



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Fisheries Science Center
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May 23, 2023

Mr. Julian Janssen
Guam Coastal Management Program
Bureau of Statistics and Plans
P.O. Box 2950
Hagatna, Guam 96932
Tel: (671) 475-9664

Re: Consistency determination for the proposed marine turtle research activities conducted throughout the Territory of Guam by the Marine Turtle Biology and Assessment Program, Pacific Islands Fisheries Science Center

Dear Mr. Janssen:

The National Marine Fisheries Service (NMFS) Pacific Islands Fisheries Science Center (PIFSC) is preparing to conduct a suite of marine turtle research activities under the Endangered Species Act (ESA) for the next five years from August 2023 – July 2028 within all coastlines of the Territory of Guam specifically including: Apra Harbor, Piti Bomb Holes, Agana Bay, Tumon Bay, Cocos Island, Talofofo Bay, and Ritidian. The Marine Turtle Biology and Assessment Program (MTBAP) has ESA permits from both NMFS and the U.S. Fish and Wildlife Service to conduct marine turtle research activities (enclosed). We have evaluated the activities described in the permits and have determined that these activities are consistent to the maximum extent practicable with the enforceable policies of the approved Coastal Zone Management Program of the Territory of Guam. This consistency determination is submitted in compliance with the Federal consistency requirements of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(1)(C)) and implementing regulations (15 CFR Part 930).

Description of Proposed Activity

The primary goal of the MTBAP is to provide robust ecological research products in support of management needs and species recovery goals, as mandated through the ESA. The MTBAP accomplishes this goal through conducting ship/boat and shore-based surveys, tagging, health assessments, stranding response, and collection of biological and diet samples.

Research Activities

As part of our research mission in the survey areas, MTBAP would send a small team (~ 6 researchers) to survey and capture foraging sea turtles (i.e., in water) or nesting sea turtles (i.e., on land). Given the expansive natural range of marine turtles, the geographic area in which the proposed research activities may be conducted includes all shoreline, nearshore, and offshore waters within Guam, with a focus around the locations listed above. Researchers would conduct in-

water activities using a locally chartered small boat for no more than four weeks per year. Terrestrial activities would be no more than four months per year. Research activities include:

Nesting surveys

Researchers would carefully walk the perimeter of the area being surveyed (either close to the water or right above the high water mark) to conduct nesting surveys. Researchers would also tag turtles with metal flipper tags, implantable micro-chip tags, and/or satellite tags, and collect biological samples from selected, healthy turtles including skin (for DNA and stable isotope analysis) and blood (for contaminant and hormone analysis). Nesting turtles may be approached when crawling up the beach in order to apply a temporary mark (e.g., paint). Typically, other activities (e.g., application of a flipper and/or micro-chip tag) will not take place until 20-30 eggs have been laid or when the female has ceased nesting activities. In addition, researchers would place satellite tags on nesting female turtles only when the turtle has finished nesting activities.

Nest excavation activities on nesting beaches (e.g., Cocos Island, Ritidian) would alter the beach sand temporarily (similar to when sea turtles are digging their nests). After inventorying the nest, the nest contents and sand will be put back as it was found. Sea turtle nests may be covered to prevent predators from predating the nest. This should not impede beach access, but may decrease usable beach space.

In-water capture

Turtles would be captured by hand in shallow coastal or reef waters via snorkeling by small boat. Once a turtle is captured, it would be brought aboard the vessel, tagged, measured, photographed, and/or affixed with a satellite tag. Small biopsy skin samples would be collected as appropriate using a new and/or sterilized biopsy punch, scissor, or razor blade. Skin sites for biopsy and tagging would be cleaned with an antiseptic prior to tagging/biopsy. Blood samples would be collected from the dorsal cervical sinus in the neck region after cleaning with an antiseptic. All captured turtles would be released promptly into the ocean.

Operation of small boats

Three to six staff would work off one small boat operated by an experienced small boat driver. The vessel would transit to survey sites moving at approximately 10 knots. Surveys and capture work would be conducted when the boat is moving at slow speeds (<3 knots), or drifting. None of the in-water capture activities would require alteration of any structure, shoreline, or seafloor substrate, nor would any activity entail any new restriction on resource use or access. Though, researchers may collect samples of potential sea turtle diet/prey items (e.g., algae, seagrass, and sponge) for stable isotope studies to understand the components of sea turtle diets.

Expected Coastal Effects

In reaching our determination, we considered many coastal uses and resources, including:

- Public access;
- Recreational resources (providing coastal recreational opportunities accessible to the public);
- Fishing;
- Historic or cultural resources (protecting and preserving historic resources in the coastal zone management area);
- Scenic and open space resources and enjoyment (protecting and preserving the quality of coastal scenic and open space);

- Marinas and floodplain management;
- Coastal ecosystems, including resource creation and restoration (protecting valuable coastal ecosystems);
- Biological and physical resources (air, tidal and non-tidal wetlands, fishponds, ocean waters, estuaries, rivers, streams, lakes, aquifers, submerged aquatic vegetation, land, plants, trees, minerals, fish, shellfish, invertebrates, amphibians, birds, mammals, reptiles, and coastal resources of national significance);
- Economic uses (providing public or private facilities and improvements important to the jurisdiction's economy);
- Coastal hazards (reducing hazards to life and property from tsunamis, storm waves, flooding, erosion, subsidence, and climate change); and
- Managing development.

The activities associated with the MTBAP research program in Guam will have negligible impact on these coastal uses or resources because our research activities are temporary and short-term in nature, infrequently conducted (maximum of 4 months per year during sea turtle nesting season, and no more than eight hours per day/night). PIFSC researchers would employ standard methodologies carried out by professional scientists. Specifically, the research would be limited to shorelines and shallow water areas (<30 meters); would not involve the construction of any permanent structures; and would not impede or restrict access to the coastal zone. Therefore, it would not affect development, economic uses, marinas, floodplains, public access, and use of scenic and open space resources. Small boats would be driven at slow speeds (approximately 10 knots in transit and three knots or less while conducting survey and capture activities) by professional boat operators. These research activities (e.g., survey, capture, and tagging of sea turtles) would not reduce or diminish the functional capacity of the coastal ecosystem; and would provide useful scientific data that could assist with local coastal zone management issues including providing critical management information on marine turtle population demographics and home ranges.

While the impact of these research activities is negligible, before and during implementation, NMFS intends to conduct a suite of measures designed, in part, to mitigate effects on coastal uses and resources that might result from implementing the proposed activities. These mitigation measures, which were also considered in our consistency determination, include:

- Avoiding, to the maximum extent possible, research in areas known to be used extensively for cultural or historic purposes.
- Ensuring staff training in recognition and avoidance of cultural resources and historic properties.
- Conducting education and outreach regarding the proposed activities and other aspects of sea turtle conservation and biology.
- Maintaining close coordination with relevant federal and territorial agencies.

Consistency Evaluation

As discussed above, the activity taken by NMFS would cause negligible effects to Guam's coastal zone management area. The underlying objective of the activity is to conserve ESA-listed sea turtles. That objective is very much in line with the policies and objectives of Guam's Coastal Management Program, particularly those related to the conservation and management of marine resources. See Guam Land-Use Policies, Executive Order 78-37 (November 15, 1978). Pursuant

to section 307 of the Coastal Zone Management Act (33 U.S.C. 1456(c)(1)(C)), we have determined that the proposed action is consistent to the maximum extent practicable with the enforceable policies of Guam's Coastal Zone Management Program. In accordance with 15 CFR 930.39 and 930.41, we request your concurrence within 60 days of receipt of this letter. If we do not receive your response within 60 days, we will presume concurrence.

Enclosed are the permits and analysis supporting this determination. If you have any questions or comments, please contact Justin Rivera 808-725-5323 or Justin.Rivera@noaa.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Tia Brown', is positioned above the printed name.

Tia Brown
Science Director (Acting)

Enclosures:

- (1) NMFS Endangered Species Act 10(a)(1)(A) Permit number 21260
- (2) Categorical Exclusion (NEPA Analysis) NMFS Endangered Species Act 10(a)(1)(A) permit number 21260
- (3) U.S. Fish and Wildlife Service 10(a)(1)(A) Permit number TE-72088A-3