

Supporting Statement B

Assessment of the Business Requirements and Benefits of Enhanced Geospatial Water Data

OMB Control Number 1028-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 sample for this collection will largely be of day-to-day professional users of hydrography data. The data will be collected electronically through an on-line questionnaire.

Respondent Universe

The respondent population for the on-line survey will be selected from State, local, and tribal governmental agencies currently using hydrography data. USGS Geospatial Liaisons will work with their state, local, and tribal counterparts to provide a list of employees using elevation data. For purposes of this study, 375 employees will be chosen to complete the on-line survey (see Table 1 below). Each respondent will be contacted via email and given the instruction for completing the survey.

Because this will be an attentive, knowledgeable, and highly motivated sample, we anticipate a response rate of approximately 80% for the on-line survey (yielding 300 actual respondents).

Table 1. Organizations in respondent universe for Survey and Interviews

Surveys				
Organization	Number of Organizations	Average Expected Survey respondents per Organization	Requested Respondents	Anticipated Respondents
U.S. States	50	6	300	240
U.S. Territories	5	5	25	20
Tribal Governments	10	5	50	40
Total			375	300

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.**

The respondent sample will be comprised of a known population of elevation data users based upon a confirmed list (n=375). Representatives from state, local, and tribal government organizations will be contacted and asked to participate in this study. The sample will not be stratified because the population is known by USGS as contacts and through working relationships.

The questionnaire design assumes that all 50 states and other selected non Federal participants will have sufficient input to the requirements assessment if an 80 percent response rate is achieved. The full requirements study includes a follow up interview process that will identify and fill in gaps. Since the questionnaire is intended to achieve a full enumeration (at least some responses from every state) no statistical validation is necessary.

The data collected during on-line survey study will be coded directly into a computerized database using Survey Monkey™. Data analysis will consist of descriptive summary statistics – sum, maximum, minimum, mean, median. Descriptive statistics will be used describe current uses within the programs of the organizations represented within the sample. Because the USGS is interested in determining ways to improve the availability of hydrography data it is important to gather baseline information concerning current requirements and to determine any information gaps or unmet needs.

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.

Several steps will be taken to maximize response rate and ensure an accurate and reliable sample. We predict that the response rate of at least 80% will be met due to the highly technical nature of the respondents and support of the USGS Geospatial Liaisons.

We are using this web based survey as a strategy to decrease costs, increase the speed of data collection, increase response rates by providing additional modes for response, and decrease the amount of non-response error. The Tailored Design Method for mail and internet surveys will be followed to help ensure a high response rate and representative sample. As a part of this process we will:

1. request participation in advance.
 2. use the following information to introduce the survey
the purpose of the survey.

the reason for participation.

the terms of anonymity and how the results will be used.
 3. allow enough time to complete the survey. With SurveyMonkey we will be able to you allow the respondent begin the survey and return at a later time if needed
 4. provide survey Instructions - Explain how to navigate through and submit the survey plus clear instructions will be included for each section when applicable.
 5. provide a survey that is easy to follow with clear and direct questions/instructions:
 6. send reminders during the survey period for those that have not completed the survey.
- 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.**

The initial questions for this collection were subject to extensive internal USGS review, as well as reviews by its external partners including the U.S. Environmental Protection Agency, the U.S. Forest Service, the Natural Resources Conservation Service, the Bureau of Land Management, Consortium of Universities for the Advancement of Hydrologic Science, Inc., the Minnesota Pollution Control Agency, and the Arkansas Department of Environmental Quality. The review and pre-testing of the survey was performed to gather comments concerning the overall structure, sequence and clarity of questions. Individuals were also asked to estimate the time burden of the survey. Comments and suggestions provided by reviewers and pre-test participants were evaluated and used to revise the survey instrument where appropriate. Comments that improved clarity and comprehension of survey content were also incorporated.

- 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.**

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