

**SUPPORTING STATEMENT B  
FOR PAPERWORK REDUCTION ACT SUBMISSION**

**USGS Generic Clearance for Water Availability Data Collections  
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 activities under this clearance may involve samples of self-selected stakeholders, as well as quota, purposive, or convenience samples. Inclusion and exclusion criteria will vary depending on the research topic. Respondents may be selected to cover a broad range of stakeholders or to include specific characteristics, experiences, or expertise related to the programs, issues, or subjects of interest. In these cases, the true size of the respondent universe may be unknown; however, sample size and response rates are not applicable to these sampling methods because the data are not used to produce statistical descriptions (careful, repeatable measurements), or generalize beyond the scope of the sample. Under this generic ICR, data collection requests (and associated samples) that are not intended for statistical purposes, as defined by 44 U.S. Code § 3561, are not subject to the same scrutiny as scientifically drawn samples.

In some cases, however, statistically representative methods will be employed to ensure a sample that reflects attributes of the population. Specific details of those methods including sample selection, respondent universe, expected response rate, anticipated analysis, and strategies to minimize nonresponse bias will be described fully in each individual collection request.

All the sampling methods employed by the collection requests under this generic clearance will be thoughtfully designed with the intent of minimizing burden, to the greatest extent possible, while simultaneously allowing researchers to gain insight into the many diverse drivers, impacts, and experiences associated with water availability (quantity, quality, and access) throughout the United States. Recommended methodologies will be based on a review of relevant literature and previous research, consultation with experts, and the individual objectives of each study. Special emphasis will be placed on ensuring clear and interpretable collection instruments and providing

respondents with transparency around the purpose of each information collection including plans for interpretation and dissemination.

**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.**

USGS may use a variety of methodologies for these information collections depending on the objectives of each particular effort. Information collections will be designed and deployed based on methodologies that ensure the collection is appropriate for the intended use of the data. When research objectives require data that can be analyzed statistically and generalized to a larger universe or population, collections will use methods that are known to produce consistent results with the necessary statistical power for drawing robust conclusions and employ techniques to reduce or address non-response bias.

When research objectives are focused on deepening the understanding of concepts or phenomenon by examining the experiences, opinions, or judgements of those with relevant lived experience, non-statistical sampling methods may be used. For these types of studies there is no standardized rule for optimal sample size. Collections will be designed and deployed with the goal of achieving thematic “saturation” – the point at which additional collection is unlikely to yield new information. Data from these collections will not be generalizable or yield statistical insights about a larger universe or population, but instead will produce rich, nuanced information that can be used to add context to quantitative data or identify new questions and avenues of research.

All submissions under this generic clearance will fully describe relevant methodology, and will be evaluated to ensure consistency with the intent, requirements, and boundaries of the anticipated generic clearance and to ensure that information-collection procedures are appropriate for the intended uses of the data. A description of any peer review of the methods and/or instrument will be provided with each information collection.

**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.**

Information collected under this generic clearance may not always yield generalizable quantitative findings; however, it can provide useful input into the priorities, methodologies, delivery strategies, and impacts of USGS research that may be generalized to other aspects of the Water Resources Mission Area science portfolio. Examples include information collections that validate or invalidate assumptions in USGS modeling products, inform data delivery methods

and product development, expose gaps in current scientific knowledge, and reveal avenues for future or expanded research. Collections of qualitative data that cannot be generalized will ensure that the accuracy, reliability, and applicability of the results is adequate for their purpose by following established, acceptable qualitative research methods. Submitted requests will describe the methods used, references or experts consulted, and plans to communicate the context for, and limitations of, all data collected.

For studies that are not meant to yield statistically generalizable results, non-response issues are less of a concern; however, researchers will still take appropriate steps to reduce non-response in the context of achieving thematic saturation across an adequately diverse pool of respondents. All data collection plans will consider the minimum number of responses needed to provide accurate and reliable data, regardless of its generalizability, and develop strategies to obtain at least that number. Prior to deployment, all collections will seek to proactively minimize non-response by tailoring the type, frequency, and nature of solicitation to research objectives, keeping collection instruments as brief as possible to reduce burden without sacrificing data reliability, and conducting adequate reviews and pretests to maximize question clarity and effectiveness. Once collection begins, other methods to increase response rates may be used as appropriate including callbacks, reminders, or delivering requests in multiple formats (e.g., surveys that are administered through the mail and electronically).

**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.**

Pretesting may be done with internal staff, a limited number of external colleagues, and/or individuals/entities familiar with the type of information sought. If the number of pretest respondents exceeds nine members of the public, USGS will submit the pretest instruments for OMB review under this generic clearance.

**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.**

Many of the collections under this generic clearance will not require rigorous statistical analysis. If statistical methods are used, USGS will obtain and provide information from the statisticians involved in the development, design, conduct, analysis, and assessment of usability of the data collections to be conducted, as appropriate. USGS will provide the name and contact information of the persons consulted in specific information collection requests submitted under this generic clearance.