

**COMMENTS ON FRAMEWORK FOR NATURAL RESOURCES SCIENCE PLAN FOR THE
PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT**

To: Managers of the Papahānaumokuākea Marine National Monument

From: KAHEA: The Hawaiian-Environmental Alliance, 'Ilio'ulaokalani Coalition, and The Sierra Club
National Marine Committee

Date: November 30, 2007

Thank you for the opportunity to submit the attached public comments on the framework for the draft Natural Resources Science Plan for the Papahānaumokuākea Marine National Monument, as presented at the Public Scoping Meeting in Honolulu, November 15, 2007.

We recognize that in this comment period, comments are being solicited specifically on the framework to be used in development of the draft Natural Resources Science Plan (scheduled for release for public comment in 2008), and we address the framework of five broad themes¹ presented at the Scoping Meeting substantively and in detail in our attached comments. (See “**Comments related to the Natural Resources Research Framework**” beginning on page 6, and “**Comments related to Framework Themes**,” beginning on page 7.) We note first and foremost that the five broad themes are not prioritized, and thus represent mere categories, or “buckets” into which research projects might fall. In theory, a research project could fall under any number of the framework themes or any number of other themes one might choose to define.

A meaningful framework for Natural Resource Science Plan for a resource management regime would and should define the pertinent research questions at hand and specifically identify information gaps and needs for restoration and management of the area under study. We must say that we are at a bit of a loss to comment, because there is little to nothing substantive on which to provide comment. Is “Biodiversity and Habitats” a valid “theme”? Possibly. It depends substantially on how this is defined, what the research under this category seeks to answer, and impacts proposed research methods under this theme might pose to the ecosystem under study.

In addition, we would like in our comments to call attention to a suite of basic concerns integrally related to the framework for the draft Natural Resources Science Plan. (See **Statement of Concerns**, beginning page 4.) It is clear that both this framework, and the resulting final Natural Resources Science Plan, will ultimately form an important component in the basis for selecting the specific research projects granted permits to access and conduct research activities in the Northwestern Hawaiian Islands. Thus, integral to this discussion are critical questions of: (1) *By what criteria will research projects be selected?* (2) *What types of research activities and practices will be allowed?* (3) *What “best practices” protocols will be required?* (3) *By what process and by whom will proposed projects be evaluated?*

We respectfully posit that no meaningful discussion of a framework for any research planning document can be had without substantively touching upon these critical and deeply interrelated issues.

Research by its nature varies in its level of intrusiveness and the potential harm posed to the research subject. Indeed, establishment and adoption of standard ethical research practices by reputable academic and research institutions have grown specifically out of a fundamental desire and mandate for researchers to conduct their investigations responsibly². Widely recognized is the clear potential for irresponsible research activities to harm the subject of its study. In the case of the study and research of the Northwestern Hawaiian Islands, state law has promulgated a strict “do no harm” standard to all activities—including research activities—permitted within the 3-mile State NWHI Refuge surrounding these fragile and extraordinary atoll ecosystems. Within the framework of co-management, this standard

¹ The five research “themes” presented were: (1) Ecological Processes and Connectivity, (2) Biodiversity and Habitats, (3) Human Impacts, (4) Indicators and Monitoring of Ecosystem Change, and (5) Modeling and Forecasting Ecosystem Change.

² The establishment of Institutional (also sometimes called “Ethical”) Review Boards under the federal 1974 Research Act is one common example. These boards grew out of early 20th century abuse by researchers (e.g., the infamous Tuskegee Syphilis Study) of the people being researched.

should be strongly upheld and reflected clearly in the framework, development, and implementation of the proposed Natural Resources Science Plan.

Research also varies in its level of usefulness. We must ask WHY a particular research question is of value—balanced against the potential harm or risk to the research subject. We assert that the most fundamental and highest value of the subject of research here—the Northwestern Hawaiian Islands—is its uniquely remote and pristine nature. This is perhaps most strongly exemplified in the extraordinary level of protections provided, towards creating a true refuge, or “Safe Haven,” as phrased in the film shown at the scoping meeting. Typical frameworks used to support multi-user management and resolve user conflicts are therefore not appropriate.

Risks and harms from research activities are real, and include (a) vessel groundings³, (b) catastrophic vessel spills of oil⁴ and other hydrocarbons⁵, (c) discharge of heavy metals, oil and grease, nitrogen, organics and phosphates in bilgewater and greywater, (d) formaldehyde, disease pathogens and hormone/pharmaceutical residues in blackwater, and (f) introduction of invasive species or coral disease pathogens and parasites from hull transport and/or laboratory operations and improperly disposed lab waste⁶, among others. We submit that the way to keep an area in its truly natural character is to restrict human activities to those required to protect endangered species, perform required restoration activities, or perform other activities directly related to protection of the area. In short, research activities should be limited to those with direct conservation value to this public trust resource.

A *well-prioritized* Natural Science Research Plan and plan framework implemented through a transparent, independent and unbiased permitting regime for selecting appropriate and responsible research are lacking in the current system of granting permits. Cumulative risks and real harms of the sum of research activities in the Northwestern Hawaiian Islands cannot be meaningfully addressed in their absence.

To this end, we provide the following outline as a guide to our comments in response to the Natural Science Research Plan framework scoping process.

³ Potential groundings pose a serious threat to coral reef ecosystems. As an example, nearly 10 years after the area’s designation as a National Marine Sanctuary, a vessel grounding destroyed 5,805 square meters of living corals and injured over 75,000 square meters of reef habitat, including fracturing of 644 square meters of coral reef framework ON Molasses Reef in the Florida Keys. (M/V *Wellwood* Coral Reef Restoration Monitoring Report, Monitoring Events 2004-2006. Marine Sanctuaries Conservation Series NMSP-07-02. June 2007.)

⁵ On October 11, 2007, between 2,000 – 4,400 gallons of diesel fuel spilled from the UH RV KAIMIKAI-O-KANALOA while docked at Pier 45 in Honolulu. (The vessel has a pending application for permit to access the NWHI State Refuge in the Northwestern Hawaiian Islands. (see http://www.hawaiiireef.noaa.gov/resource/EAs/SUMMARY_Subst.pdf)

⁶ In May 2006, during the first major research mission to the Northwestern Hawaiian Islands following the State establishment of the State NWHI refuge adoption of the “do no harm” standard for permitted activities, allegations surfaced that a researcher with the Hawai’i Institute of Marine Biology (HIMB) illegally cultivated coral onboard the vessel, dumped the water used in the experiment overboard as the vessel sailed between atolls, and cultivated coral disease bacteria in an incubator en route back to O’ahu. As of this date, the State has fined the researcher \$1,000 for one violation related to the transport of live organisms.

OUTLINE

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1. Risks and Impacts from currently proposed research activities	
2. “Co-Management” must uphold the strongest protections.	
3. A fully transparent public process is necessary to properly develop a Science Plan for this fragile public trust resource.	
4. An independent permit review panel is essential to ensuring responsible research necessary for conservation is supported and irresponsible, destructive research is avoided	
5. The framework of protections, including risk assessment, “best practices” protocols, and enforcement procedures must be in place <u>BEFORE</u> granting permits	
6. Best Practices Should Include: No Fishing, No Biosprospecting, and No Dumping of Wastewater or Contaminants	
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STATEMENT OF CONCERNS

Increase in permits for Research Activities that—without a granted research permit—would be considered illegal (e.g. coral harvesting)⁷ and inconsistent with conservation goals

Because research activities such as those involving “take” e.g. coral harvest require permits because they are considered generally illegal and prohibited in the Monument.⁸

Many research activities entail actions that can only be allowed by the granting of exceptional permits by the Monument by the state and federal trustee agencies. In other words, the actions requiring permits would otherwise be prohibited and illegal under the Proclamation and other laws regulating access to, and uses of, Monument natural resources. We are quite concerned that the Monument be protected, as intended by the Proclamation, as a natural area serving as a refuge for the natural resources there, which include the threatened Hawaiian monk seal and the Green sea turtle, and millions of birds. We are concerned that an increase in permits to research the NWHI will increase the amount of otherwise prohibited and unlawful activities within Monument waters, including the dumping of wastes into Monument waters by research vessels,⁹ the extraction of marine life, including coral (strongly protected under state law), and the use of fishing gear and recreational fishing by NOAA staff in Monument waters for personal consumption.

“Co-Management” must uphold the strongest protections

NWHI State Refuge regulations are the strictest body of laws protecting the NWHI region. State law requires that permits to access the NWHI Refuge be issued for activities which “do no harm” to the NWHI based on a “precautionary approach” to management decisions. This law applies to the most fragile near-shore areas of the new Monument, where most of the coral reefs lie. Co-management should support—not undermine—the state’s effort to protect these especially fragile areas. In fact, now that the entire NWHI ecosystem is managed collaboratively by state and federal entities, we recommend the application of the strictest measures to Monument waters.

A fully transparent public process is necessary to properly develop a Science Plan for this fragile public trust resource.

The risks of, and the need for, research projects involving access to the Monument must be carefully weighed through an open and public process, and a precautionary approach must – by law - be taken in the consideration of all permit applications, including research permits. The Monument should also have a citizens’ advisory committee, patterned after the NWHI Coral Reef Ecosystem Reserve Advisory Council, which, among other things, would provide a public forum for review of reports on the nature and frequency of research activities, as well as monitoring data related to direct, indirect, and cumulative impacts of such activities.

We underscore the fact that the NWHI Reserve Advisory Council voted, at its last public meeting in 2007, to allow the RAC Working Groups (which include interested members of the public) to engage in the chapter by chapter development of the Monument Management Plan. Development of the Science Plan would likewise benefit from meaningful Working Group participation. We urge that this process be set in motion and reiterate, as per our comments submitted on the Management Plan in June, our deep concerns about the near-complete loss of meaningful and routine public input into the development of management plans for what is *on paper* the most protected archipelago on earth.

In past years, public Working Groups – of which the NWHI *hui* is a member - have been part of the design process for NWHI planning, ensuring robust process from providing independent public input, especially in contrast to input solely from those with financial interests in researching the NWHI. The Co-trustees should rely on this proven methodology for developing this Science Plan. Unfortunately, the public was given only 15 days to review and comment on this proposed framework.

⁷ Research permits granted between 2005 and 2006 field seasons increased from 13 to 20 (each permit covers access and activities of a multiple number of people and can represent multiple vessel trips). Based on the Reserve Activities Overview in the Reserve Coordinator’s Report, of the 13 permits granted in 2005, nine (or 69%) allowed activities such as harvesting, tagging, and/or extraction, which—without granted permit—would be considered illegal or prohibited under 50 C.F.R. 404.7 and 404.11; Executive Order 13178 (2000). Because no official overview of permits issues for the 2006 field season has been released, is not possible to determine the number which involved permitting otherwise illegal or prohibited activities.

⁸ See, 50 C.F.R. 404.7 and 404.11; Executive Order 13178 (2000).

⁹ As the NOAA-sponsored film shown at the November 15 Scoping Meeting stated, the dumping of wastes into Monument waters is banned by the Monument Proclamation. The 2000 and 2001 NWHI Executive Orders also banned waste dumping inside the NWHI Reserve (approximately the same area as the Monument.)

An independent permit review panel is essential to ensuring responsible research necessary for conservation is supported and irresponsible, risky research is avoided.

The natural resources of the NWHI are public trust resources, and the public interest in their protection requires that the permitting processes for the NWHI be open and transparent, and subject to review by independent reviewers, including independent scientists,¹⁰ Native Hawaiian cultural practitioners, and conservation representatives, given the legal requirement that conservation is the primary purpose of the protective regulations.

In order assure that permit review is scientifically robust and adequately protective, the Co-trustees should establish an independent, expert permit review panel to evaluate and make recommendations on all permits to access the NWHI. This panel should be composed of coral reef ecologists and marine biologists with expertise in tropical marine pathogen transport and impacts, potential impacts of vessel discharge on tropical coral ecosystems and at least one of the following areas: marine mammal science, coral reef ecology, native marine flora and fauna of Hawai`i. This panel should also include Native Hawaiian cultural practitioners and representatives of conservation organizations with experience related to NWHI conservation. This is an appropriate mechanism to assure an appropriate, fair, and rational process to review permit applications and implement a strong research program for the NWHI, including a substantial public comment period (45 – 60 days) on all permit applications.

Unfortunately, research permits are currently granted without the evaluation and recommendation of an independent, expert review panel. Thus, some research proposals have been approved despite legitimate challenges to the scientific value of the proposed activity from permit reviewers and other agency researchers. Permits were granted to longline for sharks in monk seal foraging grounds, although permit reviewers found that "the proposed activity is at odds with the ecological activity, overall purposes and goals" of the Monument, and that "the proposal has very little research value."¹¹

Research proposals have been approved over the past two years despite clear input by independent scientists (i.e. those with no financial link to the research) that "*there is a potential risk of accidental introduction of a non native coral into O`ahu waters, and there is the potential risk of the accidental introduction of pathogenic microbes deleterious to corals into O`ahu waters*"... with "possible disastrous consequences of a release of non-indigenous coral disease from this importation."

With the advice of an independent, expert review panel, the Co-trustees can make well-informed, scientifically defensible decisions about what research is appropriate for the NWHI and what is not.

The framework of protections, including risk assessment, “best practices” protocols, and enforcement procedures must be in place BEFORE granting permits.

The old adage “an ounce of prevention is worth a pound of cure” is wise advice for managing the irreplaceable cultural and natural resources of the NWHI. One mistake can introduce an invasive species or disease pathogen or parasite, forever undermining the goal of permanent protection for this natural wonder. Therefore, managers should take every step possible to protect against the harms inherent to human activity in the NWHI. This means conducting an independent risk assessment of research activities before granting research permits; establishing best practices and strictly enforcing them, and upholding common sense protective practices like the NMFS/USFWS ban on “sustenance” recreational fishing.

Unfortunately, no formal risk assessment of activities in the NWHI has been made public. What is public, however, are reports of shipwrecks, apparently illegal disease bacteria cultivation, and routine wastewater dumping associated with research operations.¹² Unfortunately, environmental assessments are conducted by government entities and therefore do not meet the standard of independence necessary for assessing the risk of proposed research activities. It is crucial to establish this framework of protections now because of the enormous risks posed by current research activities in the NWHI.

¹⁰ The NWHI Executive Orders require scientists with voting rights on the RAC to be “non-federal scientists” (educators must be “non-federal educators”) to avoid the lasting conflicts of interest which have plagued Hawai`i ocean resource management for decades.

¹¹ Permit review comments submitted to the Board of Land and Natural Resources on May 25, 2007, re: permit application by Bud Antonellis to cull Galapagos sharks attacking pre-weaned monk seal pups.

¹² See, Board of Land and Natural Resources Enforcement Action dated January 12, 2007 for violations of permit # DLNR.NWHI06R008 issues to Greta Aeby on April 28, 2006.

Best Practices Should Include: No Fishing, No Biospecting, and No Dumping of Wastewater or Contaminants

No Sustenance Fishing. Both the National Marine Fisheries Service and the US Fish & Wildlife Service have protocols prohibiting fishing in the NWHI for consumption or recreation. The National Marine Sanctuary Program NWHI staff, however, have been strong proponents of allowing NMSP staff and researchers to fish in the Monument. There is currently a NWHI Co-Trustee permit pending for Land Board approval which would allow all agency staff, consultants, contractors to fish in Monument waters, despite the ban on doing so. This protocol should be reflected in the Monument Science Plan. It is crucial that before researchers are allowed into this unique marine ecosystem, we have in place all of the checks and balances to ensure that the permitting process is transparent, and that all enforcement procedures are properly followed.

No Bioprospecting. Bioprospecting is the collecting of biological material for the purpose of patenting or copyrighting or otherwise privately owning the right to use that material. It is our position that this method of taking and privatizing living resources undermines the purpose of protecting public trust resources, violates the intellectual property rights of Native Hawaiians, and contradicts the conservation goals of the Monument. The 2005 version of NOAA's Draft NWHI Sanctuary Management Plan contained a ban on bioprospecting, which has since been removed. We urge the reinstatement of this ban.

No Dumping of Wastewater or Contaminants. In October 2007, the Coast Guard reported that 4,400 gallons of diesel fuel were "unaccounted for" in the wake of a Pearl Harbor fuel spill from the 220-ft KA'IMIKAI-O-KANALOA, which is slated to depart for the NWHI carrying researchers who plan on **harvesting precious corals in the Monument**. A draft Environmental Assessment aimed at getting a permit for the vessel's NWHI cruise -- written a month before the spill -- stated that an oil spill would be "unlikely." In 2006, while on a research mission in the NWHI, researchers described the laboratory aboard NOAA's HI'IALAKAI as "**a bacterial cesspool.**"¹³ NOAA research vessels currently have permit applications pending for Land Board review with apparent requests to be allowed to violate the Monument ban on waste dumping in Monument waters.

NOAA's 2006 Draft NWHI Sanctuary Management Plan (the plan from which the Monument management plan will be developed) admitted that "The most persistent and significant threat to water quality in the ROI [Region of Influence] is the vessels that transit the area. Vessel traffic presents the risk of a large oil spill or release of cargo that could greatly impair the marine water quality of the affected environment." (Pg 3 – 87). This document also admitted the "multitude of wastes" produced by seagoing vessels, including among others, research vessels, and underscored the potential discharges from vessels, including sewage, gray water, bilge water, and solid wastes. The DEIS noted that gray water can include nitrogen, phosphates, copper, lead, mercury, nickel, silver, zinc, oil, grease, metals. (Pgs 3-84 to 3-87)

In 2003, more than 100 scientists convened by NOAA to identify the information needed to properly protect the NWHI agreed that human activity posed one of the greatest, yet easily controlled risks to this remote marine ecosystem.

We urge that the draft Natural Resources Science Plan to be developed will be broader in scope than the framework document was. There should be full public involvement in the development of each of the components of the Monument Management Plan. The Research Plan should be presented to the public in with other related Plans, especially those provisions of the Management Plan which the Monument managers and permitting agencies will need in order to set priorities among competing research projects, implement effective permitting controls on those research activities which are allowed, and provide ongoing monitoring and reporting of the nature, extent, findings, and impacts of such research projects.

Concerns regarding the Lack of Response to Public Input on Management Plan

We note with concern that there has been no response to the detailed comments on problems associated with the Monument Management Plan process and content submitted by organizations representing over 4 million members in June, 2007.

¹³ Id.

COMMENTS RELATED TO THE NATURAL RESOURCES RESEARCH FRAMEWORK

The scoping meeting presented the following five research “themes”:

- **Ecological Processes and Connectivity**
- **Biodiversity and Habitats**
- **Human Impacts**
- **Indicators and Monitoring of Ecosystem Change**
- **Modeling and Forecasting Ecosystem Change**

These themes are very broad and inclusive, and absent other considerations, could accommodate virtually any research project for which an investigator can obtain funding. The scoping meeting did not include a discussion of criteria by which research projects are prioritized, or the types research activities that are appropriate to the NWHI. The vast and pristine NWHI provides unlimited opportunities for proposing research projects—however, only a select few of these are and will be appropriate and/or serve the conservation goals with which management of the area has been established. Indeed, the Monument Proclamation prohibits many of the research project activities (i.e. coral harvesting) conducted within Monument lands and waters, except as allowed by permits granted by the co-trustees of the Monument (the State of Hawaii and the Departments of Commerce and Interior).

Any research activities requiring human access to the Monument involves risk to the natural resources there, including the endangered Hawaiian monk seal, the threatened green sea turtle, and countless other species for which the Monument is intended to provide refuge, or “Safe Haven,” as phrased in the NOAA film shown at the scoping meeting. Although the comments were solicited by the Managers of the Papahānaumokuākea Marine National Monument, there was very little in the scoping presentation dealing with the management issues entailed in permitting research activities within the Monument. **These issues include the means by which the Managers could prioritize research projects competing for the limited time period available for accessing the Monument and the limited land and near shore areas available to accommodate projects, and could obtain objective evaluations of the needs for proposed research projects and the risks which they would entail.** The framework does include a Human Impacts theme, which may include research relating to human impacts, including research activities, but even that kind of research may entail risks which could be avoided by adopting precautionary management practices and appropriate monitoring and reporting regimes.

A carefully-prioritized research plan is of vital importance to the protection of the NWHI ecosystem. We share the often-expressed concerns of the NWHI Reserve Advisory Council about the adoption of increasingly elaborate management structures to accomplish the primary goal of maintaining the NWHI in its natural character, especially when this includes extensive research activities which may themselves alter or even threaten the natural character the research is intended to define and measure. The need to define the characteristics of the natural character of the NWHI ecosystems appears to be based on a multiple use approach to management, wherein a complex management system is required to accommodate various potential uses of NWHI resources while attempting to prevent or mitigate damage to the natural character of the resources. We agree with scientists and RAC members who have testified that the best way to keep an area in its natural character is to restrict human activities to those required to protect endangered species, perform required restoration activities, or perform other activities directly related to protection of the area.

The scoping meeting referred to the document “**Information Needs for Conservation Science and Management of the Northwestern Hawaiian Islands,**” which was identified as an important product used to develop the proposed research science framework. The document was derived from the **I Ke Amio O Nāa Wa’a Workshop** conducted in Honolulu in May, 2003. We participated in that workshop, as did a hundred or so research scientists, and note the following:

- The workshop was conducted when the NWHI resources were managed under the NWHI Coral Reef Ecosystem Reserve designation. That designation allowed commercial fishing for bottom fish and, perhaps, lobster, to continue indefinitely (subject to caps on annual take). **The Monument Proclamation phases out commercial bottom fishing within five years, and requires the Secretaries (of Commerce and Interior) to set a zero annual harvest limit for any lobster fishing permit.** These provisions of the Proclamation require a major reassessment of the nature of research projects for the Monument, especially the need for those related to fishery

stocks, e.g. research on bottom fish and lobster stocks, and any research projects relying on extractive methods such as catch per unit effort. There are other research methodologies that are more appropriate for managing no-take areas. Resources previously allocated to fishery stock assessments should be reallocated to other research purposes and methodologies necessary for ensuring a fully protected marine ecosystem.

- Although the focus of the workshop was on information needs, all working groups identified the need to protect the NWHI natural resources from anthropogenic impacts, including potential impacts from research activities, and the need to monitor all activities for potential impacts. This was noted specifically on Page 21 of the document, which states “**There were also recommendations for risk assessments for the numerous types of human activities that take place in the NWHI, along with appropriate monitoring of these activities.**” Prevention and Mitigation were identified by researchers as an important sub-theme applicable to most, if not all, activities permitted within the NWHI, including research. Prevention is to be preferred over mitigation, once again emphasizing the need to couple any research plan with an effective permitting regime.

COMMENTS RELATING TO FRAMEWORK THEMES

• Theme 1: Ecological Processes and Connectivity

This theme is very broad and could encompass many “nice to know” topics not required to “manage” a natural area. Management of the Monument consists primarily of limiting human activities through a permitting process.

Where feasible, research projects in this category should use the least intrusive methodologies possible, such as remote sensing and similar approaches so as to avoid or minimize extractive activities or projects requiring access to the Monument.

Theme 2: Biodiversity and Habitats

This is also a very broad category, and one of the example projects, the Census of Marine Life, involved extensive extractive activities conducted in a variety of habitats within the Monument. Although the thousands of samples extracted were quite small in volume, the extraction required numerous divers operating over a wide area of the Monument. Divers and their equipment can be vectors for introducing invasive species. While it is of interest to know the “biodiversity of cryptic and understudied species,” it is a risky enterprise, which we do not find directly related to protection of Monument resources.

We do, however, support appropriate research related directly and specifically to identified conservation priorities, for example, the avoidance of inadvertent spread of disease by vectors including vessels and individuals, steps found necessary for the protection and recovery of protected species such as the Hawaiian monk seal.

We share concerns of the Marine Mammal Commission¹⁴ that it is, however, of vital importance to “identify what must be done to ensure that future research and monitoring activities have no more than negligible effects on monk seals.” We expand that observation to add “effects on ecosystem integrity”, following the state’s stringent “do no harm” requirement for permitting. We agree with the Marine Mammal Commission that there is a need for “precautionary research procedures as well as data collection and analyses to detect possible impacts [and]...ensure that studies do not adversely affect monk seals.” The MMC, by way of example, notes that “most seals are handled multiple times during their lifetime as part of research and monitoring efforts, and a potential for cumulative impacts therefore exists.” They call for an acknowledgement of the “possibility of [such] effects and [the need to] identify the steps that are currently taken to ensure that monk seal observation, handling, and instrumentation have negligible impacts on animals and population growth.” This is the sort of precautionary approach required for all aspects of ecosystem protection, not solely for research on monk seals.

¹⁴ Unless otherwise noted the citations in this section are from :MMC. Specific Comments and Rationale for Marine Mammal Commission Recommendations on the Draft Seal Recovery Plan for the Hawaiian Monk Seal, January 29, 2007

We feel that their conclusions and the insightful comments submitted by MMC member, Tim Ragen under separate cover are useful for NWHI research in general, for example¹⁵:

- The need to “identify what must be done to ensure that future research and monitoring activities have no more than negligible effects on monk seals” and, we would add, the rest of the ecosystem;
- A recommendation that “all the proposed monitoring and research activities should be reprioritized based on potential contribution to recovery, and that contribution should be expressed in the form of an explicit or specific recovery action that will enhance survival or reproduction” in the case of monk seal research. In the case of other research, we agree that a reprioritization should be based on contribution to specific, measurable conservation actions in response to specific conservation needs.

We also support the Marine Mammal Commission recommendation that researchers be provided with data sheets to allow them to record “any information with regard to evidence of seal disturbance during the course of research and the identification of the involved seals. Such information would be helpful for assessing evidence of both acclimation to research activities as well as subsequent behavior alterations or cumulative effects.” We recommend that this practice – requirement for logging observations of seal disturbance be applied to all researchers, since many of them are operating in shallow near-shore waters of monk seal foraging grounds.

Theme 3: Human Impacts

This theme includes research topics most relevant to the concerns we have raised regarding potential impacts of research activities included within the Framework. We stress, however, that it is preferable to avoid such impacts, rather than conduct research projects to “quantify” them.

This category does include some categories of human impacts which may, indeed, be “managed” by methods other than controlling access to the Monument. We agree, for example, that research into the sources of marine debris and methods for reducing the sources of marine debris and intercepting marine debris prior to its arrival to the most fragile areas of the Monument is useful.

We note that over the past two years since the NWHI permitting process has been opened to public scrutiny (primarily in the realm of state waters), we have not seen research permit applications for the specific study of human impacts in the NWHI. We posit -- echoing RAC sentiment -- that management of the NWHI is management of human activities and impacts, vessel traffic and interactions. We propose that this core category of research – including risk assessment of all on-going activities – take priority over activities.

Much of the current and proposed research appears to be federally funded and such funding appears to be often aimed at support for extractive research activities. We see no evidence of significant federal funding efforts to support the level of analysis of the impact of human activity in the NWHI, including the research footprint, as required to ensure conservation of the region. Evidence of any scientifically rigorous assessment of individual or cumulative impacts of research and vessel traffic in the NWHI has not been made public.

Typical of concerns include current extractive permit applications for NWHI activities such as the capture and tagging of up to 3,000 bottomfish by a commercial bottomfish fisher in closed no-fishing protected areas, including monk seal foraging areas, a plan to collect deep sea coral samples from submersible(s) launched from a vessel which just spilled between 2,000 – 4,000 gallons of diesel fuel into Honolulu waters and an astonishing permit for Monument Co-Trustees to allow an unlimited number of people (87 are listed, but the request is for unlimited numbers) to access the NWHI for unspecified, unnamed *research projects*, educational activities and a host of extractive, otherwise prohibited and illegal activities including dredging, killing, injuring, removing, moving, and harvesting NWHI resources.

The Co-Trustee permit application requests the right for all agency staff, contractors, consultants to be allowed to carry fishing gear (otherwise prohibited and illegal) and to engage in bottomfishing and pelagic fishing for their own pleasure. We note that that USFWS does not allow researchers to fish in its waters throughout NWHI refuges outside of Midway, and makes its researchers sign a “no fishing” agreement. DLNR does not allow fishing in state waters, and the National Marine Fisheries Service stated in 2006 that they have adopted a policy of no fishing in the Monument. The NOAA National Marine

¹⁵ The following are excerpts from Comments of Marine Mammal Commission member, Tim Ragen on Draft Seal Recovery Plan for the Hawaiian Monk Seal, January 26, 2007

Sanctuary Program Hawai'i office, however, continues to insist on the right of its employees and researchers to fish in the Monument.

We note that, in 2007, NOAA made a similar proposal before the State Land Board (unlimited access to state waters for undefined research activities, harvests, killing, taking, dredging, etc. but minus the fishing request) which was resoundingly rejected as incompatible with the protection of fragile state NWHI Refuge resources. Stringent permit conditions were applied to the NOAA permit by the Land Board which also required record-keeping in the form of an on-board log of all harvests. The agency was instructed to submit separate permit applications for any specific non-emergency research, education or otherwise prohibited activities that they wished to conduct in state waters. This year's permit application proposes not only to eliminate most of the precautionary Land Board requirements deemed necessary for the protection of State NWHI Refuge waters under stringent state law. It has also eliminated last year's requirement that NOAA (and Co trustees) must institute on-board log books to provide an official record of all harvest in the NWHI. The current permit proposal reflects the application of the weakest (Monument Proclamation) standards, instead of the most precautionary and stringent state law for state waters, as a result of Co-Management – a “race to the bottom”. The current application lumps NOAA together with UFSWS and DLNR (very different agencies, with very different scope of operations, and different legal requirements) and requests that the application of the weakest rules in the overlapping NWHI jurisdictions be applied all parties. **We underscore the importance of ensuring that the strongest rules and protective conditions apply to NWHI activities and that efforts to secure permits to allow the violation of Monument and Reserve protections regarding waste dumping, fishing and other activities be strenuously avoided.**

We would like to emphasize our **significant concern about the near-complete lack of funding and support for the most elementary risk-assessment analysis, including risk assessment measures which should be associated with and required for all activities in the NWHI.**

Theme 4: Indicators and Monitoring of Ecosystem Change

This is another potentially unlimited area for research, so there must be a process for prioritizing what research should be permitted under this category.

Regarding the example research project presented at the scoping session and titled “monitoring of lobster populations,” the need for such monitoring should be re-assessed given the effective prohibition of lobster fishing in the NWHI and given reports (made at a RAC meeting) that the commercial lobster trapping vessels used (at significant cost) to conduct the research used lobster traps which apparently may have been contaminated with highly invasive algae and may have served as a vector for the introduction of this algae at Nihoa and Mokumanamana. There are concerns that these vessels have insufficient waste management capacity to allow them to obey the “no dumping” requirements for the Monument.

Rather than continue to gather data through the extractive catch per unit effort (CPUE) approach used for commercial fishing stock assessments, the need for, and nature of, lobster population monitoring should be reassessed. Since the Monument's effective ban on future lobster fishing is the maximum management action available, and commercial fishing of lobster is banned, we can assume that lobster populations will rebound as best they can under present circumstances, and such rebound would be assisted by not removing more lobsters in the name of research. If research on the recovery of the lobster population is warranted, it should be for the purpose of gathering information relevant to the recovery of the Hawaiian monk seal and should use non-extractive means for estimating lobster populations in habitats accessible to monk seal pups in particular.

Theme 5: Modeling and Forecasting Ecosystem Change

This is another very broad category requiring prioritization. We do agree, however, that models for predicting the amount and location of future marine debris accumulation and forecasting effects of climate change (e.g. global warming and sea level rise) would be potentially valuable.

We respectfully submit the above as our comments and thank you again for the opportunity to provide input on the Natural Resources Science Plan Framework. We look forward to continued involvement with the management and planning processes for the fragile and unique natural and cultural resources of the Northwestern Hawaiian Islands.