# SUPPORTING STATEMENT SOCIO-ECONOMIC SURVEYS OF VESSEL OWNERS AND CREW IN NEW ENGLAND AND MID-ATLANTIC FISHERIES OMB CONTROL NO. 0648-XXXX 

## INTRODUCTION

This request is for a new information collection.
The National Oceanic and Atmospheric Administration’s (NOAA) Northeast Science Center's Social Science Branch (SSB) in Woods Hole, MA intends to perform two surveys among participants in the commercial fishing industry in the Northeast Region (New England and the Mid-Atlantic states). The surveys will cover commercial fishing vessel owners (the owners' survey) and crew, including hired captains (the crew survey). The surveys will collect representative data on owners and crew at the fishery level. These surveys will be repeated annually to allow for tracking trends over time. In the first year, SSB intends to collect data from all fisheries to establish baseline data. In future years, SSB would collect data from half the fisheries each year with the possibility of collecting annual data from some fisheries designated as "priority."

## A. JUSTIFICATION

## 1. Explain the circumstances that make the collection of information necessary.

The purpose of the two surveys is to provide for the ongoing collection of social and economic data related to fisheries and their communities in the Northeast Region. These data are needed to support fishery performance measures recently developed by NOAA's Northeast Science Center's Social Science Branch (SSB) in Woods Hole, MA. The measures are: financial viability, distributional outcomes, stewardship, governance and well-being. Table 1 provides definitions for each of the performance measures and specifies the indicators that SSB intends to track for each measure. Although data to support some indicators are already routinely collected by the National Marine Fisheries Service (NMFS) from NOAA and other publicly available sources, these currently available data do not provide information for many of the indicators. Additionally, many of the indicators will require information that can be provided only by participants in the commercial fishing industry. Thus, the best and most reliable source for information not currently available is to collect it through a survey of participants in the commercial fishing industry. These surveys will fill in the gaps, and allow for collecting trend data needed for more thorough analysis of changes in the fisheries, including impacts from changes in regulations.

Table 1 - Performance Measures Definitions

| Performance Measure and Definition | Indicators |
| :---: | :---: |
| Financial Viability: The financial condition of fishing vessel owners and crew, fishing households, businesses that provide fishing related goods and services (e.g., fuel, ice, gear, insurance), and businesses in the marketing chain (processors, dealers, retailers). | Profitability and productivity <br> - Malmquist index* (Technical measure of transformation of inputs into outputs) <br> - Capacity utilization <br> - Revenue per unit effort <br> - Revenue per active vessel* <br> - Revenue per vessel day* <br> - Lease price* <br> - Share price* <br> - Lease or share price to ex-vessel price* <br> - Fishing capacity of active vessels* <br> Landings distributions over time <br> - Chart distribution of landings over time |
| Distributional Outcomes: The outcomes and implications related to how the benefits and costs of a catch share program are distributed among individuals, groups, and communities. Its major focus is on access/exclusion to quota and fishing opportunities, concentration of quota, and employment opportunities. | Employment trends <br> - Total annual fishermen days* <br> - Employment demographics* <br> - Total number of active crew* <br> - Average crew earnings by day* <br> - Total crew earnings as a percent of net revenue* <br> - Changes in crew duties/ payment arrangements <br> - Survey participants about opportunities for new entrants (crew and owners) <br> Ownership trends <br> - Industrial concentration (Gini coefficient and Herfindahl index) <br> - Revenue by vessel type \& community/geographic location <br> Price of quota/ability to purchase quota <br> - Lease and share prices <br> - Debt ratio (total debt/total assets) <br> - Survey participants about ability to purchase quota <br> Community scale outcomes <br> - Revenue by communities that depend on fisheries* |
| Stewardship: The degree to which participants use the resource in a careful and responsible way. Additionally, the degree to which participants' have a sense of stewardship. | Compliance <br> - Develop compliance index based on enforcement statistics <br> Bycatch/Discards/Highgrading <br> - Measure with existing monitoring data <br> Conservation ethic <br> - Survey participants about perception of compliance <br> Activities that benefit the stock <br> - Survey participants about going beyond the regulations and engaging in other activities that improve the condition of the stock |


| Performance Measure and Definition | Indicators |
| :--- | :--- |
| Governance: The degree to which stakeholders <br> participate in the process of decision-making and <br> implementation, the transparency and legitimacy <br> of that process, the effectiveness and complexity <br> of regulations, and the degree of <br> adaptability/flexibility of the management <br> process. An additional component of governance <br> is the cost to government to implement a <br> management program and the cost to <br> participants. | Parvipation in governance <br> - |
| influence, levels of attendance at meetings, and <br> participation in leadership |  |
| - Number of regulatory infractions, Quota |  |
| overages*/underages |  |


| Performance Measure and Definition | Indicators |
| :---: | :---: |
| Well-being: The degree to which an individual, family, or larger social grouping (e.g. firm, community) can be characterized as being healthy (sound and functional), happy, and prosperous. (Pollnac, et al. 2006[2008]) | Health status and access to health insurance <br> - Survey participants about health insurance coverage <br> - Develop index based on community level health statistics <br> Community level indicators <br> - Develop index based on community level crime, poverty, unemployment, education, and conflict <br> Port infrastructure <br> - Profile relevant ports <br> Job Satisfaction <br> - Survey participants about job satisfaction <br> Changes in social networks and relationships <br> - Survey participants about social networks <br> Safety <br> - Number of injuries/hospitalizations* <br> - Number of fatalities* <br> - Number of vessels lost* <br> - Damage costs* <br> - Survey participants about perception of riskier/safer fishing practices |

*Variables agreed upon nationally by NMFS social scientist working group.

These performance measures and indicators will be essential to assessing the social and economic impacts of various fishery management policies over the near and long term, including catch share systems. The National Environmental Policy Act (NEPA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended, both contain requirements for considering the social and economic impacts of fishery management decisions:

- NEPA requires federal agencies to consider the interactions of natural and human environments, and the impacts on both systems of any changes due to governmental activities or policies. This consideration is to be done through the use of ' ... a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences...in planning and decision-making which may have an impact on man's environment;' (NEPA Section 102 (2) (A)). Under NEPA, an Environmental Impact Statement (EIS) or Environmental Assessment (EA) is required to assess the impacts on the human environment of any federal activity. NEPA specifies that "the term 'human environment' shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment" (Council on Environmental Quality NEPA Implementing Regulations 40 CFR 1508.14).
- Under the MSA there are a variety of requirements related to social, cultural and economic issues for fishermen and their communities. National Standard 8 (section 301(8)), for instance, requires that: "Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and
(B) to the extent practicable, minimize adverse economic impacts on such communities. Section 303(b)(6) on limited entry requires examination of "(A) present participation in the fishery, (B) historical fishing practices in, and dependence on, the fishery, (C) the economics of the fishery, (D) the capability of fishing vessels used in the fishery to engage in other fisheries, (E) the cultural and social framework relevant to the fishery and any affected fishing communities, and (F) any other relevant considerations." Section 303(a)(9) on preparation of Fishery Impact Statements notes they "shall assess, specify, and describe the likely effects, if any, of the conservation and management measures on--(A) participants in the fisheries and fishing communities affected by the plan or amendment; and (B) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants."

Currently, however, little data exist that allow for tracking the social impacts of fishery management policy and decisions over time in the Northeast Region, and insufficient economic trend data are available. In implementing policies and management programs and in meeting the social and economic impact assessment requirements of NEPA and MSA, there is a need to understand how such policies and programs will affect the social and economic characteristics of those involved in the commercial fishing industry. The performance measures and indicators developed by SSB are intended to specifically address these issues.
2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

Purpose
SSB intends to collect socio-economic data from vessel owners, permit holders, hired captains, and crew involved in commercial fishing in New England and the Mid-Atlantic states. As noted above, the primary use of these data will be to track a set of defined performance measures and indicators over time. These performance measures and indicators can be used to assess the impacts of changes in fishery management policies by tracking changes in the indicators before and after implementation of the fishery management policies. Additionally, these data can provide useful inputs into development of policies and strategies by providing representative social and economic information on participants in the Northeast commercial fishing industry.

SSB plans to develop reports and analyses using these data to examine trends and relationships in the data to better inform policy and understanding of the commercial fishing sector in the Northeast. These reports will be provided to the public and many of the reports will be valuable to the New England and Mid-Atlantic Fishery Management Councils in their decision making processes.

SSB will also link data from the survey to other NMFS data sources such as landings data. This will enable SSB to ask fewer questions in the survey (for example, by linking a respondent to a permit and logbook data, the survey does not need to ask questions about fishing gear used or the full range of species caught), but will also enable SSB to perform additional analyses. For example, logbook information would provide information about the place and seasonality of fishing, so that particular fishing styles (for example, localized or non-localized, single-species
targeting with bycatch or targeting multiple species) could be analyzed with respect to the pattern of survey answers. This would enable the survey to anticipate and respond to the new emphases that the agency now places on ecosystem-based management. Linking to permit and dealer data would enable analytical connections to be further made between communities on land, such that agency responsibilities for social impacts analyses can use the best available scientific data.

## Type of Information Being Collected and Rationale

The two surveys collect similar information from owners and crew, with some exceptions. In what follows, we provide a brief description of the information being requested from the survey respondents and the reasons for collecting this information.

## Primary fishery, fishing decisions, and vessel information

Both surveys ask a series of questions that relate to the respondents’ primary fishery. In short, SSB is asking respondents to identify which fishery they consider to be their primary fishery and why. For crew, this will be the only source of this information. For owners, some information is available on what types of permits are held, what types of fish were caught and the value of the catch. However, it is important to understand what fishery a respondent considers to be his or her primary one to gauge how fishery management policies affect fishery participation decisions. Additionally, this information is useful in developing more precise sampling approaches in future years by allowing for better estimates of fishery participant populations based on selfreported primary fisheries.

Information on fishing decisions such as trip length, number of crew, and ports are also helpful in understanding how fishery management policies affect the different sectors. Tracking changes in these factors in relation to changes in fishery management policies will allow for assessing how the policies have affected these decisions.

Vessel information (owners only) includes information on the numbers of vessels owned, bought, and sold. This information will allow SSB to track trends in concentration of the industry over time (fewer owners owning more vessels) and to assess how the market for vessels (a major capital item) is affected by changes in the sector.

## Crew payment methods

The nature of payment methods for crew on fishing vessels is unique and complex. Fishing crew are often paid a percentage of a trip's catch value with deductions for various vessel expenses (e.g., fuel, food, etc.). Crew payment methods reflect the contractual employment relation between crew and owners and ultimately the income earned by crew. Collecting this information is important for two reasons. First, a variety of methods are used (e.g., different formulas, deductions, etc.) and SSB is seeking to be able to better understand the breadth of payment structures in the industry. Second, these payment methods may change over time (e.g., in response to changes in fishery management policies) which may result in significant impacts on fishing crew livelihoods.

## Employment opportunities (crew only)

The crew survey asks a number of questions related to employment opportunities such as the difficulty in finding employment, number of years with the same vessel/owner, and how they found their current position. These questions will allow SSB to track the impact that fishery management policies have on employment opportunities and to track these trends.

## Fishing income information

Both surveys ask about the extent to which fishing represents a key component of respondents' income, other sources of income, and extent to which current fishing income could sustain respondents' over the short, medium, and long term. These questions are essential information in assessing the extent to which fishing represents a viable business (owners) or career (owners and crew).

## Insurance

The survey asks a number of questions about respondents’ insurance (health, vessel, etc.). Living or operating without insurance represents a risk to commercial fishermen. Not having insurance often indicates an inability to afford the insurance. Tracking trends in the extent to which owners and crew carry insurance provides an indication of the health of the fishing industry and of fishing as an occupation.

## Family involvement

Fishing has long been considered a family-oriented career and generations of families have often been involved in fishing. Thus, a key social aspect of fishing is the trend away from fishing as a family-oriented business and occupation. The survey asks a series of questions about respondents' family involvement in fishing. Tracking changes in family involvement is important to better understand the changing social landscape of fishing. Additionally, fishery management policies may have an impact of the familial nature of fishing and tracking trends in family involvement relative to fishery policies is also important.

## Job satisfaction and quality of life

Both surveys ask a series of questions related job and career satisfaction and how well respondents perceive their quality of life. Tracking trends in these areas will allow SSB to assess the extent to which "life as a fisherman" is improving or declining and the extent to which fishing management policies are improving or hurting "life as a fisherman."

## Fishing quota information (owners only)

Most fisheries involve some form of quotas (limits on the amount of fish that can be caught). In some fisheries quotas can be transferred (through lease or purchase). Understanding the extent to which owners obtained additional quota and the ease at which they obtained it (e.g., the price paid) are important factors for understanding the health of the quota market. Fishery management policies may have a significant effect on these markets. Thus, tracking trends in these markets is important.

## Governance

Fish are a managed resource and the management process itself is complex and involves significant public participation. The survey asks a series of questions about the extent to which respondents take part in the management process and their view of the process in terms of its equity, understandability, restrictiveness, adaptability, effectiveness, and other aspects. These questions will allow SSB to better understand perceptions of the fishery management process for different fisheries (which are governed by different management policies) and to track trends in perceptions over time, especially in relation to changes in management policies.

## Conservation attitudes and perceptions of resource health

Owners and crew attitudes toward conservation are important for understanding how well the resource (fish) can be managed through the fishery management process. The survey will allow SSB to track trends in these attitudes over time and to assess how well different management approaches may work and whether changes in management approaches affected attitudes.

Related to conservation attitudes are perceptions of the health of the resource. NOAA collects scientific data on resource health, but perceptions of resource health are also important. Restrictions placed on fisheries where there is a perception that the resource is healthy may involve significant public opposition. Additionally, fishermen perceptions of resource health may provide important information on the actual resource health since they are interacting with the resource on a regular basis.

## Demographics

Collecting information on respondent demographics is important for two reasons. First, it will allow for better interpretation of the data that are collected. Second, trends in demographics such as age, income, ethnic group, etc. can be tracked to assess how the demographic composition of the industry is changing over time, especially in response to changes in fishery management policies.

## Public Dissemination

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. As explained in the preceding paragraphs, the information gathered has utility. NOAA's Northeast Science Center's Social Science Branch (SSB) in Woods Hole, MA will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a predissemination review pursuant to Section 515 of Public Law 106-554.
3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

The data being collected under this survey will not involve the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology. We describe the reasons for this below for each of the two surveys.

## Owners survey

The owners survey will be implemented as a mail survey with the questionnaire being mailed to potential respondents and the respondents sending those back to NOAA. Although it is possible to provide a link to a web-based version of the survey in the cover letter to the survey, SSB has opted against that approach. There are two reasons for this. First, SSB expects that the population is less likely to take web surveys, given the nature of their work. Second, fixing the mode of the survey as a mail-based survey eliminates the possibility of mode-based effects on survey results.

## Crew survey

The crew survey will be implemented as an intercept survey on the docks of ports. Given the nature of this approach, having potential respondents use an electronic collection method is not feasible. Additionally, having the interviewers use an electronic method to collect responses as the respondents take the survey is also not feasible since the interviewers will need to travel around the docks and may be standing during the interview itself.

## 4. Describe efforts to identify duplication.

We are aware of a survey begun by the University of Rhode Island in 2009/2010 in New England under a grant from the Commercial Fisheries Research Foundation, that seeks PRA clearance for a follow-up in the Mid-Atlantic in summer 2011 under NOAA funding (Social Impacts of the Implementation of Catch Shares Programs in the Mid-Atlantic, OMB Control No. 0648-0627). The current request has learned from some elements of the URI and follow-on survey. However, this request 1 ) is focused on fisheries management in general while the earlier study is focused solely on catch shares, 2) is an ongoing survey rather than a one-time effort, and 3) specifically targets performance indicators for which data are not currently being collected. Additionally, the previous effort focused solely on the groundfish and scallop sectors while this survey effort will cover almost all fisheries in the Northeast.
5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

SSB expects that almost all respondents to the owners survey will be small entities. To minimize the burden while also maximizing information collected, SSB has followed two approaches. First, we have relied on expert academics in the field of fishery management research who have conducted surveys of fishermen. These experts advised SSB on the appropriate length of a survey of fishermen. Second, we have designed the owner survey using a split questionnaire design. That is, we will ask all owners a core set of questions. A second set of important, but not essential, questions were split between two versions of the instrument. One half of the sample
will get "version 1" (core questions plus one half of the additional questions) of the survey and the second half will get "version 2" (core questions plus the other half of the additional questions) of the survey. Using a split questionnaire approach reduces the burden on owners by reducing the number of questions that need to be asked to each owner, but still involves collecting key data from the population. Additionally, SSB has utilized statistical sampling methods to ensure that representative data are being collected at sufficient precision without having to conduct a census of the population.

## 6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

Not conducting the collection would significantly reduce the ability of NMFS to assess impacts of future fishery management policies. As described in Questions 1 and 2 above, the data being collected through these surveys will allow SSB to track important social and economic trends in the commercial fishing sector in relation to changes in fishery management practices. The data being collected through these surveys are not available from existing sources.

Less frequent collection will reduce the ability of NOAA to discern changes in the performance measures and indicators following changes in fishery management policies. SSB has already set the frequency at a minimally acceptable rate of all fisheries in the baseline (first) year and half of the fisheries in every other year in subsequent years. Thus, reducing the frequency below this level would not allow NOAA to identify trends or changes in the measures and indicators and associate those changes with fishery management practices. Additionally, for the data to be valuable to the fishery management councils, data will need to be frequent enough to be relevant for council decisions.

## 7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

The information collection is consistent with OMB Guidelines for Information Collections.
8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the 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.

A Federal Register Notice published on March 24, 2011 (73 FR 16611) solicited public comments.

NMFS received a request for the survey instrument from the National Opinion Research Center at the University of Chicago (NORC). In response to that request, NMFS provided a copy of each survey to NORC. SSB also received a comment from Meredith McCarthy of Food and Water Watch, a national consumer action organization. Ms. McCarthy commented that the data collection should have begun sooner and also provided a summary of research detailing the impacts of catch share programs. SSB agrees that it would have been better to start this data
collection sooner. While having a longer time series of the types of information SSB is proposing to collect would have been ideal, SSB is not without data and there were some preanalyses done under Amendment 16 of the MSA. Nevertheless, this data collection will help SSB shed light on many of the issues raised by Ms. McCarthy in her comments on the data collection.

## 9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments or gifts will be provided to respondents.

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

As stated on the survey instrument forms, SSB will assure respondents that their data remain confidential. Information collected under these surveys fall under the confidentiality requirements of the MSA, as amended, section 402(b). This section of the Act guarantees confidentiality of information submitted to the Secretary, but allows disclosure to Federal employees.

## 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.

None of the questions being asked in the surveys deal with matters that are considered private.

## 12. Provide an estimate in hours of the burden of the collection of information.

Table 2 provides estimates of the total annual number of respondents, responses, burden hours, and the cost of burden hours. The surveys will involve collecting data from an average of 1,400 respondents annually with each respondent providing one response for a total of 1,400 responses annually. SSB estimates that each response will take 30 minutes to complete, resulting in a total burden hour estimate of 700 . The burden hours include the time to take the survey and, potentially for owners, to look up some specific data items. However, we expect that almost all questions for the owners require recall only and would not involve significant time to search for information to provide answers. The labor cost associated with the estimated burden hours is $\$ 13,147$, based on information from the Bureau of Labor Statistics (BLS) (see note [a] below Table 2).

Table 2 - Estimated Number of Respondents, Responses, Burden Hours, and Cost of Burden Hours

| Survey | Total Annual Number of Respondents, Annualized | $\begin{array}{r} \text { Responses } \\ \text { per } \\ \text { Respondent } \end{array}$ | Total <br> Number of Annual Responses, Annualized | Average Response Time Per Response | Total <br> Annualized <br> Time for Responding (Burden Hours) | Average <br> Loaded Hourly Labor Cost <br> [a] | Total Cost for Responding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Owner [b] | 513 | 1 | 513 | 30 min | 256.5 | \$ 31.65 | \$8,118 |
| Crew | 887 | 1 | 887 | 30 min | 443.5 | \$ 11.34 | \$5,029 |
| TOTAL | 1,400 | - | 1,400 | - | 700.0 | - | \$13,147 |

[a] Labor costs are derived from BLS http://www.bls.gov/oes/current/oes453011.htm. The value for crew is taken as the median rate ( $\$ 11.34$ ) and the value for owners is the $90^{\text {th }}$ percentile ( $\$ 19.78$ ). The owner rate is marked up by 60 percent to reflect a loaded rate. The crew rate is not marked up since the crew will be taking the survey on their own time and thus their time will not incur overhead to their employer.
[b] There are two versions of the owner survey (see question 5 above). Each is expected to take a half-hour to complete and both are included in the estimates of this row.

## 13. Provide an estimate of the total annual cost burden to the respondents or recordkeepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

The two surveys do not impose recordkeeping costs on the respondents; the vessel owner surveys will have envelopes with prepaid postage included, and the crew surveys are in person.

## 14. Provide estimates of annualized cost to the Federal government.

SSB has contracted with consultants and subcontractors to develop the survey. Based on this, costs to SSB have included survey and sampling development costs, including pilot testing, of $\$ 124,000$. The contractor has provided implementation costs on a per-complete basis of $\$ 25$ per complete (returned) survey for the owner survey and $\$ 150$ per complete for the crew survey. Based on the necessary sample sizes, the total estimated annual cost to the government is \$140,363, including development, and \$145,817 taking into account just implementation. Table 3 provides details on these cost estimates. ${ }^{1}$

[^0]Table 3 - Annualized Cost to the Government

| Item | Owner Survey | Crew Survey |  |
| :--- | :---: | :---: | :---: |
| Survey and sampling plan <br> development [a] | $\$ 124,000$ |  |  |
| Implementation |  |  |  |
| $\quad$ Year 1 [b] | $\$ 19,225$ | $\$ 199,500$ |  |
| Year 2 [c] | $\$ 9,613$ | $\$ 99,750$ |  |
| $\quad$ Year 3 [c] | $\$ 9,613$ | $\$ 99,750$ |  |
| Implementation Total | $\$ 38,451$ | $\$ 399,000$ |  |
| Total cost to government <br> (one year development plus <br> three years of implementation) |  | $\$ 561, \mathbf{4 5 1}$ |  |
| Annualized Cost, including <br> development [d] | $\mathbf{\$ 1 4 0 , 3 6 3}$ |  |  |
| Annualized Cost, <br> implementation only [e] | $\mathbf{\$ 1 4 5 , 8 1 7}$ |  |  |

[a] Survey design and sampling plan development costs were incurred for both surveys combined.
[b] For the owner survey, this is the sample size (769) multiplied by a per-complete cost of $\$ 25$. For the crew survey, this is the sample size $(1,330)$ multiplied by a per-complete cost of $\$ 180$ per complete.
[c] In year 1, data will be collected for all fisheries, but in years 2 and 3, data will be collected from only half of the fisheries. Thus, year 2 and 3 costs are calculated as half the year 1 cost.
[d] Annualized over four years: one year for development and three years for implementation.
[e] Annualized over three years of implementation.

## 15. Explain the reasons for any program changes or adjustments.

This is a new program.

## 16. For collections whose results will be published, outline the plans for tabulation and publication.

SSB will develop both reports and tabulations based on the data collected under these surveys. For each survey conducted, SSB will tabulate the responses from each survey question and provide cross-tabulations of survey questions when warranted. These tabulations will be provided on SSB's web site.

In years following the first year, SSB will perform statistical hypothesis tests to determine whether the underlying population values have changed over time. These tests will be standard Students $t$ or $F$-statistic tests, depending on the data under consideration.

Further detailed analyses may also be performed on these data. These analyses could include linear regression, analysis of variance, and other more complex statistical methods used to investigate trends and hypotheses in the data. The specific analyses to be performed will be based on the summary statistics that are tabulated and on the analytical needs (e.g., current policy questions needing information).

Figure 1 provides a summary of the time line for completing one round of each the owners and crew surveys. The crew survey will be implemented over an eight month time frame to ensure that crew from different fisheries are selected as part of the sample.


Figure 1 - Data Collection, Analysis, and Reporting Timeline

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

Not applicable. The collection instruments will display the expiration date.

## 18. Explain each exception to the certification statement.

No exceptions are being requested.


[^0]:    ${ }^{1}$ As noted in Table 3, the costs including development are annualized over four years and the costs for just implementation are annualized over three years.

