# JUSTIFICATION FOR CHANGE

## OMB Control Number 0648-0646 SOCIOECONOMICS OF CORAL REEF CONSERVATION

This request is for approval of a survey under the information collection requirement currently approved under OMB Control Number 0648-0646 "Socioeconomics of Coral Reef Conservation", 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 a jurisdictional survey instrument to be implemented in the **United States Virgin Islands (USVI) in 2017-18**. This request also briefly describes the information collection venues and sampling methodology applicable to the USVI. <u>Please note</u>, this change justification is the sixth such request as per previous submissions for similar survey efforts in American Samoa, Florida, Hawaii, Puerto Rico, Guam and the Commonwealth of the Northern Marianas.

This survey instrument has 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 USVI survey). Each survey has 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 the USVI, a combination of phone and face to face surveys will be used. The survey will be conducted in the following languages: English and Spanish. More information for the USVI's survey, sampling, and mode of survey implementation is provided below.

#### **United States Virgin Islands**

The information collection for this US Coral Reef location is to be conducted by a contracted survey firm who will utilize face to face household as well as phone surveys based on a sample purchased by the survey firm from a reputable vendor. For the jurisdictional population, we intend to select a random sample of individuals over the age of eighteen, stratified geographically as described in Table 6 below. 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.

Other details as per data collection and analysis are outlined in the Supporting Statement. See Table 3 for Estimates of Burden Hours. The sample (Table 6) and associated burden numbers (Table 3) presented in the Supporting Statement have been modified, as shown below, for the USVI. We raised the total respondent number for USVI from 525 to 1,125. This represents an increase of 600 respondents for the USVI jurisdiction. The reason for the increase is to provide a representative sample at the island scale (St John, St Thomas, St Croix). This will allow us to do some limited statistical inter-island comparisons. The previous sample size would have only allowed for statistical analysis of the aggregated results for the entire USVI.

It should, however, be noted that while the respondent numbers have been raised for the USVI, there was in fact a net decrease in the Florida jurisdiction from what was originally planned, from 2,600 to 1,335. Thus there is no net increase in burden for this information collection.

| Requirements                                 | Minimum # of<br>Respondents<br>Required for<br>Statistical<br>Robustness | Responses Per<br>Respondent | Total # of<br>Responses | Response<br>Time | Total Burden<br>(in hours) | Labor Cost |
|--|--|-----------------------------|-------------------------|------------------|----------------------------|------------|
|  |  |                             |                         |                  |                            |            |
| Florida                                      | 1,335  | 1                           | 1,335                   | 25 min.          | 556                        | \$7,784    |
| Guam   | 710  | 1                           | 710                     | 25 min.          | 296                        | \$4,239    |
| Hawaii                                       | 2,240  | 1                           | 2,240                   | 25 min.          | 933                        | \$19,171   |
| American Samoa                               | 448  | 1                           | 448                     | 25 min.          | 187                        | \$3,901    |
| Puerto Rico                                  | 2,500  | 1                           | 2,500                   | 25 min.          | 1,042                      | \$12,552   |
| Commonwealth of Northern<br>Marianas Islands | 700  | 1                           | 700                     | 25 min.          | 292                        | \$6,082    |
| U.S. Virgin Islands                          | 1,125  | 1                           | 1,125                   | 25 min.          | 469                        | \$7,894    |
| Total Responses                              | 9058   |                             |                         |                  |                            |            |
| Non response burden                          |  | 1                           |                         | 1 min.           | 60                         | \$0        |
| Total Public Burden                          |  |                             |                         |                  | 3,835                      | \$74,379   |
| Annualized (3 years)                         | 3,019  |                             |                         |                  | 1,275*                     | \$24,793   |

#### Table 1: Estimates of Burden Hours (3.5-year time frame)

<sup>•</sup> 1,255 (Response) + 20 (Non response) burden hours

### Table 6: Sampling Requirements by Geographical Jurisdictions

| Jurisdiction | Total Sample | Sample Size by Strata |           |        |  |  |
|--------------|--------------|-----------------------|-----------|--------|--|--|
| 2. USVI      | 1,125        | 355                   | St John   | Island |  |  |
|              |              | 385                   | St Thomas | Island |  |  |
|              |              | 385                   | St Croix  | Island |  |  |