

Supporting Statement B. 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.

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods 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 universe of potential respondents for this study include all the recreational users of TVA reservoirs that access water areas either through the public access areas or directly from their own private properties located along the shoreline. Since the primary objective of this study is to find out that number of total users, we currently do not have data on total estimate of potential respondent universe.

We however know that a total of 10,416 26A permit holders (property owners) reside along the shorelines of three reservoirs where the study will take place. From that, we will draw a random sample of 1,000 to conduct the property owners' survey.

Since the data has not been collected yet, actual response rate is not known. However, we expect about 50-60% response rate in case of property owners survey, and over 90% response in case of on-site survey.

Table: Population, needed sample size, and number of contacts to be targeted by reservoir for the shoreline property owners' survey.

Reservoir	Population	Sample size needed	Targeted contacts*
Watts Bar	5,096	357	714
Norris	2,479	333	666
Chickamauga	2,841	339	678
<i>Total</i>	<i>10,416</i>	<i>1,029</i>	<i>2,058</i>

* Targeted contacts estimated according to the assumption of roughly 50% response rate. Previous surveys conducted by TVA at Norris (in 2007) and Chickamauga (in 2009) had 59% and 56% response rates.

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.

- For the general recreation users that access water areas from public access-points (marinas, fishing piers, boat ramps etc.), a stratified random sampling approach will be adopted. All the access points in study area will be classified into "low" and "high" use areas based upon a

preliminary discussion with TVA staffs familiar with local users flow. Then, available sampling hours will be allocated to those strata to count the number of visitors (and party size) exiting the site during a particular sampling period. Mean party size and number of parties will be combined to get the average use statistics for respective sampling strata, and then to the particular reservoir. Resulting use statistics from this user survey will be combined with data collected from property owners' survey of the corresponding reservoir. Once the data is aggregated at the reservoir level for three reservoirs being studied, mean statistics will be generated in terms of per-shoreline mile and per-surface-area units. This will finally be combined with the total shoreline miles and surface areas of the entire reservoir system to extrapolate the use statistics to the entire system. A similar procedure will be followed for calculating mean expenditure per-surface acres and per-shoreline miles of select reservoir and finally extrapolating it to the entire reservoir system.

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.

- TVA will send a reminder to property owners survey participants as the address will be available for those contacts (from 26A permits). However, the address will not be known for general recreation users contacted on-site and therefore cannot be reminded further to increase the response. Respondents of both surveys will be provided with a convenient self-addressed pre-paid envelope to mail back the survey. In case we noticed low-response rate among certain strata (e.g. low use area), we will adopt a standard method of post-stratification weighting to balance the sample.

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 test may be submitted for approval separately or in combination with the main collection of information.

- There is no tests of procedure or methods to be conducted. Methods/procedures to be followed are widely used in recreation surveys already (for example, please see Vaske, J. 2008. Survey Research and Analysis. Venture Publishers).

5. Provide the name and telephone number 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.

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