## SUPPORTING STATEMENT B FOR PAPERWORK REDUCTION ACT SUBMISSION

## Pollinator Conservation Social Network Analysis Survey OMB Control Number 1018-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.

We expect the potential population respondent universe to be approximately 730 organizational representatives (private sector, academics, nonprofits, city, county, State, Federal, and Tribal agencies). Our known sample population, based on previously conducted research and engagement is 500 organizational representatives.

Starting with organizational representatives we previously identified, we will send an initial email that notifies them of the study. This email will have two purposes – first, it will notify them that there is a survey that will be distributed via email about their work in the region and their collaborative relationships. Second, it will provide the opportunity for the receiver of the email to send us a different organizational email address so that we can best reach the person in the best position on behalf of the organization to complete the survey.

Approximately a week after the study notification email, we will send another email that introduces the study, includes the full consent protocol, and invites the participants to take the survey by clicking the link. This email will be sent to the organizational email address of the participant that represents the organization of interest in the study. The link will be embedded in the email and participants who choose to take the survey will spend approximately 20 minutes completing the maximum 30-question survey.

Based on respondent responses regarding "who they work with", we will employ a linked chain or snowball method that snowballs the survey invitation to identified organizations on the list, who were not on the original list. This snowball process will continue until the list of new organizations generated from surveys and cross-referenced with our population sample frame was less than 10%.

We expect not to exceed a 50% response rate and an expected 730 organizational

representatives to receive the survey which would result in a maximum sample size of 365.

- 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.

We plan to send an invitation to the survey to the total population of organizations working in the pollinator conservation space across North America and therefore there will be no sample stratification. The linked chain or snowball sampling procedure is a common practice in network studies.

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.

In order to maximize response rate, we will send the initial study notification email, the first invitation to participate, followed by two reminders from the study PIs.

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.

We have improved and refined the governance network methodology and analytical techniques over the past 10 years. We are constantly evaluating methods used to analyze social network data and the evolving applications of inferential statistics using exponential random graph and auto-logistic actor attribute models. While some improvements in precision, accuracy, and general results are expected, it is unlikely that the improvements will be substantial enough to allow a reduction in survey coverage since the current best sampling practices include attempts to identify and survey entire organizational populations. Similar methodology and protocol comes from the USDA USFS STEW-MAP efforts (Landau et al. 2019).

Landau, Laura, Lindsay K. Campbell, Michelle Johnson, Erika Svendsen, and Holly Berman. 2019. "STEW-MAP in the New York City Region: Survey Results of the Stewardship Mapping and Assessment Project." *Gen. Tech. Rep. NRS-189. Newtown Square, PA: US Department of Agriculture, Forest Service, Northern Research Station.* 69 p. 189: 1–69.

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.

Persons collecting and analyzing data:

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