

# 1 Supporting Statement A

## Yukon-Kuskokwim Delta Berry Outlook

OMB Control Number 1028-XXXX

### Justification

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.**

The collection of information is necessary in order to better understand berry dynamics in the Yukon-Kuskokwim (YK) delta and future impacts to berry resources that may result from climate change induced ecological and weather changes. Berries are an important subsistence resource for human populations and bird populations in this region. Legal authority for this collection can be found in 15 U.S.C. 2901, 2908 The National Climate Program Act of 1978 established a national climate program to assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection. Be specific. If this collection is a form or a questionnaire, every question needs to be justified.**

The information collected here will be used by USGS researchers to inform a Bayesian model of berry dynamics in this region. Information will be collected in the form of a cultural consensus survey concerning four different berry species (local names: cloudbberries, red berries, blackberries, and blueberries). Cultural consensus surveys are dichotomous surveys in which the survey participant is forced to answer yes/no true/false. In this way analysis of the surveys can reveal a community-wide consensus of correct answers for each question. This is a new collection, therefore the agency has not made use of any information. The majority of the questions are identical for each berry species though some are unique to a particular species. Justification for each question follows, the question itself is *italicized*:

- *This is an important berry in my household.* – This question is used to ascertain the level of importance of different berry species in households to understand possible impacts were this berry no longer available.
- *We travel less than twenty miles to pick this berry.* – This question seeks to understand how far people travel to pick berries.
- *My family travels the same distance as we always have to gather this berry.* – This question will provide information on whether people are traveling the same distance as always or longer distances to obtain berries.

- *The location where we can pick these berries has changed over the last ten years.* – This question seeks to understand if berries are growing in the same location they always have over the past decade or if people are being forced to seek out new berry picking locations.
- *The amount of snow in the winter affects how many berries there will be the following summer.* – This question seeks to establish a consensus on the impact of snow on berry abundance.
- *The amount of rain in the summer affects how many berries there will be.* – This question seeks to establish a consensus on the impact of rain on berry abundance.
- *Berries are the same size they have always been.* – This question seeks to understand if the health of berries is changing or staying the same.
- *Compared to ten years ago, we find more brown dead berry plants.* – This question also seeks to understand if the health of berries is changing or staying the same.
- *Smoke from fires has no impact on berries.* – This question seeks to establish a consensus on the impact of increasing forest fires on berry resources.
- *Spring temperatures have no impact on how many berries there will be.* – This question seeks to understand if changes in spring temperatures impact berry resources.
- *Summer temperatures impact how many berries there will be.* – This question seeks to understand if changes in summer temperature impact berry resources.
- *There are less berries than there were ten years ago.* – This question seeks to establish a consensus on whether the abundance of berries has changed or stayed the same over the past decade.
- *The abundance of this berry is more variable than it was ten years ago.* – This question seeks to establish a consensus on whether the abundance of particular berry species are more variable.
- *These berries are not impacted by ATV trails.* – This question seeks to understand if particular species are being impacted by ATV travel.
- *These berries are ripe at the same time they have always been.* – This question seeks to establish a consensus on whether observed changes in seasonal timing have impacted the timing of berries ripening.
- *Wind has no impact on these berries.* – This question seeks to establish a consensus on whether wind and potential change in wind patterns have an impact on berry resources.
- *The landscape where we pick berries has changed.* – This question seeks to understand whether landscape changes (erosion, permafrost thaw, flooding, etc) are impacting berry resources.
- *These berries are not impacted by flooding.* – This question seeks to understand the impact that flooding has on particular berry species.
- *We pick blackberries after the first frost.* This question is specific to blackberries and seeks to establish a consensus on the timing of when these berries are picked as it may have implications if the timing of the first frost is changing.
- *The blueberries we pick come from plants that are less than two feet tall.* – This question is specific to blueberries and is attempting to ensure that the interviewer and interviewee are discussing the same plant.

- 3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden and specifically how this collection meets GPEA requirements.**

This data collection does not use automated, electronic, or any other technological collection techniques. The cultural consensus surveys will be administered in person, one on one, with the survey administrator marking the participants' answers on paper.

- 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.**

Investigators are working closely with other researchers in the field to share resources and avoid duplication. The Alaska Native Tribal Health Consortium has distributed a paper based survey focused on berries at two Alaskan Tribal Environmental conferences (Alaska Tribal Conference on Environmental Management, Alaska Forum on the Environment) and electronically to participants in the Local Environmental Observers (LEO) Network over the years 2013 and 2014. A modified electronic survey has been distributed to LEO participants on an annual basis since. However, the cultural consensus survey that will be used in this new information collection is a specific type of survey formatted in a way that statistical analysis will allow for a *culturally correct* understanding of berry resources to be established that can be used to inform models in such a way that the broader LEO survey cannot. Furthermore, this new collection focuses in on one region of Alaska, the Yukon-Kuskokwim Delta, in order to gain a deeper understanding of specific berry resources in one region, while the LEO survey is distributed across the entire state of Alaska and includes numerous berry species. Finally, because the LEO berry survey is only distributed to LEO network participants, typically there are only one or two respondents in each village while our survey will recruit 10-20 respondents in each village for a total of 40-80 respondents across the region.

- 5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

The collection of information will not impact small businesses or other small entities.

- 6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

This information collection is part of a federally funded study if it does not take place the goals of this study will not be met. Furthermore, this information collection fulfills goals of 15 U.S.C. 2901, 2908 The National Climate Program Act of 1978 established a national climate program to

assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications. This information collection will only take place once.

- 7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**
- \* requiring respondents to report information to the agency more often than quarterly;**
  - \* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
  - \* requiring respondents to submit more than an original and two copies of any document;**
  - \* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**
  - \* in connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
  - \* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
  - \* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
  - \* requiring respondents to submit proprietary trade secrets, or other confidential information, unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

None of the above special circumstances apply to this information collection.

- 8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and in response to the PRA statement associated with the collection over the past three years, and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.**

This information request was published in the Federal Register on Tuesday June 14, 2016 and appears on page 38732. A copy has been attached with this form.

**Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

**Consultation with representatives of those from whom information is to be obtained or**

**those who must compile records should occur at least once every three years — even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

We consulted with the individuals listed in the table to obtain their views on the information presented in our instrument. Modifications to the format and design of the application were suggested during the testing period and these have been incorporated. For instance based on community and tribal council input a fourth berry was added to the survey as was a question concerning flooding. Additional questions were added about the height of blueberry plants to ensure correct species identification when analyzing the surveys and about the occurrence of brown or dead berry plants.

Table 1

Chevak Community Member Date of contact: July 21, 2016	Alaska Native Tribal Health Consortium Date of contact: May 13, 2016
Environmental coordinator – Kotlik Tribal Council Date of contact: May 18, 2016	Environmental coordinator – Chevak Traditional Council Date of contact: May 24, 2016
Yukon-Kuskokwim Health Corporation Date of contact: January 28, 2016	Environmental coordinator – Native Village of Hooper Bay Date of contact: July, 20, 2016

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

Respondents will not be provided with payment or gifts.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

Respondents will remain confidential beyond the research team. Assurance will be provided in the form of an informed consent document as well as a Privacy Act statement.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

Respondents will not be asked questions of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

- \* Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- \* If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- \* Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here.**

We are using the Bureau of Labor Statistics document, Employer Costs for Employee Compensation to estimate the burden value for this collection. The ECEC of June 9, 2016 states that average wages are \$23.25 per hour.

Table 2

Participant / Activity	Number of Responses	Minutes per response	Burden Hours	Burden Value
Public reads instructions	40	1	1	\$32
Public completes survey	40	59	39	\$1,250
Project follow up with public	40	60	40	\$1,282
	40	120	80	\$2,564

We anticipate the number of respondents will be 40 members of the public. Respondents will only be asked to respond once, however there will be an optional attendance follow up community meeting to present results, which we estimate will take 60 minutes. Burden was estimated based on the amount of time it will take to read the survey instructions and complete the survey and multiplying that by the Bureau of Labor Statistics most recent total employer compensation costs for private industry workers (Bureau of Labor Statistics. (June 2016) Employer Costs for Employee Compensation – March 2016 [News Release]. Retrieved from <http://www.bls.gov/opub/>).

**13. Provide an estimate of the total annual non-hour cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected in item 12.)**

- \* The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information (including filing fees paid for form processing). Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
- \* If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.
- \* Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

There are no non-hour burden costs with this collection.

**14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.**

We estimate the cost to the Federal government to be \$31,454. This includes \$26,626 for labor plus \$4,828 in contractor expense. The details are shown below in two tables. The salary data was taken from OMB location salary schedules for Alaska and Denver.

Federal Govt Labor cost			440		\$26626
	Grade / Step	Hourly Rate	Annu Hrs by Fed	Fully Loaded Hr Rate	Total Labor Value
<i>Project Lead, Research Landscape Ecologist*</i>	12/5	\$42.21	240	\$67.54	\$16210
<i>Project Lead, Social Scientist**</i>	11/3	\$32.55	200	\$52.08	\$10416

\*OPM salary table 2016 – Alaska

\*\*OPM salary table 2016 – Denver, CO

Other expenses to Federal Government: Contractual services	\$4828
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**15. Explain the reasons for any program changes or adjustments in hour or cost burden.**

This is a new collection and there have been no changes or adjustments made.

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

We anticipate publishing the findings of this information collection in several formats and presenting in several venues. These include, community and stakeholder reports and presentations that will be given in the communities, in the central hub of the region for stakeholders, as well as at Alaska Tribal Conferences. Survey data will be analyzed following cultural consensus statistical procedures utilizing the freely available Bayesian Ornstein-Uhlenbeck Model toolbox package. Tabulation will take place on the USGS ScienceBase website per Western Alaska Landscape Conservation Cooperative (the funding agency) procedures and guidelines.

Timetable	2016			2017			
	AMJ	JAS	OND	JFM	AMJ	JAS	OND
<i>Project activity months</i>							
Develop Cultural Consensus survey	•	•					
Recruit survey participants			•	•			
Conduct surveys				•			



Synthesis and analysis of survey results				•	•		
Stakeholder review						•	
Community & Stakeholder presentations						•	
Dissemination & reporting							•

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

We are not seeking such approval.

**18. Explain each exception to the topics of the certification statement identified in "Certification for Paperwork Reduction Act Submissions."**

We have no exceptions to the topics of the certification statement.