

SUPPORTING STATEMENT
SURVEY OF HAWAII RESIDENT RESOURCE (SHRR) USERS' KNOWLEDGE,
ATTITUDES, AND PERCEPTIONS OF CORAL REEFS IN TWO HAWAII PRIORITY
SITES
OMB CONTROL NO. 0648-XXXX

INTRODUCTION

This submission requests that the Office of Management and Budget (OMB) approve a new information collection consisting of a survey of Hawaii resident resource users' knowledge, attitudes, and perceptions of coral reefs in two priority sites. These priority sites are South Kohala on the Big Island (Pelekane Bay-Puako-Anaeho'omalu Bay, Hawaii) and West Maui Ka'anapali-Kahekili, Maui). This survey will help to support coral reef and watershed management actions at these sites.

The United States (U.S.) Coral Reef Task Force (USCRTF) was established in 1998 by [Executive Order 13089](#) to lead and coordinate U.S. efforts to address the threats facing coral reefs. The Hawaii Coral Reef Working Group (CRWG), composed of key state and federal partners involved in coral reef management, was established through a local charter to provide guidance to the State of Hawaii's coral program and to implement specific ridge-to-reef management activities at priority sites. The CRWG have designated as "priority sites", those sites whose coral reef ecosystems of high biological value are threatened but have strong potential for improvement with management intervention. More detail is available in "[Hawaii Coral Reef Strategy: Priorities for Management in the Main Hawaiian Islands, 2010-2020](#)".

Information from this survey is needed to assist federal and state agencies, non-governmental organizations (NGO), and other stakeholder groups to develop management plans to conserve resources and allow for the long-term sustainability of human use of coral reefs and the associated watersheds. Additionally, the results of this survey will provide priority site managers with essential information about the population of resident users and their knowledge, attitudes, and perceptions of the resources in the priority sites. This study will supplement other types of public input into the conservation and management planning processes at the sites.

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

This request is for a new information collection.

The purpose of this data collection is to research resident users' knowledge, attitudes, and perceptions regarding coral reef and watershed conditions and alternative management strategies to protect resources at two priority sites in Hawaii. This is a unique effort to provide a voice to a sector of society that may not be adequately represented in currently established planning forums. The two priority sites are identified by the State of Hawaii's coral program and are South Kohala on the Big Island (Pelekane Bay-Puako-Anaeho'omalu Bay) and West Maui (Ka'anapali-Kahekili). The target audience for this survey includes local residents that use the

priority sites, such as fishermen, surfers, beach-goers, and boaters.

The identification of the two priority sites by the State of Hawaii's coral program stems from their involvement in a multiagency coral reef management effort that was codified via Executive Order 13089 with the creation of U.S. Coral Reef Task Force (USCRTF). The USCRTF co-chaired by the Secretary of the U.S Department of Interior and the Secretary of the U.S Department of Commerce through the Administrator of the National Oceanic and Atmospheric Administration (NOAA). The USCRTF is an interagency body that works to develop and implement comprehensive, multidisciplinary, and coordinated approaches to preserve and protect U.S. coral reef ecosystems, and encourage sound coral reef conservation practices globally. NOAA's Coral Reef Conservation Program (CRCP) is responsible for implementing NOAA's responsibilities as they pertain to the Coral Reef Conservation Act of 2000 and other requirements from the USCRTF. More information about the US Coral Reef Task Force can be found here: <http://www.coralreef.gov/about/docs.html>.

CRCP's approach is non-traditional for a Federal program in that they directly fund States, Territories and other local entities to implement actions from their priority documents, including: U.S. National Action Plan to Conserve Coral Reefs: 2000, the NOAA CRCP Goals and Objectives: 2010-2015 and the Hawaii Coral Reef Strategy of 2010-2020. The Nature Conservancy's Conservation Action Plan (CAP) for the South Kohala, Hawaii area is one example of an activity that CRCP identified and funded to implement Goal #1 of the Hawaii Coral Reef Strategy of 2010-2020: Reduce key anthropogenic threats to two priority near-shore coral reef sites by 2015 and five by 2020 using ahupua'a based management. A task was also identified in the Hawaii Coral Reef Strategy under this activity that states: "Conduct Knowledge Attitudes Perceptions (KAP) survey to gauge support and knowledge for Marine Managed Area (MMA) and recreation rules." Our team was approached by the Hawaii Coral Reef Working Group (the State of Hawaii Coral Program's local multi-agency management group) with a request for assistance in completing this task since we had the necessary resources and technical experience to gather the data. Our original grant proposal submitted to CRCP was funded at the full level and includes letters of support from partners. CRCP funded our proposal with the primary purpose to identify major causes and consequences of degradation of coral reef ecosystems in Hawaii from the resident resource user's perspective.

This research will inform management about resident resource users' knowledge about the natural resources at the site, perceptions of threats to these resources, and will afford managers with critical information to guide future management efforts. This unique multi-agency planning effort is genuinely interested in providing a voice to the array of resource users of these sites. The planners and managers understand that many resident resource users do not attend government planning meetings because they do not have the time, are not interested or able, or are not comfortable in a formal setting. However, these managers and planners agree that this is a critical sector of society that requires in-depth examination through a survey such as this to shed light on their knowledge, attitudes and perceptions and provide this critical piece of information as planning and implementation efforts move forward. Our projected timeframe is to begin field work as soon as possible to allow us to provide useful and timely results to the CAP process.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

Information will be collected using a written survey distributed in-person. The survey will be conducted under contract by an individual/group skilled at survey research, and familiar with the two priority sites. The information will be collected only one time per priority site. The same questionnaire will be used at each site, except that the site name will be changed. For simplicity, the attached questionnaire uses the South Kohala site name.

The purpose of collecting this information is to inform managers and planners as they develop and implement conservation and management plans for watersheds and coral reefs at priority sites. The data will include:

- Uses of the site;
- Knowledge and attitudes regarding site conditions, perceptions of threats to those conditions;
- Attitudes toward a variety of types of ocean and coastal management tools;
- Limited demographic information about respondents, because we have found demographic characteristics to be related to beliefs, knowledge, attitudes, and behavior regarding natural resources and their management.

The survey instrument utilizes a combination of open and closed-ended questions to describe information on the topics of interest as identified during discussions with representatives from federal and state agencies, NGOs, and other stakeholder groups involved in the management of resources at the two sites. Open-ended questions inform researchers of issues that may not have otherwise come to light during a survey of only multiple choice questions. Closed-ended questions provide more detailed, representative data on a series of topics of interest to managers when considering the management strategies and plans for the priority sites.

As needed, researchers will assist in interpreting the survey data for the specific needs of the managers and a summary of results will also be available to all interested parties. Integrity of the data will be ensured prior to dissemination and independent of the specific intended distribution mechanism. The researchers will maintain objectivity by presenting the information and information products in an accurate, reliable, and unbiased manner including analytic results that are developed using commonly accepted scientific and statistical methods.

- NOAA's CRCP is responsible for implementation of their plans (U.S. National Action Plan to Conserve Coral Reefs: 2000, the NOAA CRCP Goals and Objectives: 2010-2015 and the Hawaii Coral Reef Strategy of 2010-2020). The CAP planning effort is one activity highlighted in the Hawaii Coral Reef Strategy that was funded by CRCP. The CAP planning effort is implemented in partnership with various Federal, State, non-profit and community groups at the site. Because each of the participating agencies has different responsibilities, they each will play a role in implementation of the plan. For example, information about people's perceptions of land-based pollution affecting coral

reefs may be addressed by Hawaii Department of Health or the U.S. Environmental Protection Agency, whereas information about people's knowledge and attitudes about fisheries resources or fisheries management options may be addressed by the State of Hawaii Department of Land and Natural Resources, Division of Aquatic Resources (HDAR). A diversified approach adhering to each agency's jurisdictional mandate is what is envisioned. Please see the following links for details about the different types of strategies the planning teams in each site have proposed to address problems with the natural resources: <http://www.kaanapaliwmp.com/participate.html>

- http://www.hawaiicoralreefstrategy.com/PDFs/3_Priority_Sites_Kohala/skcap_final_report.pdf

Our survey will complement the existing CAP planning effort by targeting a broader audience of resource users. This additional information from a broader array and larger number of resident resources users will provide valuable data to aid in calibrating and implementing the CAP plan. By targeting resident resource users, we will help to capture resident resource users' knowledge and perceptions about the natural resources, and their attitudes and perceptions about various management strategies that NOAA, State of Hawaii and others can take to address these issues.

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. NOAA Fisheries will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](#).

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

This collection of information will use a minimum amount of information technology. Surveys will be distributed in-person on paper to be filled out by the respondent. The survey will not be available on the internet. Responses will be written and respondents will return the written surveys to survey administrators. Every effort has been made to reduce the public burden by using this method of data collection which requires no additional public burden beyond the survey administration on site (i.e. labor cost).

4. Describe efforts to identify duplication.

Researchers have examined existing materials and information sources to better understand the types of information that would be useful, including extensive conversations with the various agencies, NGOs, and other site managers. Reviews of existing information are common practice when initiating social science studies. In this review, we noted that an economic valuation study of Hawaii coral reefs was conducted by Meade and Leeworthy from National Ocean Service. However, that study did not have similar foci, goals and target audiences to our study –

objectives regarding the knowledge, attitudes, and perceptions about coral reef status and threats in priority sites, with our survey's target audience. Our project will ensure that all data collected is relevant, new, and essential for achieving the goals of this information collection.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

Not Applicable.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

If this information is not collected, managers and planners will not have available important data regarding resident and informed users' knowledge, attitudes, and perceptions related to coral reef ecosystem and watershed status and management at the priority sites. Public input will consist only of comments from those who have the time and desire to attend public meetings instead of a more systematic attempt to collect information from a wide range of area residents who actually visit the coral reef areas. Management activities implemented will have a higher likelihood of being understood and supported by the public if the views of user residents have been measured and taken into consideration. In addition, without the data resulting from this survey, managers will not have a sound basis for designing management efforts and providing desired information to the public, especially segments of the public that did not attend earlier public meetings.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

Not Applicable.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice soliciting public comment for this data collection was published on February 22, 2012 (77 FR 10480).

During the public comment period, one set of comments was received from the Hawaii Fisheries Regulatory Review. These comments focused primarily on: 1) the impact of the survey administrator(s) on which site users will be approached for participation, and 2) the importance of ensuring questions are asked in a neutral and unbiased manner. The comments were considered carefully and the majority have been addressed in the final survey instrument and methodology. The comments and corresponding responses are detailed in Table 1.

Table 1. Comments and our responses.

Comment or concern	Our response
Comment related to screening level questions to make sure HI residents.	Addressed through redesign of screening questions.
Consider “satisfaction” of resource conditions.	We incorporated questions about the respondent's satisfaction of resource conditions into each of the questions in "Part II: Knowledge about site conditions."
Concerns about bias relating to site conditions (e.g., “unsustainable fishing practices” a loaded term and “recreational misuse” pre-supposes that misuse is occurring)	Added question on whether the respondent believes these and other threats are present or not.
Concerned about biased wording "lack of government’s ability to manage and enforce.”	Changed wording to "government’s ability to manage and enforce” to make wording more neutral.
Concerns about management strategies focusing primarily on fishing restrictions as options. Commenter wanted to see more of a balance of the types of use restrictions as options (e.g., recreational use).	Question added regarding restricting other recreational uses and an “other” option.
Suggested rewording questions about marine managed areas if they restrict the respondent’s use, would their answer remain the same?	Question added.
Concern why fishing and boating was being targeted under our old “enforcement” section and not underage drinking or something else? Suggestion that we ask whether they are familiar with resource laws that apply to the area, if no then skip.	Dropped these questions from survey.
Concern about wording for a question where we asked if the respondent wanted anything “changed” with how resources were managed.	Question modified to incorporate preference for status quo.

One response was received from Reef Relief in Florida, requesting a copy of the survey instrument. This was provided directly to the commenter.

Extensive consultation with persons outside NMFS was conducted to obtain their views on the availability of data, frequency of data collection, clarity of the instructions and recordkeeping, disclosure or reporting format, and on the data elements to be recorded, disclosed, or reported. Discussions with site managers, planners and other interested stakeholders provided information on existing data and the need for a more detailed, representative study as is proposed in this information collection.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments or gifts will be given to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

As stated in the introductory explanation in the survey instrument, respondents will be assured that responses will be confidential, consistent with the [MSA, Section 402\(b\)](#). Their responses will be analyzed only in combination with other responses received and their names or other identifying personal characteristics will not be available or associated with any of their responses. When individuals are provided a copy of the survey instrument, the initial page of the survey will contain the following statement:

Your identity will remain anonymous and your responses will only be used and reported in combination with responses from other respondents.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

The survey instrument does not contain questions of a sensitive nature, such as sexual behavior and attitudes, religious belief and other matters that are commonly considered private.

12. Provide an estimate in hours of the burden of the collection of information.

The total burden as shown in Table 2 is 67 hours for each site, a total of 134 hours (rounded down to 133 in ROCIS).

Table 2. Estimated annualized burden hours.

Sample Survey Respondents	No. of Respondents	No. Responses per Respondent	Average Burden Hours per Response (hours)	Burden Hours
Pelekane Bay-Puako-Anaeho‘omalua Bay, Hawai‘i	200	1	20 minutes	67
Ka‘anapali-Kahekili, Maui	200	1	20 minutes	67

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

No additional cost burden will be imposed on respondents aside from the burden hours indicated in the response to Question 12.

14. Provide estimates of annualized cost to the Federal government.

The total cost to the Government for collecting these data consists of a contract to collect the information, including managing survey administrators on site and time to administer the survey. The total estimated cost is \$30K, \$15K for FY 2012 and \$15K for FY 2013.

15. Explain the reasons for any program changes or adjustments.

This is a new information collection.

16. For collections whose results will be published, outline the plans for tabulation and publication.

The data are not intended for publication for statistical use by other agencies or the general public. Data will be analyzed using standard social science quantitative and qualitative data analysis methods, including basic statistical measures, including totals, means, and medians. While standard errors and hypothesis testing will be part of the tabulation plan and published results, the main objective of this study is to develop qualitative measures to guide the future management and conservation actions and development and administration of management plans at each of the priority sites (Pelekane Bay-Puako-Anaeho'omalu Bay, Hawaii and Ka'anapali-Kahekili, Maui).

Final reports, brochures, and other relevant portions of the research process will be posted on the appropriate section of the NOAA Fisheries Pacific Islands Fisheries Science Center web site. In addition, the researchers will develop a summary of results and distribute it to interested parties. Where relevant, studies in the entirety may be published as internal reports or in part may be submitted for publication in journals to encourage peer review of data collected through this process as well as to disseminate findings. We will also prepare and distribute summaries of the research results to partners and at public meetings.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

Not Applicable.

18. Explain each exception to the certification statement.

Not Applicable.