**SUPPORTING STATEMENT**

**VISITOR CENTER AND EXHIBIT SURVEYS AT THE OFFICE OF**

**NATIONAL MARINE SANCTUARIES AND PARTNER OUTREACH FACILITIES**

**OMB CONTROL No. 0648-xxxx**

**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.**

Below is a table of the number of visitors to visitor centers. We expect at least a 45% response rate, based upon current surveys ONMS is currently implementing. The current response rate for the SBNMS wildlife viewing survey (OMB Approval Number 0648-0763) is roughly 25% and the response rate for the CINMS wildlife viewing survey (OMB Approval Number 0648-0729) is roughly 46%. These are much longer surveys, so we feel that 45% is a conservative estimate.

Each site will select a mix of weekdays and weekends to survey respondents. They will survey for a set period of time (1-2 hours) on a given day and select one adult from each group that enters based upon who had the last birthday. The target population is users of the visitor centers (and not the sanctuary). Respondents will be approached by visitor center staff, education and outreach staff, docents, interns and volunteers that have some type of sanctuary logowear on them (such as a shirt or lanyard) and asked to participate in the survey on-site and complete a paper version or electronic version (via tablet or kiosk) or if they prefer to complete the survey at a later date they will be provided with a postcard with a web link to complete the survey. The individual respondent will be sampled. The needed number of completes is shown below (Israel, 1992).

**Table 1: Visitor Center and Exhibit 2017 Visitation and Sample Sizes Needed**

|  |  |  |  |
| --- | --- | --- | --- |
| Program | Sub-unit | FY17 | Completes Needed |
| ASNMS Governor Tauese P.F. Sunia Ocean Center | American Samoa NMS | 5,306 | 370 |
| Florida Keys NMS Eco-Discovery Center | Florida Keys NMS | 47,255 | 397 |
| Exhibits at Texas Seaport Museum | Flower Garden Banks NMS | 57,500 | 397 |
| Reef on the Road Traveling Exhibit and Programs | Flower Garden Banks NMS | 8,208 | 381 |
| Exhibits at Cameron Park Zoo | Flower Garden Banks NMS | 450,000 | 400 |
| Exhibits at Tybee Island Marine Science Center | Gray's Reef NMS | 60,000 | 397 |
| Exhibits at Georgia Southern Museum | Gray's Reef NMS | 16,470 | 390 |
| Greater Farallones Marine Sanctuary Visitor Center | Greater Farallones NMS | 17,958 | 391 |
| Exhibits at Aquarium of the Bay | Greater Farallones NMS | 550,000 | 400 |
| Exhibits at California Academy of Sciences | Greater Farallones NMS | 1,500,000 | 400 |
| Exhibits at Pigeon Point Lighthouse | Greater Farallones NMS | 175,000 | 400 |
| Hawaiian Islands Humpback Whale Sanctuary Visitor Center | Hawaiian Islands Humpback Whale NMS | 9,829 | 385 |
| Coastal Discovery Center - Visitor Center | Monterey Bay NMS | 12,000 | 390 |
| Sanctuary Exploration Center - Visitor Center | Monterey Bay NMS | 56,000 | 397 |
| Olympic Coast Discovery Center - visitor center | Olympic Coast NMS | 6,000 | 375 |
| PMNM Mokupāpapa Discovery Center - visitor center | Papahānaumokuākea MNM | 59,544 | 397 |
| Exhibits at Maritime Aquarium at Norwalk | Stellwagen Bank NMS | 300,000 | 400 |
| Exhibits at Maritime Gloucester | Stellwagen Bank NMS | 30,000 | 397 |
| Great Lakes Maritime Heritage Center | Thunder Bay NMS | 93,943 | 400 |
| Exhibits at NPS Point Reyes Bear Valley Visitor Center | Cordell Bank NMS Greater Farallones NMS ELP SOS Network | 290,000 | 400 |
| Exhibits at NPS Point Reyes Ocean Exploration Center | Cordell Bank NMS Greater Farallones NMS | 131,700 | 400 |

**Green highlighted fields represent visitor centers, the non-highlighted rows are exhibits.**

**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 Analysis**

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 following table shows the number of responses needed from each site (Israel, 2003). There are no unusual problems requiring additional methods/techniques. See Table 1 above.

**Degree of Accuracy Needed for the Purpose Described in the Justification**

The sample will be a convenience sample of our target population – users of the visitor center. We do not know demographics of the population, so it is not possible to weight the data. However, as long as the recommended sample sizes are obtained we expect the sample to be representative of the population.

**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.

**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.**

We anticipate a 45% response rate of the target population, based on past applications of similar collections for National Marine Sanctuaries. Further, in the past, researchers have had no item non-response, even for income questions. (We are not asking income questions on this survey). The data will be used by visitor centers to improve services and provide the types of information respondents’ report they would like to have increased or provided. Respondents may complete the survey on-site or we may provide them with a postcard to log on and complete later. Given the multiple ways to access the surveys, and our expected response rate, we believe the data will be reliable. Further, 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 a significant issue for this collection. Demographic information obtained through the survey will be analyzed for evidence of non-response bias.

**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.**

The surveys have been reviewed by ONMS education staff and visitor center staff. These are the people who work closely with our target population and have an understanding of the types of questions that would be most beneficial to improve visitor centers, services and educational experiences.

**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.**

**NOAA Project Leads**

Dr. Danielle Schwarzmann was the primary advisor on the statistical aspects of the study design in consultation with Dr. Leeworthy, Chief Economist, with the Office of National Marine Sanctuaries. They are both experts in this area of research and application.

**Project Lead**

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**Sources:**

Israel, G. PEOD-6, a series of the Program Evaluation and Organizational Development, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: November 1992.