Finding of No Significant Impact

Marine Turtle Research Program (MTRP)

Proposed Action (Alternative C): Expansion of the Status Quo Program to Include the Study of Site Fidelity to Foraging Grounds

National Oceanic and Atmospheric Administration National Marine Fisheries Service Pacific Islands Fisheries Science Center Honolulu, Hawaii

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NOAA Administrative Order (NAO) 216-6 (revised May 20, 1999) contains criteria for determining the significance of the impacts of a Proposed Action. In addition, the Council on Environmental Quality regulations at 40 CFR 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 others. The significance of this action is analyzed based on the NAO 216-6 criteria and the Council on Environmental Quality's context and intensity criteria. These include:

1. Can the Proposed Action be expected to jeopardize the sustainability of any target species that may be affected by the action?

The Proposed Action is not expected to jeopardize the sustainability of any target species affected by the action. The intent of the research is to generate data in support of sea turtle recovery efforts in the Pacific Ocean. The Hawaiian stock of the green sea turtle has been studied by the MTRP since 1972 and protected under the Endangered Species Act since 1978. Each year, several hundred green sea turtles are counted, captured, tagged, measured, sampled, or aided while stranded. The population of this stock has been increasing under this research protocol and legal protection, despite the extensive fibropapilloma (FP) disease complex throughout many areas of the Hawaiian Islands. Therefore, this stock has been able to support active research techniques, with careful implementation of standard operating procedures and mitigation measures as described in the Proposed Action.

However, the Hawaiian and Pacific Ocean stocks of hawksbill, loggerhead, olive ridley, and leatherback sea turtle species have not demonstrated signs of recovery despite years of protective efforts. Data collection on these species is limited to a few dozen any one year and generally involves animals that have been stranded or caught as bycatch in Pacific Ocean fisheries. Implementation of the standard operating procedures and mitigation measures as described in the Proposed Action ensure that the MTRP would not jeopardize the sustainability of these sea turtles.

2. Can the Proposed Action reasonably be expected to jeopardize the sustainability of any non-target species?

The Proposed Action is not expected to jeopardize the sustainability of any non-target species affected by the action. The data collection methods are highly specific and few non-target species would be affected. Collection of a limited number of "cleaner" reef fish, which would be conducted for a study of FP disease transmission, would not adversely impact the sustainability of the reef fish populations in localized areas. The small amount of algae collected by clipping rather than by removal via the holdfasts would not adversely impact the sustainability of these fast-growing populations.

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 Magnusen-Stevens Act and identified in Fishery Management Plans?

The Proposed Action would not cause substantial damage to the ocean, coastal habitats, or Essential Fish Habitat because the activities involve primarily short-term or temporary impacts related to data collection. The collection of small amounts of algae represents a fraction of the total biomass of algae at any one sample site.

4. Can the Proposed Action be reasonably expected to have a substantial adverse impact on public health or safety?

The Proposed Action would not have a substantial adverse impact on public health or safety. The nesting research on green sea turtles is conducted in the Papahanaumokuakea Marine National Monument (PMNM). The public rarely visits the PMNM because it is in a remote location and access is limited by a permitting system. Other MTRP research activities may take place on public beaches. Members of the public may watch activities involving stranded sea turtles or sea turtle examinations or releases, but they are not allowed to assist. Educational information and materials are provided to the public whenever requested or when the research activities take place in a public setting. The Proposed Action would not expose the public to hazardous materials. The use and disposal of chemicals is carefully tracked and dealt with according to appropriate laws and regulations.

5. Can the Proposed Action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

The Proposed Action would result in "take" – as defined by the ESA – of federally threatened and endangered sea turtle species during the data collection and stranding response activities. The take would be in the form of pursuit, capture, measure, weigh, flipper tag, PIT tag, blood sample, tissue sample, release, and transportation. However, the direct and indirect adverse impacts from these data collection and monitoring (i.e., attaching scientific instruments such as satellite tags) activities would be mostly short-term and temporary. The long-term minor beneficial effect of the data collection activities and stranding response would be an improved understanding of sea turtle biology and ecology. These research activities have been authorized by NMFS and the U.S. Fish and Wildlife Service through Section 10(a)(1)(A) scientific research and enhancement permits. The Proposed Action is designed to avoid serious injury or mortality of sea turtles. In very rare circumstances, sea turtles rescued during stranding response activities are too sick to survive in the wild and are humanly euthanized by a qualified veterinarian in accordance with all applicable authorizations.

Components of the Proposed Action would occur in the Northwestern Hawaiian Islands, which is designated critical habitat for Hawaiian monk seals. The Proposed Action would not affect or modify the primary constituent elements of the critical habitat. The Proposed Action is designed to avoid take of Hawaiian monk seals during surveys and data collection activities.

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.)?

The Proposed Action would not have a substantial impact on biodiversity or ecosystem function within the affected area. The research activities are carried out on a small scale, with generally one individual sea turtle at a time that is then released back into the wild. Sampling of the environment (e.g., collecting algae and fish) is extremely limited, and would not result in adverse impacts to biodiversity or ecosystem function. Field surveys incorporate standard operation procedures to avoid interfering with the native wildlife (e.g., seabirds) in these remote areas.

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

The Proposed Action would not have significant social or economic impacts because adverse effects to the natural and physical environment are primarily short-term and temporary. Furthermore, the Proposed Action would take place mostly in remote and uninhabited areas. The Proposed Action would have a long-term minor beneficial effect on sea turtles in the Pacific Islands Region by contributing field data to species recovery efforts. This would have a minor indirect beneficial effect on wildlife-related tourism to the islands.

8. To what degree are the effects on the quality of the human environment likely to be highly controversial?

The effects of the Proposed Action on the quality of the human environment would not be highly controversial. Over the last 38 years the MTRP has worked with state governments, local agencies, non-governmental organizations, and individuals to facilitate the recovery of sea turtles in the Pacific Islands Regions. In order to avoid any misconceptions by the public during the Proposed Action, the MTRP has, and would continue to engage the public through educational materials and presentations, both in the field during research activities and in classroom-type settings.

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?

The Proposed Action would not have a substantial adverse impact on unique areas. The nesting surveys would take place in the Papahanamokuakea Marine National Monument (PMNM). These surveys, and the field camping necessary to conduct the surveys, would be limited to two researchers and take place over approximately 45 days. Following the surveys, all equipment and trash would be removed from the campsite and therefore all direct and indirect impacts would be temporary. Stranding response and research activities many occur in a variety of marine or coastal settings, but these impacts are short-term and temporary. Stranding response involves a couple of researchers, on foot, aiding a turtle and, if necessary, carrying the turtle to a truck to be transported back to the rehabilitation facility.

10. To what degree are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

The Proposed Action would not involve highly uncertain, unique, or unknown risks. The MTRP has been conducting this research for over 38 years, using procedures, protocols, and minimization measures that are accepted worldwide in the sea turtle research scientific community and that have proven effective in the Hawaiian Islands and the Pacific Ocean sea turtle stocks.

11. Is the Proposed Action related to other actions with individually insignificant, but cumulatively significant impacts?

The Proposed Action is not related to other actions with individually insignificant, but cumulatively significant impacts. The MTRP is the principal sea turtle research group in the Pacific Islands Region. The Proposed Action would involve capturing, sampling, tagging, and transporting wild sea turtles, as well as aiding stranded sea turtles. Because the five species of sea turtles being studied are listed as threatened or endangered, the take of these species is regulated by the NMFS Protected Species Division and U.S. Fish and Wildlife Service. The MTRP has carefully considered the potential adverse effects of each research activity. The standard operating procedures implemented by the MTRP were developed to avoid and minimize adverse effects to sea turtles. Furthermore, the educational outreach and technical assistance components of the Proposed Action have shared these standard operation procedures with researchers across the Pacific Islands Region. Other actions related to the Proposed Action include research by state and local agencies, as well as non-governmental organizations. These non-MTRP research programs account for a fraction of the research on sea turtles within the scope of analysis and are usually coordinated with the MTRP.

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 historic resources?

The Proposed Action would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places and would not cause the loss or destruction of significant scientific, cultural, or historic resources. The Proposed Action would take place in the PMNM, which was inscribed a World Heritage Site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) on July 30, 2010. The nesting surveys, which take place each summer for approximately 45 days on East Island in PMNM, would have only minor temporary effects on the biological and physical environment. The Proposed Action has been, and would need to be, permitted by the PMNM. The Proposed Action has been designed to avoid resources that are listed on the National Register of Historic Places (e.g., Nihoa Island, Mokumanamana). Furthermore, the research activities takes place primarily in and around dynamic natural ecosystems, such as sandy beaches and coral reefs, which generally cannot support structures or sustain other historic resources because of wave action.

13. Can the Proposed Action reasonably be expected to result in the introduction or spread of a nonindigenous species?

The Proposed Action would not result in the introduction or spread of nonindigenous species. The Proposed Action involves only native species, including the leeches and barnacles found growing on sea turtles, in their historical ranges. As a minimization measure, all research and sampling equipment is sanitized between uses.

14. Is the Proposed Action likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

The MTRP research program has been conducting these types of data collection and stranding response activities for the last 38 years without establishing a precedent for future actions with significant effects. The Proposed Action, which includes a minor additional research project to the existing status quo program, would also be conducted in accordance with past authorizations and all new necessary reauthorizations, thereby not establishing a precedent for future actions with significant effects. The Proposed Action would not represent a decision in principle about a future consideration.

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?

The Proposed Action would not have, or threaten to have, a violation of Federal, state, or local law or requirements imposed for the protection of the environment. The MTRP operates with all necessary and required permits and approvals from Federal, state, and local agencies.

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?

The Proposed Action would not result in cumulative adverse effects on the human environment, and therefore would not have a substantial effect on target species or non-target species. As described in Section 4.3 of the attached EA, sea turtles face a number of natural (e.g., disease) and anthropogenic (e.g., bycatch during commercial fishing) threats in the Pacific Islands Region. The Proposed Action is designed to avoid and minimize direct and indirect adverse impacts to target and non-target species. Consequently, the Proposed Action will have a long-term minor beneficial impact on both target and non-target species through an improved understanding of the region's ecology.

Determination

In view of the information presented in this document and the analysis contained in the supporting Programmatic Environmental Assessment prepared for the MTRP, it is hereby determined that the Proposed Action (Alternative C): Expansion of the Status Quo Program to Include the Study of Site Fidelity to Foraging Grounds will not significantly impact the quality of the human environment as described above and in the Programmatic 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 Environmental Impact Statement for this action is not necessary.

Minh P. Ku.	6/23/11	
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