

**Finding of No Significant Impact for  
Research Activities Conducted by the Coral Reef Ecosystem Division  
Pacific Islands Fisheries Science Center, Coral Reef Ecosystems Division,  
Honolulu, Hawaii**

**National Marine Fisheries Service**

National Oceanic and Atmospheric Administration Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

Response: No. The primary research conducted is minimally-invasive monitoring of coral reef ecosystems and the knowledge gained is shared with resource managers and various public stakeholders to improve decision-making for the long-term conservation and management of coral reef resources. The proposed activities are not expected to jeopardize the sustainability of any target species. Samples and collections are secondary to observational data recording and done so as to not affect the sustainability but enhance the information available of these species. In addition, strict protocols are observed to ensure minimal disturbance to the environment during field activities and the research program is designed to obtain the needed data with the minimum environmental impact. The primary goal of the proposed research activities is to generate consistent qualitative research, thereby maintaining a healthy ecosystem.

2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

Response: No. Effects to non-target species will be negligible, as observations and collections of target species are specific and minimal with the methods that will be used. No ecosystem-level effects due to this research are anticipated given that the research is primarily observational with minute impact from specimen collections, therefore minimizing potential effects on a greater geographic scale.

3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMPs)?

Response: No. The proposed monitoring research methods are minimally invasive, none of which has substantial damaging effects on ocean or coastal habitats or essential fish habitat. No ecosystem-level effects due to this research are anticipated given that the research is primarily observational with minute impact from specimen collections, therefore minimizing potential effects on a greater geographic scale.

4) Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

Response: No. The proposed actions are not expected to have any impacts on public health or safety. This is largely due to the fact that the research is minimally invasive and will be conducted in often remote and mostly uninhabited areas. In addition, research protocols include stringent measures to protect divers and other researchers during field activities.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

Response: No. The proposed research activities are not expected to adversely affect endangered or threatened species or critical habitat, as defined under the Endangered Species Act of 1973. During field work, strict protocols to minimize impacts on protected species (e.g., ceasing all activity or getting out of the water when protected species are observed in the vicinity) are integrated into study design and implementation. In addition, the coral reef monitoring supports the research, conservation and monitoring of endangered and threatened species, marine mammals and critical habitat.

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: No. The research is intended to gather information and knowledge on the biodiversity and ecosystem functions in order to aid conservation and management. No species will be introduced that would affect ecosystem function in the affected area. Observational data and correlating specimen collections are intended to aid in the cataloging of biodiversity within the ecosystems studied. As a result, no substantial negative impact on biodiversity or ecosystem function is anticipated.

7) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No. The research is intended to be long-term monitoring that aids in the management and conservation decisions of the regions observed and would have no negative impact on social or economic activities in the affected areas.

8) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No. The research is minimally invasive and the goal is to gather data to support conservation efforts. The procedures, methods and mitigation measures that are proposed in this document have been extensively used, tested, and are accepted techniques.

9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

Response: No. Although some of the areas where research is conducted are located within Marine National Monument waters and/or National Wildlife Refuges, the proposed research activities are not conducted in a manner where the near environment of any unique geographic or cultural features would be adversely affected. The research is primarily observational and therefore the proposed actions will not result in any significant impacts to these areas.

10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No. The procedures, methods and mitigation measures that are proposed in this document have been extensively used, tested, and are accepted techniques that follow all NOAA dive and boating regulations.

11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: No. The cumulative observations and collections involved with the proposed action are primarily monitoring efforts that aid in the understanding and management of the regions surveyed. Adverse impacts to target and non-target species will be avoided and minimized using techniques and measures that have proved successful in the past. The goal of the proposed actions is to generate information on strategies that may be used to benefit the areas. Other research and monitoring actions conducted by staff from the PIFSC within the action area also involve short-term minor impacts on the environment. Together these related research and monitoring actions will not result in cumulative significant impacts.

12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: No. The proposed research activities would not adversely affect any districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Similarly, the proposed research activities are not likely to cause loss or destruction of scientific, cultural or historical resources, and any involvement of scientific resources. If a previously unknown cultural or historic site is encountered, it will not be disturbed but its location will be noted and provided to experts.

13) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: No. The proposed research activities are not expected to result in the introduction or spread of a nonindigenous species. The species involved in the proposed research activities are native to the study regions. Collections and any equipment used is either disposable or sanitized between uses and thorough protocols are in place to specifically target and prevent the spread or introduction of nonindigenous species.

14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: No. The proposed monitoring consists of several primary research activities, the basic methods and procedures for which are widely accepted in the scientific research community and have already been published in peer-reviewed scientific literature. Any new methods to be used in the proposed studies build upon existing techniques or information in an attempt to further improve data collection and analysis and results obtained from the proposed research will be subject to further review and potential modification, which is an integral part of the scientific research process. To the extent that these methods establish a precedent for future studies, the precedent will be based on the quality of the data obtained, and will consider the minimization of the adverse impacts to the resources being studied.

15) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: No. The proposed research activities comply with applicable Federal and state environmental regulations, including applicable permit requirements. For example, permits have been obtained through all local, state and federal agencies where research is conducted. Therefore, this research is not expected to violate such laws and requirements.

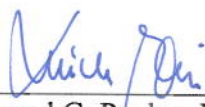
16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No. The proposed action involves minimally invasive monitoring of coral reef ecosystems and the knowledge gained is shared with resource managers and various public stakeholders to improve decision-making for the long-term conservation and management of coral reef resources. Minor adverse impacts to target and non-target species will be short-term and will not have a substantial cumulative effect.

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## DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for Research Activities Conducted by the Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division, Honolulu, Hawaii, it is hereby determined that such research will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

  
for Samuel G. Pooley, Ph.D.  
Director, Pacific Islands Fisheries Science Center  
Responsible Program Manager

5/7/10  
Date