

Supporting Statement B

Visitor Use Surveys for
Headwaters Forest Reserve and King Range National Conservation Area

OMB Control Number 1004-NEW

Collections of Information Employing Statistical Methods

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When the question “Does this ICR contain surveys, censuses, or employ statistical methods?” is checked "Yes," the following documentation should be included in Supporting Statement B to the extent that it applies to the methods proposed:

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 government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

- The potential respondent universe, based on 2010 annual recreation visitation, is 13,500 people at Headwaters and 6,000 at the Lost Coast Trail in King Range National Conservation Area (KRNCA).
- The vast majority of this use occurs during the months of May through September, with more use occurring on weekends than on weekdays.
- At Headwaters, we will sample June 1 through Sept. 30. At KRNCA, we will sample primarily May 23 through September 2 (Memorial Day weekend through Labor Day weekend). However, if possible, we may also sample earlier in the Spring or later in the Fall to encompass increasing visitation during this timeframe.
- We will sample weekdays (Mon-Fri) and weekend days (Sat-Sun) equally (50/50).
- The expected response rate is 70%. The response rates from the previous collections (1999 Headwaters and 2003 KRNCA) were 70.9% and 72% respectively.
- Our sample target is 600 contacts, and 420 completed surveys for Headwaters and 400 contacts, and 280 completed surveys for KRNCA (see table 1 below)

Table 1 – Respondent Universe and sample for mail-back survey effort.

Location	Respondent Universe	Total Number of visitors to be sampled	Projected response rate	Total number of expected respondents
Headwaters	13,500	600	70%	420
KRNCA	6,000	400	70%	280

2. Describe the procedures for the collection of information including:

- * **Statistical methodology for stratification and sample selection,**
- * **Estimation procedure,**
- * **Degree of accuracy needed for the purpose described in the justification,**
- * **Unusual problems requiring specialized sampling procedures, and**
- * **Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

- We will sample during each week of the sample period, approximately from mid-May through September.
- Prior to sampling, we will randomly select weekdays (25 Headwaters and 43 KRNCA) and weekend days (25 Headwaters and 32 KRNCA) from the sampling period.
- We will sample for 8 hours each sampled day. Half of the days in each stratum will be sampled from 8:00 am to 4:30 pm; the other half will be sampled from 11:00 am to 7:30 pm.
- 50 sampled days (Headwaters) and 75 sampled days (KRNCA) should easily provide enough subjects to obtain our desired sample size.
- A net sample (assuming 70% response rate) of 420 completed surveys (Headwaters) and 280 (KRNCA) is large enough to provide a 5% confidence interval (at a 95% confidence level), which is a sufficient degree of accuracy for the purpose of this collection.
- No unusual problems requiring specialized sampling procedures are anticipated.
- These data should be collected every 5 - 10 years.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided

for any collection that will not yield "reliable" data that can be generalized to the universe studied.

In order to maximize response rates, individual, face-to-face contact will be made with every potential respondent. The person conducting the contacts will be trained in survey and interview methods. The purpose of the study will be explained to each person contacted. Subjects will be asked if they would be willing to participate, and will indicate their willingness by providing their contact information (name, address, e-mail address).

Non-response is not expected to be an issue for the on-site portion of either of these studies. At Headwaters in 1999 we had a 97% response rate for the on-site portion of the study, and at the Lost Coast Trail in 2003 we had a 98% response rate to the on-site portion of the study. However, in an effort to prevent non-response bias, the person conducting the interview will make note of any groups who decline to participate, and will note their group size and whether or not they had a dog. This will allow us to check for a non-response bias in the event that the response rate for the on-site portion is significantly lower than in the past. Likewise we will make note of non-participants in 2013 at the Lost Coast Trail.

Each subject providing contact information will then receive, no more than one week later, a survey in the mail. First class postage stamps will be used on the envelope to make it look less like bulk (aka junk) mail. A cover letter will again explain the purpose of the study, and the importance of each subject completing and returning the survey in order to increase the reliability of the study results. The letter will also explain that all answers are anonymous and will be analyzed in a way that will not connect the respondent to their answer. An online (Survey Monkey) option to complete the survey will also be provided and explained. Based on a similar study we expect about 20% of respondents to choose the online response option. A pre-addressed, postage-paid return envelope will be provided for return of the survey. A reminder postcard will be sent to each subject approximately one week after the mailing of the survey. The previous collections (1999 and 2003) achieved response rates of 70.9% (Headwaters) and 72% (KRNCA) with this method (minus the online option).

- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

Most of the survey questions will be questions that have been used in previous surveys or have already been pre-tested in groups smaller than ten.

- 5. Provide the names and telephone numbers of individuals consulted on 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.**

The following individual was consulted on the statistical aspects of the study design, and is also the contractor who will collect and analyze the data for the agency. Dr. Martin has conducted over 20 similar recreation visitor studies, including the original (1999 and 2003) visitor studies for the Headwaters Forest Reserve and KRNCA.

Dr. Steven R. Martin
Professor and Dept. Chair
Dept. of Environmental Science and Management
Humboldt State University
Arcata, CA 95521
707-826-5637
steven.martin@humboldt.edu