

**SUPPORTING STATEMENT
ALASKA HALIBUT CATCH SHARING PLAN SURVEY
OMB CONTROL NO. 0648-XXXX**

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

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 is all charter halibut permit (CHP) holders in Alaska during 2014. Each of these CHP holders have a permit to take anglers on charter fishing trips that target Pacific halibut. The permit designates the number of anglers allowed on each fishing trip, and the permit program is administered by NMFS. In 2014, there were 602 CHP holders.

A full census is expected to be conducted of the population, so no sampling or other methods will be employed. For the collection as a whole, an overall response rate of 40% is anticipated. This estimate is based on previous AFSC experience with similar survey protocols used for a nearly identical population (Alaska saltwater sport fishing charter businesses). CHP holders are a subset of this previously-surveyed population. However, the survey administered in that study was much more complex and asked for financial information. This led to a much lower response rate (between 22% and 27%) than expected for this data collection, which asks for primarily opinions and attitudinal information (but also for basic information on participation in the GAF leasing market).

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.

Since the survey will be conducted as a census, no sampling or sample selection methods will be employed.

3. Describe the methods used to maximize response rates and to deal with nonresponse. 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. The survey instrument has benefited from input from numerous one-on-one interviews with members of the target population. In early testing, participants helped identify questions and concepts that needed to be clarified or modified to make them easier to fill out for them, as well as provided useful information about ways of making the survey more useful and attractive for them and other CHP holders to want to fill it out. Later interviews were also used to fine-tune survey design issues related to specific wording, flow, and comprehension issues. Additionally, the interviews were used to ensure the survey was a comfortable length and easy to complete. The result is a high-quality and professional-looking survey instrument.

CHP holders have made it clear to us that the optimal time for conducting the survey to minimize burden on them and maximize the accuracy of the information they provide is between March and May, a time period just before the CHP holders, who are also charter businesses, begin in earnest activities necessary to get ready for the fishing season. As a result, conducting the survey in March will maximize potential response by this population.

The implementation techniques that will be employed are consistent with methods that maximize response rates. Implementation of the mail survey will follow a modified Tailored Design Method (Dillman, Smyth, and Christian, 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. An **initial mailing** sent a few days after the advance letter. Each mailing contains a personalized cover letter, instructions and credentials for accessing the online survey, a printed questionnaire, and a pre-addressed stamped return envelope,
3. A **postcard follow-up reminder** to be mailed 5-7 days following the initial mailing.
4. A **second full mailing** will be mailed approximately 1-2 weeks after the postcard follow-up reminder.
5. The **telephone contact and follow-up interview** will be initiated about 1-2 weeks following the second full mailing. All individuals who have not returned the survey to date will be contacted, provided a valid phone number can be procured via reverse telephone lookup or other means (e.g., internet search). Contacted respondents will

be encouraged to fill out and return the questionnaire, but also given the option to complete the survey over the telephone either on the same phone call or at another scheduled time and date. During this phone contact, all respondents, regardless of their desire to complete the mail survey, take the survey via telephone, or unwillingness to participate, will be asked several questions that will assist in understanding non-response behavior. These phone interviews are expected to last up to 10 minutes for those agreeing to complete and return the mail survey, for those who decline participation, and for those who agree to a follow-up telephone interview at a different time and date. For those agreeing to the telephone interview to be taken immediately, we expect the phone call to last about 30 minutes.

Non-respondents

To better understand why non-respondents did not return the survey and to determine if there are systematic differences between respondents and non-respondents, those contacted in the follow-up phone call and identified as non-respondents will be asked a few questions to gauge their reasons for not responding to the mail survey. These include select questions related to their attitudes toward the CSP and plans for participating in 2015. Information collected from non-respondents will aid in improving the survey implementation and to correct for non-response bias where necessary. Lew et al. (2014) outlines how samples of fishery participants can be weighted to adjust for non-response bias. They illustrate the methods using data from a survey of Alaska saltwater sport fishing charter businesses—one that overlaps significantly with the population of interest in this study—and that uses auxiliary data about the population from available data from the State of Alaska. Given that the same auxiliary data are available for the population of interest in this study, we anticipate applying the sample weighting approaches delineated in Lew et al. (2014) (included as a supplemental document) to adjust responses to the census to better match up with the population in generating population estimates.

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.

Numerous cognitive interviews were conducted during the survey design phase to test survey materials. Six members of the target population (owners/operators of saltwater sport fishing charter businesses with CHPs) provided input during the in-depth interviews. Moreover, the survey design and implementation plan have benefited from review by individuals with expertise in fisheries-related economic survey design and implementation. The reviewers included staff from the Alaska Department of Fish and Game--Scott Meyer (fishery biologist) and William Romberg (sport fish administrator/supervisor). A Council staff member (Jane DiCosimo) and an advisor to the Council on halibut management (Jonathan King) were also consulted, as well as NMFS Regional Office staff involved with halibut management issues (Rachel Baker, Jason Gasper, and Julie Scheurer).

Note that since the timing of the survey requires fielding the survey in March 2015, and information being collected is pertinent to ongoing Council discussions and is thus time-

sensitive, we do not anticipate being able to conduct a formal pretest implementation.

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.

The following individuals were consulted on the statistical aspects of the design:

Dr. Dan Lew
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Drs. Dan Lew and Doug Larson are responsible for analyzing the data.

The survey will be conducted with a survey firm (TBD) with expertise in survey data collection methods and implementation.

References:

Dillman, D. A., J. D. Smyth, and L. M. Christian. 2009. *Internet, Mail, and Mixed-Mode Surveys: The Total Design Method*. 3rd Edition. Hoboken, NJ: John Wiley & Sons.

Kroetz, Kailin, James N. Sanchirico, and Daniel K. Lew. 2013. "Efficiency Costs of Social Objectives in Tradable Permit Programs." Working paper.

Lew, Daniel K., Amber Himes-Cornell, and Jean Lee. 2014. "Weighting and Data Imputation for Missing Data in Fisheries Economic and Social Surveys." Working paper.