Supporting Statement B

Registry of Climate Change Vulnerability Assessments

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 potential respondent universe is comprised of public and non-public entities (universities, nongovernmental organizations, private firms) that conduct climate change vulnerability assessments (VA). Respondents will be "identified" through distribution channels managed by two federal interagency committees and their nonfederal partners[1]

Estimates of the number of ongoing VAs are derived from a 2010 internal "data call" by the Interior Department. This data call identified approximately 400 ongoing VAs. USGS is aware of procedures used in this data call that resulted in a less than complete distribution of this data call and less than complete responses. Based on this initial imperfect sample, and the knowledge that additional VAs have been started since that time, we estimate 800 VAs in the Interior Department. Based on conversations with partners and knowledge of funding activities, we estimate that the extent of VAs in other agencies (USDA, EPA, etc.) is approximately the same.

[1] The primary group assisting in this initiative is the Interagency Land Management Adaptation Group (ILMAG) and *ad hoc* group with participants from federal agencies, executive office (CEQ, OSTP), Congressional (GAO), state fish and game agencies, and nongovernmental organizations (NGOs). The Climate Adaptation Work Group of the US Global Change Research Program is also overseeing this work. The state and NGO participation on ILMAG provides a strong entry to state and NGO-oriented projects; one state participant is the Association of Fish and Wildlife Agencies, the member organization for all state fish/game departments. State entities beyond "fish and game" sectors will be reached with the assistance of Federal agencies (such as EPA and the Army Corps of Engineers, who work with different state agencies. A second ILMAG participant is the National Wildlife Federation, which has spearheaded significant work on defining methods for vulnerability assessments, and their staff are considered experts in this field.

We conservatively estimate that states have underway, on average, two VAs per state. As an average, this estimate is reasonable, but there is considerable variation in the level of activity by state. Estimates for local government are especially difficult, as many of these projects are small and not widely publicized, and many local projects will have a state or federal partner. Estimates of tribal activity are from personal knowledge of the study design team, which interacts directly with this community.

Estimates of response rates are aggressive but realistic with respect to federal agencies. This will be a "data call" survey managed within the normal data call procedures of each participating agency. Distribution through these mechanisms will increase access and likely response. Response rate estimates for other sectors are simply that, estimates.

Estimated Survey Universe and Response Rates		
Sector	Estimated Universe	Estimated Response (%)
Department of the Interior bureaus	800	600 (75%)
Federal agencies other than DOI	800	600 (75%)
Total Federal	1600	1200
States and state entities	100	60 (60%)
Local governments	100	10 (10%)
Tribal governments and entities (e.g. intertribal organizations)	50	40 (80%)
Private sector entities (e.g. commercial firms, NGOs, and academic researchers)	150	50 (30%)
Total Non-Federal	400	160
Grand Total	**2000**	**1360 (68%)**

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.**

This information collection is not designed to produce statistical estimates of the characteristics of the underlying population. The goal is to increase access to and visibility of the individual studies, thus making each more valuable than an isolated effort. Simple statistical calculations, such as the number focused on plants / animals / ecosystems, or the number by state or other geography, will be conducted to provide a summary view of the identified activities. In addition, such summary statistics will be used to identify potential gaps in coverage (either of VAs themselves or of penetration of the survey instrument) by assessment endpoint, agency affiliation or geography, and to identify more-commonly employed assessment methods.

Vulnerability assessments are a new and emerging scientific discipline. Users will be cautioned that inclusion on the registry does not imply any assessment of the scientific quality or reliability of the conclusions, findings, or other information in each report, and that assessing fitness for use is the responsibility of the user.

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.**

As noted, this collection is not intended to provide statistical estimates of population characteristics. However, several steps will be taken to address response rates, so as to maximize the utility of the collected information. These include:

- *Federal agencies*: Working with federal agency leadership to utilize internal "data call" procedures. Most agencies have an internal system enabling headquarters-led information gathering about agency activities. The interagency working group overseeing this initiative has agreed to utilize these procedures for this information collection.
- *State and local governments and entities*: Working with state entities to achieve broad coverage for the survey. We have participants from state-membership entities that can reach directly to many state agencies, and the Federal agencies involved have significant ties to states and local government.
- *Tribal governments and entities*: USGS and the Interior Department are developing a rich and interactive community around native American (Indian, Alaska native, Pacific Island/Hawaiian) climate change. Staff from the program sponsoring this information collection regularly interacts with the leadership of this community; the Advisory Committee on Climate Change and Natural Resource Science (a new Federal advisory committee) has tribal representation, and there are an increasing number of related venues. Direct contact with these groups will ensure broad reach for 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.**

Survey questions were reviewed and refined with the help of the developmental partners noted above. In addition, the online, Web-based survey instrument was made available in "beta" form and was tested by 7 candidate recipients from different sectors (i.e., ecology, built systems) to gain feedback on the phrasing of questions, instructions, time required, and related matters, to ensure ease of use by respondents.

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.**

Because this project is not utilizing any advanced statistical methodology, we have not consulted individuals on the statistical design. Simple calculations, e.g., how many assessments were Federal versus state versus others; how many assessments in the Northeast versus Northwest, how many deal with fish versus birds, etc., are likely. This level of "analysis" does not warrant a more complex statistical / research plan.