

## 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 Tauuese 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.