

SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Generic Clearance for NOAA Citizen Science and Crowdsourcing Projects
OMB Control No. 0648-NEW

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Data collection methods and procedures would vary across the CSC projects; however, the primary purpose of these CSC projects would be to collect qualitative and quantitative data that would help inform scientific research, assessments, validate environmental models or tools, support STEM learning, or; enhance the quantity and quality of data collected to support NOAA's mission. Part B is not applicable to most CSC projects. However, if a specific CSC project intends to use focus groups or statistical methods, such as sampling, imputation, or other statistical estimation techniques, the mini-ICR for that CSC project would include a Part B, which would explain the statistical methods the project would use and provide a response to each of the following five questions.

1. Who will be surveyed and why is it appropriate to survey that group?
2. How was the survey developed including consultation with interested parties, pretesting, and responses to suggestions for improvement?
3. How will the survey be conducted, how will the population be sampled if fewer than all the population will be surveyed, what is the expected response rate, and what actions does NOAA plan to take to improve the response rate?
4. How will NOAA analyze the results of the survey and generalize the results to the entire population?
5. What is the contact information for 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?

In addition and as noted below, Part A of each mini-ICR would provide other related information.

- 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 NOAA CSC projects would not use statistical methods to select project participants. Participants in almost all those projects would be self-selected. NOAA would describe the method for soliciting participation in Part A of the mini-ICR for each collection. For example, a project could advertise for participation through targeted outreach and engagement methods like standard and social media outlets, collaborations with on-the-ground partners, public talks, and word-of-mouth.

The number of participants would; vary by CSC project. The variation in participation would likely be due to multiple factors like personal interests, accessibility, perceived burden, outreach by NOAA, and success over time. NOAA would provide an estimate of the expected number of participants in Part A of the mini-ICR for each project.

NOAA would design its CSC projects under this generic clearance to contribute to research and science, not to collect highly influential scientific information¹.

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.

Very few CSC projects would use statistical methods to select project participants and NOAA typically would not generalize the results to the entire population. Participants in almost all those projects would be self-selected. Data collection methods and procedures would vary and NOAA would provide the specifics of these in Part A of the mini-ICR for each CSC project. If Part B would be applicable for a specific CSC project, NOAA would provide a response in the mini-ICR for that project. The response would explain how the project would be conducted, how the population would be sampled if sampling would be used, the expected response rate, and the actions NOAA would plan to take to improve the response rate. In addition and if applicable, the response would explain how NOAA would analyze the results of the survey and generalize the results to the entire population.

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.

Because the NOAA CSC projects would not use statistical methods to select project participants, the methods to maximize response rates and to deal with issues of non-response are not relevant. The related issues of recruiting and retaining sufficient numbers of voluntary participants,

¹ Information NOAA or OMB determines: (i) could have a potential impact of more than \$500 million in any year, or (ii) is novel, controversial, or precedent setting or has significant interagency interest.

including those from underserved communities, are relevant and are discussed in the response to Part A, Item 1.

- 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.**

NOAA could do pretesting with internal staff or a limited number of external colleagues. If the number of pretest respondents would exceed nine members of the public, NOAA would submit the pretest instruments for review under this proposed generic clearance.

- 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.**

If Part B were required for a specific CSC project, the mini-ICR for that CSC project would include a response to Question 5 above, which would meet this requirement.