

**SUPPORTING STATEMENT**  
**COMPREHENSIVE SOCIO-ECONOMIC DATA COLLECTION FROM**  
**ALASKAN COMMUNITIES**  
**OMB CONTROL NO. 0648-0626**

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

*(If your collection does not employ statistical methods, just say that and delete the following five questions from the format.)*

**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 governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.**

The potential respondent universe includes city and tribal representatives from 250 communities, composed of the 136 communities that were profiled in the 2005 *Community Profiles for North Pacific Fisheries – Alaska* and the remaining 114 populated communities involved in commercial fishing that were considered for inclusion in that document, but did not meet the selection criteria (Sepez et al, 2005) for inclusion in the study. The present data collection includes the remaining communities, based on input from fishing community representatives at a series of community meetings held by ESSRP social scientists in August and September 2010. Community representatives requested that ESSRP consider communities that were involved in subsistence fishing as well as those involved in commercial fishing. By including the remaining 114 communities, subsistence fishing communities are now captured in the population.

Due to the low number of communities, a census of the population will be attempted. A census of the population is also necessary in order to obtain the same set of unique information about each community's involvement in fishing for use in future updates of the community profiles.

Representatives of each community will be sent the survey instrument to complete on behalf of their community. Potential respondents are identified as the mayors or city managers, and tribal leaders or heads of non-profit corporate entities for each community. The data collected in the survey will be supplemented from secondary data sources.

In general, a response rate of 60% is expected for mail surveys sent to the general population (Salant and Dillman 1994, pp. 43-44; Rea and Parker 2005, pp. 9-11; Dillman et al 2009, pp. 59). In the first two years of implementation, this response rate was exceeded. In 2011, the response rate was 66% and, in 2012, the response rate was 75%. Based on this experience and given the highly specialized nature of the sample population for this study, we expect that future years of implementation will continue to have response rates between 65 and 75%.

**2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

The survey instrument submitted for approval with this supporting statement was finalized in October 2010 after significant input from survey design experts and cognitive interviews with community representatives. Continued implementation of the survey will follow a modified version of the Dillman Tailored Design Method (Dillman et al 2009), which consists of multiple contacts, including an advance letter, telephone recruitment, initial mailing, follow-up postcard reminder, a follow-up telephone interview, and a second full mailing. This modified methodology followed that conducted in at least one other NOAA data collection conducted in Alaska (Lew et al 2010) with the addition of a telephone recruitment contact. Representatives from numerous Alaskan fishing communities have expressed enthusiastic support for this project and have offered to help us collect this data. Given this, we expect the response rate for the survey to be higher than average.

The survey will be a census of 250 Alaskan communities biennially, as described above. There is no statistical methodology for sample selection as all 250 communities are being targeted and being provided an equal opportunity to complete the survey.

The method of data collection will be an annual questionnaire sent by mail. The names and addresses of respondents will be obtained from publically available information about the municipal and tribal leadership in each community provided by the Alaska Division of Community and Regional Affairs. Each mailed questionnaire will include a pre-paid postage return envelope to reduce any financial burden on the participant. The mail survey will be followed by telephone contact with communities that are not initially responsive, offering facilitation of a response and ensuring the survey has reached the most appropriate community representative. Where necessary, the telephone contacts will be followed by additional telephone contact to actually conduct the survey over the phone and develop answers in collaboration with community representatives or a new survey will be mailed to the respondent if requested.

**3. Describe the methods used to maximize response rates and to deal with non-response. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.**

Numerous steps have been, and will be, taken to maximize response rates and deal with non-response behavior. These efforts are described below.

### **Maximizing Response Rates**

The first step in achieving a high response rate is to develop an appealing questionnaire that is easy for respondents to complete. Significant effort has been spent on developing a good survey

instrument. Experts in survey design and who work with Alaskan fishing communities on a regular basis were asked to review the draft survey instrument and provide comments on the wording of questions, additional questions to include, question order effects, question structure and response categories. The survey instrument also benefited from input on earlier versions from cognitive interviews. Cognitive (one-on-one) interviews were used to ensure the survey instrument used words and terms people could understand, and was a comfortable length and easy to complete. Cognitive interviews were used to ensure the survey instrument used words and terms people could understand, and was a comfortable length and easy to complete. The result is a high-quality and professional-looking survey instrument.

The implementation techniques that will be employed are consistent with methods that maximize response rates. Implementation of the mail survey will follow a modified version of the Dillman Tailored Design Method (2009), which consists of multiple contacts. The specific set of contacts that will be employed is the following:

1. An **advance letter** notifying respondents a few days prior to the questionnaire arriving. This will be the first contact with the sample.
2. A **telephone recruitment call** 2-5 days after the advance letter to encourage response to the initial mailing.
3. An **initial mailing** sent a few days after the advance letter. Each mailing will contain a personalized cover letter, questionnaire, and a pre-addressed stamped return envelope.
4. A **postcard follow-up reminder** to be mailed 5-7 days following the initial mailing.
5. A **follow-up telephone call** 5 days after the postcard reminder to further encourage response and to collect information to address non-response bias. Individuals needing an additional copy of the survey will be sent one with another cover letter and return envelope.
6. A **second full mailing** will be mailed to all non-respondents immediately after the follow-up telephone call.

The importance and benefits of this data collection project to the respondents will be emphasized in the advance letter, initial mailing cover letter, and telephone contacts. In these letters and phone contacts, the investigators clearly state that with the help of the respondents, the important role that fishing has in each community can be explicitly reported in each community's profile and that the information they provide will be used to enhance the fisheries management practices of NMFS. Making a clear link between the survey, their participation, and the importance of fishing to their communities is expected to help increase the response rate even further.

AFSC social scientists will continue to work with representatives of Alaskan fishing communities, non-profit municipal representation organizations (e.g., Southwest Alaska Municipal Conference, Gulf of Alaska Coastal, Communities Coalition, Southeast Conference), Community Development Quota entities, the North Pacific Fisheries Management Council, Alaska Department of Fish and Game, and Alaska Sea Grant to make communities aware that this survey is important for each to complete.

## **Non-respondents**

To better understand why non-respondents did not return the survey and to determine if there are systematic differences between respondent communities and non-respondent communities, those contacted in the follow-up telephone call and identified as non-respondents, (e.g., they state that they will not complete a survey) will be asked a few questions to gauge their reasons for not responding to the mail survey. These questions will include the capacity of the respondent to complete the survey, if they can recommend a more suitable respondent, and answer any questions they might have. Additionally, non-responding communities will be compared to publically available fisheries and Census data to determine the demographics of such communities and whether there is a significant pattern in the non-response.

### **4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.**

A formal pretest of procedures and methods was not undertaken for this project given the small number of respondents in the population and that a census of the population will be undertaken in the full survey implementation. However, the survey instrument was evaluated and revised using input from cognitive interviews conducted with 9 potential respondents in Anchorage, Dutch Harbor, Nome and Petersburg. Both verbal protocol (talk aloud) and self-administered interviews were conducted, both with follow-up debriefing by team members. Moreover, the survey design and implementation plan have benefited from review by individuals with expertise in socio-economic survey design and implementation in fishing communities. In addition, the survey was implemented in 2011 and 2012 with high response rates and minimal item non-response, indicating that the survey questions have been worded clearly and are easy to answer.

### **5. Provide the name and telephone number of individuals consulted on the 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.**

An internal peer review of the survey instruments was conducted before the first year of implementation which included grammatical, clarity, design, and statistical review. NMFS federal staff that reviewed the survey instruments includes:

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The individuals who will actually collect and analyze the information are Amber Himes-Cornell, social scientist at the Alaska Fisheries Science Center, and Christina Package, PSMFC Contractor.

## **References**

Dillman, D.A., J.D. Smyth, and L.M. Christian (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. 2<sup>nd</sup> ed. New York: John Wiley & Sons, Inc.

Dunham, G., E. Uchida and H. Uchida. (2013). "The Effect of Fishery Management on Information Sharing Networks and Social Capital." Selected Paper prepared for presentation at the Agricultural & Applied Economics Association's 2013 AAEA & CAES Joint Annual Meeting, Washington, DC August 4-6, 2013.

Lew, D.K., D.F. Layton, and R.D. Rowe (2010). Valuing Enhancements to Endangered Species Protection under Alternative Baseline Futures: The Case of the Steller Sea Lion. *Marine Resource Economics* 25: 133-154.

Rea, L. and R. Parker (2005). *Designing and Conducting Survey Research: A comprehensive guide*. 3<sup>rd</sup> ed. San Francisco: Jossey-Bass.

Salant, P. and D. Dillman (1994). *How to conduct your own survey*. New York: John Wiley & Sons, Inc.

Sepez, J. A., B. D. Tilt, C. L. Package, H. M. Lazrus, and I. Vaccaro. (2005). *Community profiles for North Pacific fisheries - Alaska*. U. S. Dep. Commerce, NOAA Tech. Memo. NMFS-AFSC-160, 552 p.