TO: Bill Gilmartin, Leader

Marine Mammal and Endangered Species Investigation

NMFS Honolulu Laboratory

FROM: George Balazs

Fishery Biologist

SUBJECT: Recent letters exchanged between the NMFS Southwest Region, Mr. Cooper, and the State Division of Aquatic Resources concerning a "take" exemption and review of the ESA listing of Hawaiian and other Pacific

sea turtle populations

The purpose of this memo is to give you my inital thoughts on the statements and viewpoints contained in the above correspondence. These letters have been copied to us over the past 3 months and, in my opinion, deserve some sort of enlightened response. As the contracted researcher specializing in sea turtles within your program, I anticipate that a formal opinion will eventually be requested from us by our Honolulu Lab Director, or by Southwest Regional Director Alan Ford based in California, who has apparently already initiated action as a result of Mr. Cooper's inquiry and complaint. The following narrative outline of significant points should serve as the basis for further discussion between the two of us at the earliest opportunity.

1. Insinuation that the listing of Hawaiian and Pacific sea turtle populations was conducted in haste, was not justified by available data, and/or somehow did not give all interested parties the opportunity to make their views, needs, requests and data known— There is no factual basis for such beliefs. When the Threatened listing of green sea turtle populations in the U.S. Pacific islands became effective in September of 1978, it was the culmination of no less than 54 months (4½ years) of evaluation. During this time, numerous comment periods were opened to the public and specifically brought to the attention of state, territorial and federal government officials. All available data were evaluated several times over by both the NMFS and the Fish and Wildlife Service. In addition, a full EIS was prepared on the listing.

The Hawaii State Department of Land and Natural Resources also conducted an exhaustive review of the known status of Hawaiian sea turtles over a 14-month period leading up to May of 1974. Written testimony was repeatedly solicited, and full public hearings were convened on each of the Hawaiian Islands so that verbal data could also be gathered. The information received led the State Board of Land and Natural Resources to adopt measures to ban all commercial turtle fishing, and to restrict the noncommercial catch of green turtles to those over 90 cm for fishermen with a permit issued free of cost. If any requests were made to the State at that time for a "subsistence" or "traditional Hawaiian" take exemption of turtles (and I doubt if there were), then the State must have rejected them as being unwarranted since such provisions were not part of the final fishery regualtion (DLNR-36) that was

adopted. After the implementation of the State regulation in May of 1974, the records show that the following numbers of turtles were taken under the permit system. Please note that this constitutes the total legal take throughout the Hawaiian Islands.

May-Dec. 1974 - 9 1975 - 6 1976 - 21 1977 - 32 Jan.-Sept. 1978 - 16 Total - 84

The statistics available to the public do not show how many fishermen were actually involved, however, it is reasonable to assume that a number of these individuals were responsible for repeat catches. I therefore estimate that not more than 35 fishermen ever exercised their legal right to catch turtles under the State regulation. I have good reason to believe that most of these 35 people caught turtles for a) food preference, i.e. they like the flavor; b) sport or recreation; c) ornamental use of the carapace; or d) because they accidentally encountered a turtle during other fishing activities and the opportunity was just too good to pass up. However, a few of these 35 people (not necessarily of native Hawaiian heritage) may have caught turtles for true subsistence purposes, as defined by regulatory provisions of the ESA. Under the auspices of the Hawaii Institute of Marine Biology, I submitted testimony to the NMFS (copies attached) concerning these few possible people involved in a true subsistence take. To my knowledge, I was the only one to do so. The "rights and privileges" of these few people needed to be, and subsequently were, considered by the NMFS. However, there is something in excess of 900,000 people in Hawaii. After being involved in all aspects of research on Hawaiian sea turtles for the past 10 years, I am confident that the vast majority of these people want their own rights and privileges extended on behalf of securing the survival of Hawaiian sea turtles, instead of gambling through any further direct exploitation. Alternate sources of protein are available for subsistence purposes, and indeed certain practices have had to be altered on behalf of sea turtles by a number of people throughout the United States (e.g. shrimp fishermen, mariculture interests, beach resort developers, Army Corps of Engineers).

2. Absence of new or any other data or evidence to support the request for action by the Southwest Region— Requests for exemptions, changes, or delistings of ESA listed species are usually made in the form of petitions that contain supporting data and other substance. Such material has not been provided in this present case. Instead, several vague and unsubstantiated statements are made, followed by threats to violate the law if the requests are not approved in short order (see letter of 11-12-81). On such a basis, it certainly seems inappropriate for the Southwest Region to initiate action that will consume dollars and personnel otherwise intended for the recovery of Pacific sea turtles and other listed species. Furthermore, it is my understanding that any petition so filed must be submitted, or at least forwarded, to the NMFS and FWS in Washington D.C. for evaluation and publication in the Federal Register.

- Absence of a request by the Southwest Region for relevant basic facts-Some very fundamental and important questions were left unanswered in relation to the initial letter of 11-12-81 sent to the Southwest Region. There is no indication in the copied letters we have received that an effort was made by the Southwest Region to obtain these facts. It seems to me that at least the following should have been requested at the onset. a) Does the petitioner have a history of subsistence use of turtles, as opposed to being a commercial turtle fisherman? b) Does the petitioner follow a subsistence life style, as opposed to being in the mainstream market economy of modern life?(see M. McCoy's 1974 paper on the Western Caroline Islands for a comparison) c) Did the petitioner exercise his legal right to take turtles when this was an authorized activity under State regulation between May 1974 and September 1978? d) How does the petitioner define "aboriginal rights" and "aborigine" as he applies these descriptive terms to Hawaii? Does the petitioner qualify under these definitions? e) What specific organizations or groups of people, or specific individuals, have authorized the petitioner to file and speak on their behalf? What is the nature of the organizations- private or commercial? What is the life-styles being followed by the individuals- true subsistence or modern market economy? In this respect, it is appropriate to note that the petitioner's letterhead states "Commercial Fishing , Wholesale Retail , Oceanographic Research , Aquaculture" and "Import & Export".
- Traditional Hawaiian usage of sea turtles within the context of the historic 4. Polynesian society- On the basis of Hawaiian scholars who have recorded the history of their own culture, the traditional consumption of green sea turtles is known to have been the exclusive privilege of male chiefs and priests. Turtles were occasionally kept in special stone enclosures along the shoreline, but only as a holding measure until they were ready to be eaten by the chiefs and priests. A total prohibition traditionally existed on the consumption of the hawksbill turtle (probably because of toxicity), but their scutes were sometimes used to make fishhooks and a certain medicine. The traditional Hawaiian usage of sea turtles declined after 1819 when prominent Hawaiian nobility abolished the traditional Hawaiian "kapu" system and adopted Christianity. Between 1819 and May of 1974 there were in essence no legal or traditional controls on the capture of green turtles in Hawaii. Any number of any size could be taken for any purpose- both commercial and noncommercial. Any method could be used to take them, except firearms and shark guns, but I have evidence to show that these were also regularly used by certain elements of the commercial trade.

The intentional placement of turtles in Hawaiian fishponds (used for raising fish) seems unlikely since too much benthic algae is seldom a problem, and turtles are known to prey on or bite at fish when in a pond environment. In any event, I can find no record of this practice being carried out in the traditional Hawaiian culture.

5. State regulation on sea turtles (DLNR-36) deleted by the Division of Aquatic Resources- The State of Hawaii's sea turtle regulation was deleted as a legal precept in May of 1981 after being described in a public notice as "obsolete and inactive". Up to that time, certain sections of the regulation that

remained valid after the ESA listing were still being used by the State Division of Conservation and Resources Enforcement to help protect Hawaiian sea turtles from illegal take. Since May of 1981 State enforcement officers have not had a legal precept under which they are empowered to protect sea turtles. They have not been given the authority, or have not requested the authority (I do not know which is the case), to enforce the listed status under the ESA. Another legal precept of the State of Hawaii (Wildlife- Chapter 124) was supposed to have encompassed the protection of sea turtles in a manner identical to the ESA listed status, but this has been pending now for over 8 months. At present when State enforcement officers receive a violation report involving turtles they notify the NMFS agents. All 4 of these agents are based in Honolulu and most of their activities seem to be devoted to hump-back whales and other marine mammals.

- 6. The ESA listing has somehow reduced the quality and/or quantity of tagging and other research on Hawaiian sea turtles— There is no factual basis for such beliefs. Actually the exact opposite is true because the listing made it possible for the Honolulu Lab (and the Southwest Region) to receive additional funds for the research, recovery and protection of Hawaiian and other Pacific sea turtles. The State regulation that eliminated the commercial turtle fishery to some extent reduced the opportunities for certain types of research (mainly with dead turtles). However, in this case, the continued survival of the population was obviously more important than any research benefits, and the State clearly made a wise choice.
- Southwest Region's proposal and initial steps to form a "working group" to open and review the ESA listing record— The letter from the Southwest Region dated 1-21-82 states that "...if (my emphasis) new information is available or if pertinent information was not considered during the rulemaking process, we (NMFS) and the U.S. Fish and Wildlife Service share a responsibility to open the record and review that information." As I outlined in items No. 2 and 3 of the above, no supporting information of substance, or even basic data, has been supplied to the Southwest Region by the petitioner. Nevertheless, without receiving this material, and acting contrary to the stated prerequisite, the Southwest Region has proposed that the record be opened and a "working group" of government representatives be formed to review and collect information.

The more reasonable, prudent and productive course of action, in my view, would be for the Southwest Region, or perhaps the FWS, to now constitute the formal Recovery Team needed for Hawaiian and Pacific sea turtles listed under the ESA. A Recovery Team composed of researchers and other scientific authorities on sea turtles was assembled over 2 years ago to address the problems of sea turtle populations in the southeastern United States. As indicated in the Southwest Region's letter of 1-21-82, the ESA requires that the status of listed species be reviewed every 5 years. Sea turtles are therefore up for review in September of 1983, about 18 months from now. It is my understanding that the FWS is the designated lead agency for the review. If a Recovery Team is not appointed and functioning by that time, I believe that it will be very difficult to explain and justify to the many private and governmental organizations that have interests

in sea turtles. Certainly a working group of government representatives cannot fulfill this need. It was not possible in the case of the Hawaiian monk seal (for which there is now a Recovery Team appointed by the Southwest Region), and it would even be less likely for Pacific sea turtles.

Possible reason for the Southwest Region's apparent absence of key information and a factual historic perspective, such as I have outlined in this memo-As you know, there is now a considerable body of literature dealing with Hawaiian sea turtles. The available information covers such aspects as reproductive biology, migrations, life history, historical overviews of exploitation and management, and pioneer findings on growth rates and movements within the breeding colony (to name several). A comprehensive bibliography of this published and unpublished material, current to September 1979, was included in my NOAA-TM-SWFC-7 synopsis report. It would appear that the Southwest Region office in California is not fully aware of the contents of this literature. Not having a good grasp of the literature may very well be the reason why many key points and questions were not contained in the letters written. I realize that there are many other important issues besides sea turtles to be dealt with by this administrative level. Nevertheless, when decisions are made and actions taken that are potentially far reaching, such as in this case, they should be founded on the very best and most complete background information available.