

Generic Clearance for Citizen Science and Crowdsourcing Projects (Renewal)

Supporting Statement – Part B: STATISTICAL METHODS

Data collection methods and procedures will vary; however, the primary purpose of these collections will be for qualitative and quantitative data collections that might help inform scientific research, assessments, or environmental screening; validate environmental models or tools, or; enhance the quantity and quality of data collected across the country's diverse communities and ecosystems to support the Agency's mission.

1. Universe and Respondent Selection

Statistical methods will not be used in the selection of respondents. Participants in citizen science and crowdsourcing projects are self-selected. The method for soliciting participation will be described fully in each collection request, but participation may be advertised 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 will vary by project submitted under this generic clearance. The variation in participation is likely due to multiple factors like personal interests, accessibility, perceived burden, outreach by the Agency, and success over time.

Results will not be used to directly inform Agency regulations or policies. Data also will not be generalized beyond the scope of the sample.

2. Procedures for Collecting Information

Data collection methods and procedures will vary and the specifics of these will be provided with each collection request. Each request under this generic collection will include details on the statistical methodology for stratification and sample selection (if applicable to the collection – this is not applicable to the selection of participants), estimation procedure, degree of accuracy needed for the research purpose described in the justification, unusual problems requiring specialized sampling procedures, and any use of periodic data collection cycles (less frequent than annual) to reduce burden.

3. Methods to Maximize Response

Participants will have complete control over their participation in citizen science or crowdsourcing projects. Participants will need to proactively seek out opportunities, respond to an email, or actively sign up for a project in order to participate. Outreach and advertising materials will provide information on how to participate but will not

assume participation from anyone. Several existing citizen science and crowdsourcing projects employ engagement tactics to support continued participation, and reduce non-response including newsletters with appreciation, motivation and results delivered to participants, and optional bi-weekly reminders to observe. The collection requests under this generic clearance may utilize some of these techniques while acknowledging that participants have full control over whether to participate or not.

Each collection request under this generic clearance will specify methods to track and increase response rates. Some collection requests will provide opportunities for participants to submit negative data, for example, information on the time and effort to attempt to obtain an observation in the event of no observation.

4. Testing of Procedures

Pretesting may be done with internal staff or a limited number of external colleagues (less than 10). If the number of pretest respondents exceeds nine members of the public, the Agency will submit the pretest instruments for review under this generic clearance.

5. Contacts for Statistical Aspects and Data Collection

Projects submitted under this generic clearance can consult with statisticians in the development, design, conduct, and analysis of the data collection. Statistical expertise is available from Agency statisticians or contractors and the Agency will include the names and contact information of persons consulted in the specific information collection requests submitted under this generic clearance as needed.