each region)	Alternative 4: Enhanced Implementation (Preferred Alternative)
<b>HAWAIIAN MONK SEALS</b>					
<b>Mortality</b>	Direct/Indirect Effects	Minor Adverse	Negligible	Minor to Moderate Adverse	Minor to Moderate Adverse
	Cumulative Effects	Negligible contribution			
<b>Reproduction</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>Contribution to Conservation Objectives</b>	Direct/Indirect Effects	Moderate beneficial	Major adverse	Major beneficial	Major beneficial
	Cumulative Effects	Moderate beneficial contribution	Major adverse contribution	Major beneficial contribution	Major beneficial contribution
<b>SEA TURTLES</b>					
<b>Mortality</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>Reproduction</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			

		Alternative 1: Status Quo	Alternative 2: No Action No Permit After 2014	Alternative 3: Limited Translocation (only MHI to NWHI or within each region)	Alternative 4: Enhanced Implementation (Preferred Alternative)
<b>CETACEANS</b>					
<b>Mortality</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>Reproduction</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>FISH</b>					
<b>Mortality</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>BIRDS</b>					
<b>Productivity</b>	Direct/Indirect Effects	Negligible to Minor adverse	Negligible	Negligible to Minor adverse	Negligible to Minor adverse
	Cumulative Effects	Minor adverse contribution	Negligible contribution	Minor adverse contribution	Minor adverse contribution
<b>Survival</b>	Direct/Indirect Effects	Minor adverse	Negligible	Minor adverse	Minor adverse
	Cumulative Effects	Minor adverse contribution	Negligible contribution	Minor adverse contribution	Minor adverse contribution
<b>Habitat Alteration</b>	Direct/Indirect Effects	Minor adverse	Negligible	Minor adverse	Minor adverse
	Cumulative Effects	Minor adverse contribution	Negligible contribution	Minor adverse contribution	Minor adverse contribution



		Alternative 1: Status Quo	Alternative 2: No Action No Permit After 2014	Alternative 3: Limited Translocation (only MHI to NWHI or within each region)	Alternative 4: Enhanced Implementation (Preferred Alternative)
<b>INVASIVE SPECIES</b>					
<b>Spread of Invasive Species</b>	Direct/Indirect Effects	Minor adverse	Negligible	Minor adverse	Minor adverse
	Cumulative Effects	Negligible contribution			
<b>COMMERCIAL FISHERIES</b>					
<b>Commercial Landings</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>SUBSISTENCE FISHERIES</b>					
<b>Subsistence Catch</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>RECREATIONAL FISHERIES</b>					
<b>Recreational Catch</b>	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>CULTURAL AND HISTORIC PROPERTIES</b>					
<b>Archeological Sites</b>	Direct/Indirect Effects	Minor adverse	Negligible	Minor adverse	Minor adverse
	Cumulative Effects	Negligible contribution			
<b>RECREATION AND TOURISM</b>					
<b>Recreation</b>	Direct/Indirect Effects	Negligible	Negligible	Moderate beneficial	Moderate beneficial

		Alternative 1: Status Quo	Alternative 2: No Action No Permit After 2014	Alternative 3: Limited Translocation (only MHI to NWHI or within each region)	Alternative 4: Enhanced Implementation (Preferred Alternative)
Experience and Cost, and Public Safety	Cumulative Effects	Negligible contribution			
<b>ENVIRONMENTAL JUSTICE</b>					
Disproportionate Effects on Minority Populations	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			
<b>MILITARY ACTIVITIES</b>					
Military Activities	Direct/Indirect Effects	Negligible	Negligible	Negligible	Negligible
	Cumulative Effects	Negligible contribution			

**COLOR KEY**

	Negligible effect
	Negligible to minor adverse effect
	Minor adverse effect
	Minor to moderate adverse effect
	Major adverse effect
	Moderate beneficial effect
	Major beneficial effect



This PEIS addresses research and enhancement permit activities that are proposed in the foreseeable future. The process for preparing research and enhancement permit applications and how they would be reviewed for NEPA compliance using this PEIS is detailed in Chapter 5. Proposed research and enhancement permit activities identified and analyzed within the

Preferred Alternative will be subject to NEPA compliance review on a regular basis to determine whether activities conducted are within the scope of activities analyzed in this PEIS. Proposed research and enhancement permit activities not identified and analyzed in the Preferred Alternative will be subject to a separate NEPA compliance review, the level of which will be determined when the application is submitted.

#### *Monitoring Plans for the Two-Stage Translocation Process*

The proposed two-stage translocation strategy is an option included in Alternatives 3 (Limited Translocation) and 4 (Preferred Alternative), with Alternative 4 allowing the additional option of temporary translocation of NWHI pups to the MHI. The strategy is aimed at improving juvenile Hawaiian monk seal survival. A multitude of variables exist that contribute to uncertainty of outcomes, thus the translocation program would be monitored and guided by a complex and adaptive decision framework described in Appendix E. Many of the inputs to the decision framework rely on direct observation of key indicators such as population status, juvenile survival rates, and outcomes from previous translocation actions. Also, at various points in the decision framework, researchers would use a computer model (called a stochastic simulation model) updated with the most recent seal population data to estimate the likely range of benefits associated with different choices (that is, different source sites and nursery sites, or different numbers of seals).

#### *Plan for the Vaccination Process*

The proposed vaccination program is somewhat unique among the actions in this PEIS because it is designed to address a potential, rather than a realized, threat to the Hawaiian monk seal. There is great potential for infectious disease to have devastating effects on the species. Morbillivirus and West Nile virus

(WNV) are two viral diseases, with available vaccines, that pose a potential threat to monk seals.

The proposed vaccination activities (detailed in Appendix D) for Hawaiian monk seals involve two primary elements as follows:

- 1) Continue research to test these vaccines on captive seals, confirm the vaccines' safety, and determine whether the expected immune response occurs by following up with blood tests; and
- 2) Be prepared with response plans should a "trigger" occur (for example, a case of morbillivirus in a wild monk seal). Even in the case of such a response, vaccinations would be initially limited to the population perceived to be at immediate risk, and would be expanded only after confirmation of safety and efficacy.

Prophylactic (preventative) vaccination may be considered in the future, but only after careful and conservative testing indicates that such an approach would be safe and effective.

#### **Plan for Development of a Behavior Modification Program**

Chapter 2 includes a description of a variety of aversive and disruptive (noise, visual, tactile, etc.) stimuli that may be considered for behavioral modification. Behavioral modification techniques will be applied only in situations where wild seals are beginning to regularly demonstrate behaviors that put themselves or humans at risk. Some examples include (but are not limited to): regularly interacting with snorkelers, divers or other ocean users; or regularly interacting with fishermen or fishing gear. The behavior modification program will employ a graduated approach, with escalating levels of aversive stimuli or deterrents (or positive stimuli to redirect behavior) delivered in response to increasing persistence or aggression on the part of the seal.

#### **Unanticipated Discovery of Historic or Cultural Properties**

An Unanticipated Discovery Plan (UDP) will be developed for use during research and enhancement activities. In the event that historic or cultural resources are encountered in the course of executing research and enhancement activities, the UDP will provide guidance about how the resources should be handled to minimize effects.

#### **Coordination with Stakeholders and Communities**

Ocean-oriented stakeholders and community members, such as fishers, surfers, coastal properly managers, etc. are among those most likely to encounter monk seals or most likely to have unique knowledge or experience that would be useful for successful implementation of the proposed research and enhancement activities in the MHI. NMFS has established a number of new programs (as described in Chapter 5) to facilitate coordination with stakeholders while also

improving local support for and participation in the Hawaiian monk seal recovery efforts in the MHI.

Among the new initiatives are a Native Hawaiian liaison program, a cultural practitioner network program, and a community liaison program. Outreach and collaboration efforts with fishers and other community members are also underway. Accordingly, one initiative now under consideration is a pilot program intended to partner with a small group of boat and shore-based fishers to document and mitigate fishery-seal interactions associated with the various types of fishing gear and methods used extensively in the MHI. NMFS has also partnered with several hotels and resorts to conduct training with their staff and outreach with their guests. Another program which has grown significantly in recent years is the Marine Mammal Response Network in Hawai'i, managed by NMFS in partnership with several government and non-government partners. This network, which now has hundreds of trained volunteers and NMFS-funded coordinators on every island in the MHI except Lāna'i and Ni'ihau, responds to monk seals (and other marine mammals) that are reported to be sick, injured, entangled, or hooked.

#### *ES-8.0*

#### *NEXT STEPS*



This executive summary is a synopsis of the contents of the Hawaiian Monk Seal Recovery Actions Draft PEIS. Comments received during the public comment period on the Draft PEIS will be reviewed and considered when developing the Final PEIS. Following release of the Final PEIS anticipated in March 2012, NMFS will make its decision concerning

Hawaiian monk seal research and enhancement. NMFS will issue the Record of Decision approximately one month after the Final PEIS is released to the public. This decision document will conclude the NEPA process on the proposed action. For updates on the Final PEIS, please visit the NMFS project website at: <http://www.nmfs.noaa.gov/pr/permits/eis/hawaiianmonkseal.htm>.

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