

JUSTIFICATION FOR CHANGE

OMB Control No. 0648-0646 SOCIOECONOMICS OF CORAL REEF CONSERVATION

This request is for approval of two surveys under the information collection requirement currently approved under OMB Control No. 0648-0646 “Socioeconomics of Coral Reef Conservation”. The approved information collection is part of the National Coral Reef Monitoring Plan and relates to Social Science and Human Dimensions monitoring. The National Oceanic and Atmospheric Administration (NOAA) created the Coral Reef Conservation Program to safeguard and ensure the welfare of the coral reef ecosystems along the coastlines of America’s States and Territories. The administration of this program has potential economic and cultural impacts on the lives of nearby residents and citizens. In accordance with its mission goals, NOAA has designed surveys to provide longitudinal data about the impact of the Coral Reef Conservation Program.

NOAA has developed two jurisdictional survey instruments to be implemented in **Hawaii** and **Puerto Rico in 2014-15**. As per OMB guidelines for PRA clearance, NOAA is required to submit a change request listing the questions selected from the full question bank for each of the jurisdictional survey instruments. This request also briefly describes the information collection venues and sampling methodology applicable to each jurisdiction. Please note, this change justification is the second such request as per a previous submission for similar (ongoing) survey efforts in American Samoa and Florida.

These two jurisdictional survey instruments have been developed for the purpose of collecting information that can be used to analyze frequency of coral reef and/or beach use and other activities, general knowledge, attitudes and perceptions of coral reef ecosystems as well as attitudes and opinions of natural resource management and protection activities including rules and regulations (See Hawaii and Puerto Rico surveys). Both surveys have a core set of questions that will be the same for all jurisdictions (See Core Module). Each jurisdictional survey instrument contains questions that are specific to the local management needs and to the population. General demographic information will also be collected from respondents. The questions that have been selected from the bank (See Core Module) will allow NOAA to collect data for some of the socioeconomic indicators of interest to the Coral Reef Conservation Program as outlined in Table 1 of the original supporting statement.

As described in the original supporting statement (included here as a supplemental document), the information will be collected using the most efficient and effective means in the individual jurisdiction. For both Hawaii and for Puerto Rico, telephone surveys will be used. For both survey instruments, the number of questions has been reduced to mitigate respondent burden: fewer jurisdictionally relevant questions were added, and in some cases, the question format was changed (fewer categories, fewer answer options). In addition, for some questions, there are actually fewer applicable activity choices than, for example, was the case in Florida. Also, note that these two instruments will be converted to Computer Assisted Telephone Interview (CATI)

format, and instructions for such questions as that on race and ethnicity will be modified to reflect telephone interviewing.

More information for each jurisdictional survey, mode of survey implementation and burden hours is provided below.

Hawaii and Puerto Rico

The information collection for both US Coral Reef locations is to be conducted by a contracted survey firm who will utilize a phone survey based a sample purchased by the survey firm from a reputable vendor. For each of the jurisdictional populations, we intend to select a random sample of individuals over the age of eighteen, stratified geographically as described in Table 6 of the supporting statement. The random sample will be obtained from the selected survey firm using standard sample selection tools. These strata have been designed to account for the differing sizes of the populations in the areas close to coral reefs. We have used the standard approach to estimating sample size for a stratified population:

$$[t^2 N p(1-p)] / [t^2 p(1-p) + a^2 (N-1)]$$

Where N is the size of the total number of cases, n is the sample size, a, is the expected error, t is the value taken from the t distribution corresponding to a certain confidence interval, and p is the probability of an event.

As indicated in the supporting statement, the final sampling size was to be determined in relation to available resources. As a result, the sample for Puerto Rico has been increased from the original proposed number by 54%. The estimated number of respondents, 2,500, will be adequate to provide precise estimates for the population of the five counties as a whole (i.e., estimated to be within +/- 5.0 percentage points with 95 percent confidence). The sample size and estimated number of actual respondents for Hawaii has been increased by 130%. This increase in estimated respondents, 2,240, will allow for a more robust and statistically significant representation (+/-5.0 percentage points with 95 percent confidence) of the population of each of the six most populated Hawaiian Islands. A table with the updated respondent numbers, burden, and labor cost for Puerto Rico and the original numbers for Hawaii is provided below.

Other details as per data collection and analysis are outlined in the Supporting Statement.

From Supporting Statement, Table 1: Estimates of Burden Hours (3.5-year time frame)

Requirements	Sample Size	Required # of Respondents	Responses Per Respondent	Total # of Responses	Response Time	Total Burden (in hours)	Labor Cost
Hawaii	3,085	2240	1	2240	20 min	747	\$15,342
Puerto Rico	3,375	2500	1	2500	20 min.	833	\$10,034

Original estimated total responses and hours for these two locations has increased from 2,600 and 1,301 to 4,740 and 1,580 (or, annualized, from 867 and 434 to 1,580 and 527), with net increases of 713 responses and 93 hours,.