SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Evaluation of Public Visitors' Experience at the National Marine Sanctuaries Visitor Centers and Exhibits

OMB Control No. 0648-0582

SUPPORTING STATEMENT PART B

COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

Potential Respondent Universe

The target population is users of the visitor centers (and not the sanctuary). Data analysis will be geared toward understanding the attributes of our target population, effectiveness of sanctuary messaging, satisfaction with visitor center services, and what could be improved. Attribute profiles for the population will be summarized using basic univariate descriptive statistics. Using a precision level of 5%, a confidence level of 95%, and a P=.5, the table shows the number of responses needed from each site.

Based on responses to Mokupapapa Discovery Center's prior survey (completed in January of 2010) and data from similar surveys conducted at aquariums and other interpretive facilities,) there is an expected response rate of 85%-90%.

Table 1: Visitor Center and Exhibit Visitors and Responses Needed
Green highlighted fields represent visitor centers, the non-highlighted rows are exhibits at partner facilities.

Visitor Center/Exhibit	National Marine Sanctuary	Annual Visitors	Responses Needed
Pacific Islands Ocean Exploration Center*	Pacific Islands Region	5,000	370
Mokupāpapa Discovery Center	Papahānaumokuākea Marine National Monument	75,000	398
NMSAS Governor Tauese P.F. Sunia Ocean Center	American Samoa	5,306	370

Visitor Center/Exhibit	National Marine Sanctuary	Annual Visitors	Responses Needed
Florida Keys NMS Eco-Discovery Center	Florida Keys	47,255	397
Exhibits at Texas Seaport Museum	Flower Garden Banks	57,500	397
Reef on the Road Traveling Exhibit and Programs	Flower Garden Banks	8,208	381
Exhibits at Cameron Park Zoo	Flower Garden Banks	450,000	400
Gray's Reef Ocean Discovery Center*	Gray's Reef	5,000	370
Exhibits at Tybee Island Marine Science Center	Gray's Reef	60,000	397
Exhibits at Georgia Southern Museum	Gray's Reef	16,470	390
Greater Farallones and Cordell Bank National Marine Sanctuary Visitor Center	Greater Farallones	17,958	391
Exhibits at Aquarium of the Bay	Greater Farallones	550,000	400
Exhibits at California Academy of Sciences	Greater Farallones	1,500,000	400
Exhibits at Pigeon Point Lighthouse	Greater Farallones	175,000	400
Hawaiian Islands Humpback Whale Sanctuary Visitor Center	Hawaiian Islands Humpback Whale	9,829	385
Kauai Ocean Discovery*	Hawaiian Islands Humpback Whale	7,700	380
Coastal Discovery Center	Monterey Bay	12,000	390
Sanctuary Exploration Center	Monterey Bay	56,000	397
Olympic Coast Discovery Center	Olympic Coast	6,000	375
Exhibits at Maritime Aquarium at Norwalk	Stellwagen Bank	300,000	400
Exhibits at Maritime Gloucester	Stellwagen Bank	30,000	397
Great Lakes Maritime Heritage Center	Thunder Bay	93,943	400
Exhibits at NPS Point Reyes Bear Valley Visitor Center	Cordell Bank Greater Farallones	290,000	400
Exhibits at NPS Point Reyes Ocean	Cordell Bank	131,700	400

Visitor Center/Exhibit	National Marine Sanctuary	Annual Visitors	Responses Needed
Exploration Center	Greater Farallones		
	Total	3,909,869	9,386

*New visitor center.

Characteristics of patron types at visitor centers and museums may vary considerably (e.g., a local family may be followed by a tourist couple who may be followed by a single adult tourist). In places with relatively low volumes of visitors (compared to high volume places such as the Smithsonian), a sample of visitor groups can be obtained by using a "next available" protocol, as follows:

> The interviewer is positioned near the exit from the exhibit space. As any visitor group (usually 1-4 people) nears the exit, the interviewer approaches and makes eye contact with the 'first adult' (in practice: the one who is physically closest to the interviewer) and requests their participation in giving feedback about the exhibits. Face-to-face surveys typically offer the highest response rates obtainable. If the adult visitor agrees, the interview is completed. Upon completion, the interviewer will tend to step aside to complete their work on the interview form (documenting the date and time of the interview, adding their own initials to it, reviewing the form to check for completeness and readable handwriting, and also to put away that completed interview form and have a new blank one ready); this process usually takes 3-5 minutes. When the interviewer is then prepared with a new blank interview form and related materials (e.g., a photo board about the exhibits, used for some of the interview questions), he/she looks up and selects the "next available" visitor group.

The principle of this and other sampling methods is that the interviewer does not *choose* who to interview by appearance, or by facial expression that might indicate enjoyment or not, or by whether there are or are not children in the group; in essence, the visitor group *selects themselves* (although they don't know the sampling parameters) by deciding when to exit (e.g., there may be another group being interviewed at the time when this group leaves, in which case they would not be selected). Depending on the visitor flow, the next visitor group might be leaving right then, or the interviewer might have to wait for 5–10 minutes for the next group to leave. This characteristic of "low volume" visitor facilities makes it impractical to use other methods such as selecting every 4th visitor group, or using a random number chart (for example, from 1 to 5), to decide which visitor group to select. While additional methods could be used to provide reliability assessments of the sampling method, the budget is modest in this particular project, and we are choosing to put relatively more effort in the analysis of questions from a well-conducted random sampling of "next available" visitor groups. We will make an effort to balance the sampling between weekday and weekend surveys to ensure capture of both local and visitor traffic.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring

specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

Statistical Method for Stratification and Sample Selection

This collection does not employ a statistical sampling method. The sample will be a convenience sample of the target population – users of the visitor center. Using a precision level of 5%, a confidence level of 95%, and a P=.5, we determined the number of responses needed from each visitor center/exhibit.

Estimation Procedure and Accuracy

Data analysis will be geared toward understanding the attributes of our target population, effectiveness of sanctuary messaging, satisfaction with visitor center services and what could be improved. Attribute profiles for the population will be summarized using basic univariate descriptive statistics. We do not know the demographic characteristics of the population, so it is not possible to weight the data.

Unusual Problems Requiring Specialized Sampling Procedures

We do not anticipate any unusual problems that require specialized sampling procedures. We do not plan to collect demographic information on approached individuals who decline the survey.

Periodic Data Collection Cycles

The purpose is a snapshot of visitor experience, thus the timing of survey administration is important as the visitor experience should be fresh in the respondent's mind to get the most honest answers. There is no intention of predicting or forecasting visitor behavior from the responses collected.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

There is an expected response rate of 85%–90%. Therefore, non-response should not be an issue in this study. Prior experience has shown that inviting visitors to contribute their opinions and feedback is a positive motivator. The respondents are from a group of interested users, which has been shown to yield higher response rates than a random mail or phone survey. For the reasons described above, we do not expect non-response bias to be an issue for this collection.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval under the Paperwork Reduction Act.

There will be no test of procedures or methods.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Dayna McLaughlin, National Interpretation Coordinator, dayna.mclaughlin@noaa.gov, will be NOAA's informational designer and responsible for data compilation and synthesis. Representative data will be used for exhibits, programs, and related ways of educating the public about the National Marine Sanctuary System.