## NORTHWESTERN HAWAIIAN ISLANDS CORAL REEF ECOSYSTEM RESERVE ADVISORY COUNCIL

10 August 2009

Ms. T. 'Aulani Wilhelm Reserve Superintendent, Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve 6600 Kalaniana'ole Highway, Suite 300 Honolulu, HI 96825

Dear Ms. Wilhelm:

At the 10 August 2009 meeting, the Northwestern Hawaiian Islands Reserve Advisory Council (RAC) discussed recommendations provided by the Research Subcommittee relating to the Draft Natural Resources Science Plan (NRSP) for the Papahanaumokuakea Marine National Monument (PMNM). In our review of the NRSP, we are generally supportive of the plan's prioritization of research related to protected species and invasive species. In addition, the RAC offers the following recommendations:

**Recommendation 1** (as recommended by the RAC in a X-X-X vote): Include the following language in section 2.5, on page 8 of the NRSP:

Research and monitoring activities must demonstrate consistency with the Vision, Mission, Guiding Principle and Goals of the PMNM Management Plan (MP) and, if applicable, must be consistent with the following findings and review criteria cited in the Proclamation establishing the PMNM:

- a. The activity can be conducted with adequate safeguards for the resources and ecological integrity of the monument;
- b. The activity will be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance monument resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects:
- c. There is no practicable alternative to conducting the activity within the monument;
- d. The end value of the activity outweighs its adverse impacts on monument resources, qualities, and ecological integrity;
- e. The duration of the activity is no longer than necessary to achieve its stated purpose;
- f. The applicant is qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct;
- g. The applicant has adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct;
- h. The methods and procedures proposed by the applicant are appropriate to achieve the proposed activity's goals in relation to their impacts to monument resources, qualities, and ecological integrity;
- i. The applicant's vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of this proclamation; and

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j. There are no other factors that would make the issuance of a permit for the activity inappropriate.

Priority will be given to research and monitoring activities that:

- 1) clearly address the management needs of the Monument and Co-Trustees, as identified in the management plan;
- 2) have been assessed with respect to its individual and cumulative impacts (risks) to Monument natural resources;
- 3) include impact monitoring protocols and appropriate safeguards for all phases of the activity.

**Recommendation 2** (as recommended by the RAC in a X-X-X vote): For the purpose of evaluating future research and monitoring proposals and plan modifications, we recommend that the science plan panel prioritization process maintains a numerical ranking system and addresses the questions below. In addition, the process should not automatically prioritize a research and monitoring activity as critical, because risks are associated with all activities and should be evaluated.

- How important is this research/monitoring activity to the future protection and conservation of Monument natural resources? Applicant must identify how a specific Action Plan strategy in the MP is supported by the research/monitoring activity.
- What are the potential risks to the future protection and conservation of Monument natural resources of conducting this research/monitoring activity?
- What are the potential risks to the future protection and conservation of Monument natural resources of NOT conducting this research/monitoring activity?
- Are there specific management actions that would change if this research/monitoring activity is conducted?

Additionally we recommend that you change from "Examples of research needs and opportunities" to "Current research priorities addressing management needs" throughout plan.

**Recommendation 3** (as recommended by the RAC in a X-X-X vote): The text and content of Table 2 should include a brief statement of what is known, what gaps the research fulfills, and what management action is likely to result from the research. Please use the examples listed as a template to complete the remaining descriptions:

## Table 2:

Habitats—Characterize intertidal zone habitats/communities

• Need a basic characterization of biodiversity (e.g. basaltic intertidal, rocky intertidal, and sand), to establish a baseline for one of the habitats that is most susceptible to natural or anthropogenic stressors (e.g. oil spills, human use, climate change, invasive species).

Native Species—Assess fish population characteristics

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 Documenting the geographic distribution and abundance of native fish species in order to understand trophic/energetic relationships, environmental drivers of productivity, and diversity.

Specially Protected Species—Evaluate methods to reduce predation on monk seals

• Evaluate methods to reduce shark predation on monk seals

Oceanographic Processes—Understand marine primary productivity

 Need an improved characterization of marine primary productivity, particularly as it relates to Pacific Decadal Oscillation as a driver of ecosystem structure and function, and climate change as a driver of ecosystem degradation

Page 15—Include the following bullets:

- Quantify population structure, size, and connectivity of intertidal species (e.g. opihi, a'ama crab), which may be proposed for cultural subsistence take but may exist in low numbers or with limited recruitment from outside sources.
- Characterize current abundance of invasive and/or alien species.

Page 18—Include in the description the prohibition of chemicals, toxins, and explosives in collection of cryptofauna in the Monument.

Page 59—Include a disclaimer that the themes are not listed in any particular order of priority. In the introduction, state that protected species and invasive species activities are generally given highest priority.

Page 63, bullet 8—While monitoring for high risk diseases should be a high priority, we do not believe that the evaluation and testing of vaccines is appropriate in the Monument.

**Recommendation 4** (as recommended by the RAC in a X-X-X vote): We recommend that the Monument comply fully with NEPA and prepare a programmatic EIS and/or individual project EAs/EISs to ensure that the environmental consequences, including cumulative impacts, of proposed research and other activities are fully evaluated and taken into consideration in the permitting process. When state agency actions are involved in a proposed activity, a Cultural Impact Assessment should also be prepared.

We hope you will give these recommendations full consideration.

Sincerely,

Timothy E. Johns Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council Chair

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