

Supporting Statement B

Yukon-Kuskokwim Delta Berry Outlook

OMB Control Number 1028-0122

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, or sampling frame, includes all occupied households in the Yukon-Kuskokwim (YK) Delta region of western Alaska with the exception of households in the village of Bethel. The village of Bethel will be excluded from our potential respondent universe as it is a more densely populated, more urban, and differs from the rest of the region in nearly all demographic categories and thus is not representative of our target population. To determine the villages in this region we have used the service area of the Yukon-Kuskokwim Health Corporation (YKHC), which represents 58 federally recognized tribes served by five sub-regional clinics and one regional clinic located in the major regional hub of Bethel. Excluding Bethel and using 2010 census data on occupied households our potential respondent universe includes 4,240 households. We will use a proportionate probability sampling method in which the chance of a household’s selection is based on the percent of households represented by each region. This will ensure proportionate representation of different geographic and environmental regions in the YK Delta. We are targeting households as our sampling unit as berries are harvested at the household level. We have no way of estimating the expected response rate as we have never used this mode of survey administration in this region.

- 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.**

Information will be collected via a mailed, self-administered, household survey. Households will be randomly selected from each region based on the proportion of total households in each region. Each of the six regions was assigned a number (1-6) randomly and each household within each region assigned a number from 1-n, n being the total number of households within the specific region. Household numbers were assigned by sorting the names of the villages within each region alphabetically and then numbering households starting with the lowest address number and proceeding sequentially through all villages in each region. A random number generator was used to select households by generating a separate group of numbers for each region based on a proportionate sample (villages located in a more densely populated region have a greater chance of being selected). The number of sampling units generated for each region was dependent on the percentage of households represented in each region in order to obtain an overall sample of 150 households. This is shown in Table 1.

Regions	Number of Households	Percentage of households	Sample per region
Region 1	516	12	18
Region 2	561	13	20
Region 3	416	10	15
Region 4	1445	34	51
Region 5	587	14	21
Region 6	715	17	25
Total	4240	100	150

No estimation procedures are needed beyond the stratified random sampling of household region combinations described above. Given the size of the sample and an anticipated response rate of 66% we expect to achieve +/- 10% accuracy with 95% confidence. There are no unusual problems that we are aware of that require specialized sampling procedures.

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.

Traditional methods to maximize response rates will be used, specifically we will use the method of multiple carefully designed contacts that are strategically timed (Dillman, Smyth, and Christian 2014). This will include a pre-notice letter to introduce the project and let the respondent know that the survey is coming followed by an invitational letter, the survey itself, and a postage paid envelope to return the survey roughly a week later. The following week respondents will receive a postcard thanking them for participating in the survey, which also serves as a reminder for those who have not yet completed the survey. Roughly two-weeks later a follow up reminder letter will be mailed to all non-respondents with a replacement survey and

replacement postage paid return envelope.

- 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.**

This survey has been revised based on results and feedback from a previously administered survey. The updated survey has been circulated to community members in the villages participating in the study as well as experts in the field for comment. No further tests are planned.

- 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.**

Nicole Herman-Mercer, Social Scientist, USGS – Water Mission Area ph. 303-236-5031 and Rachel Loehman, Research Ecologist, USGS – Alaska Science Center ph. 505-724-3664 will actually collect and analyze the information for the USGS.

References

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, Phone, Mail, and Mixed-Method Surveys: The Tailored Design Method.

[OMB-OIRA has produced a number of documents that may serve as useful reference material for completing Supporting Statement B. These can be found at:
http://www.whitehouse.gov/omb/inforeg_statpolicy]