#### SUPPORTING STATEMENT PART A

U.S. Department of Commerce National Oceanic & Atmospheric Administration Economic Surveys of Specific US Commercial Fisheries OMB Control No. 0648-0773

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#### **ABSTRACT**

The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS or NOAA Fisheries) is requesting revisions to this standard collection of information. The proposed revisions would do the following to the currently approved information collection.

- 1. Change the title from "West Coast Limited Entry Groundfish Fixed Gear Economic Data Collection" to "Economic Surveys of Specific US Commercial Fisheries";
- 2. Expand it to include an additional 14 fisheries (there are currently approved information collections for four of those 14 fisheries and discontinued information collections for the other ten fisheries);
- 3. Extend it for three years; and
- 4. Increase the burden hours to the sum of the burden hours for the 15 information collections.

The requested information will include different components of operating costs/expenditures, earnings, employment, ownership, vessel characteristics, effort/gear descriptors, and demographic information for the various types of fishing vessels operating in the 15 U.S. commercial fisheries listed below. In that list and in the fishery specific section titles, the OMB Control Number is included for the five fisheries with currently approved economic information collections.

- 1. West Coast Limited Entry Groundfish Fixed Gear Fishery (0648-0773)
- 2. West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Fisheries
- 3. American Samoa Longline Fishery
- 4. Hawaii Longline Fishery
- 5. Hawaii Small Boat Fishery
- 6. American Samoa Small Boat Fishery
- 7. American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (0648-0635)
- 8. Mariana Archipelago Small Boat Fisheries (0648-0755)
- 9. USVI Small-Scale Fisheries
- 10. Puerto Rico Small-Scale Fisheries
- 11. Gulf of Mexico Inshore Shrimp Fishery
- 12. Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)
- 13. West Coast Coastal Pelagic Species Fishery
- 14. West Coast Swordfish Fishery (0648-0751)
- 15. West Coast North Pacific Albacore Fishery

To make it easier for the public and other reviewers to focus on the responses for a specific fishery or set of fisheries, we provide a set of 18 responses one fishery at a time. However, for responses that apply to the bundled information collection request as a whole, we present the full

response for only the first fishery, indicate the response applies to all 15 fisheries and then only reference that response in the corresponding response for the other 14 fisheries, unless the response is very brief. After Question 1.18, we include a summary table for the 15 information collections, which identifies the applicable characteristics of each collection. That table provides a clear visual of the commonalities and differences among the collections.

#### 1. West Coast Limited Entry Groundfish Fixed Gear Fishery (0648-0773)

1.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

This response applies to all 15 fisheries. NMFS needs the economic data included in this information collection to be capable of more than cursory efforts to comply with or support the following laws, Executive Orders (EOs) and NOAA Fisheries strategies and policies, which require economic analyses<sup>1</sup>.

- 1. The Magnuson-Stevens Fishery Conservation and Management Act (MSA)
- 2. The Marine Mammal Protection Act (MMPA)
- 3. The Endangered Species Act (ESA)
- 4. The National Environmental Policy Act (NEPA)
- 5. The Regulatory Flexibility Act (RFA)
- 6. EO 12866 (Regulatory Planning and Review)
- 7. EO 13771 (Reducing Regulation and Controlling Regulatory Costs)
- 8. EO 13840 (Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States).
- 9. The NOAA Fisheries Guidelines for Economic Reviews of Regulatory Actions
- 10. The NOAA Fisheries Strategic Plan 2019-2022 (Strategic Plan)
- 11. The NOAA Fisheries Ecosystem-Based Fishery Management (EBFM) Road Map
- 12. The NOAA Fisheries National Bycatch Reduction Strategy
- 13. NOAA's Catch Share Policy.

There is implicit authority for the proposed information collections in each of those laws and EOs.

1.2. 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.

This response applies to all 15 fisheries.

<sup>1</sup> Appendix A discusses their requirements for economic data and analyses.

**How will the information be collected:** An in-person, telephone or video call interview is the primary information collection method for 12 of the fisheries. A mail survey is the primary data collection method for the other three fisheries. For one of those three fisheries, there is a webbased option and for another there is an in-person interview option if necessary. Table 1.2 presents the information collection method(s) by fishery. Subsequent responses to fishery specific questions in Parts A and B of the supporting statement provide explanations of why NMFS selected a particular information collection method or collection of methods for a specific fishery.

Table 1.2 Information Collection Method(s) by Fishery for Question 1.2.

Fishery Number	Science Center	Survey Name	Data Collection Methods
1	NWFSC	West Coast Limited Entry Groundfish Fixed Gear Economic Data Collection	Respondents' options: in-person interviews, telephone or mail
2	NWFSC	West Coast Open Access Groundfish, Non- tribal Salmon, Crab, and Shrimp Economic Data Collection	Respondents' options: in-person interviews, telephone or mail
3	PIFSC	American Samoa Longline Survey	In-person interviews
4	PIFSC	Hawaii Longline Survey	In-person interviews
5	PIFSC	Hawaii Small Boat Economic Survey	Mailed survey with a web-based option
6	PIFSC	American Samoa Small Boat Survey	In-person interviews
7	PIFSC	Trip Level Economic Surveys of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (an econ add-on to a creel survey)	In-person interviews
8	PIFSC	Cost Earnings Survey of Mariana Archipelago Small Boat Fleet	In-person interviews
9	SEFSC	USVI Fisheries Economic Survey (Socio- Economic Profile of Small-Scale Commercial Fisheries (SSCF) in the U.S. Caribbean)	In-person interviews
10	SEFSC	Puerto Rico Fisheries Economic Survey (Socio-Economic Profile of Small-Scale Commercial Fisheries (SSCF) in the U.S. Caribbean)	In-person interviews with optional telephone interviews
11	SEFSC	Gulf of Mexico Inshore Shrimp Fishery Economic Survey	Mailed survey
12	SEFSC Economic Expenditure Survey of Golden Crab Fishermen in the U.S. South Atlantic Region Info from current submission)		Mail survey but option of in- person interviews if necessary
13	SWFSC	West Coast Coastal Pelagic Species Fishery Economic Survey	Respondents' options: a telephone or video call interview or mail
14	SWFSC	West Coast Swordfish Fishery Cost and Earnings Survey	Respondents' options: a telephone or video call interview or mail
15	SWFSC	West Coast North Pacific Albacore Fishery Economic Survey	Respondents' options: a telephone or video call interview or mail

**From whom will the information be collected:** The information will be collected from owners/operators of active vessels, permit owners or other well-defined groups of fishermen or license/permit holders.

**How will the information be used:** NMFS and the Regional Fishery Management Councils (Councils) will use this information to monitor, explain and predict changes in the economic performance and impacts of 15 commercial fisheries. This will increase their ability to meet the requirements for economic analyses and to allow better-informed conservation and management decisions on the use of living marine resources and marine habitat in federally managed fisheries. The measures of economic performance include costs, earnings, and profitability (net revenue); productivity and economic efficiency; capacity; economic stability; the level and distribution of net economic benefits to society; and market power. The economic impacts include sector, community, or region-specific and national employment, sales, value-added, and income impacts. The efforts to monitor, explain and predict changes in economic performance and impacts are ongoing and contribute to the value of the information contained in regulatory analyses of current and proposed fishery conservation and management measures, stock assessment and fishery evaluation (SAFE) reports, as well as other technical and scientific reports that address changes in economic performance and impacts. As required by the MSA, the Scientific and Statistical Committee of each Council reviews the data and models used in the economic analyses NMFS or Council staff provide for the Council process. In addition, various advisory groups and the public review the results of such analyses. Appendix B contains references to the uses of the information to be collected.

**What information will be collected:** The following is a summary of the types of questions that will be included in the surveys for the 15 fisheries and of the need for each type of question. The questions asked for a specific fishery depend on a variety of factors including the availability of complementary information from other sources, fishery-specific fishery management issues, the history of the information collection program(s) for a fishery, and the historic or expected effects of a fuller suite of questions on response rates.

**Question 1. Vessel Characteristics:** Information on United States Coast Guard (USCG), NOAA and state identifiers is necessary to help identify specific vessels. While much of the information on physical characteristics such as hull type, tonnage, length, and engine power exists in other sources, these data are often outdated, missing or conflicting. Information on other vessel characteristics, such as engines, fuel capacity, electronics, and the difficulty in switching gears is typically not available from other sources. Vessel characteristics information is useful in assessing the ability and desire of these vessels to participate in a fishery and to make general decisions concerning harvesting plans given changes in regulations and environmental or market conditions.

**Question 2. Ownership:** Questions regarding ownership are necessary to provide linkages between seemingly independent entities. Often, individual vessels and post-harvesting facilities are treated as separate entities when in reality they are part of a larger company. Uncovering these linkages is useful to analysts in identifying small entities as defined by the RFA and in modeling the behavior of these vessels. In addition, these questions are useful in terms of demographic interest; however, evaluation of owner participation also plays a role in predicting

whether marginal vessels will stay in business. For example, the owner of a vessel with zero or slightly negative net profits may decide to remain in the fishery if the owner is deriving a wage from personally operating a vessel. On the other hand, an owner who hires a skipper may be more likely to choose to exit the fishery under a similar circumstance. Finally, vessels with a wider species base, or vessels that are part of a larger company may be more capable of weathering a fishery downturn.

**Question 3. Capital and Other Asset Costs:** We designed this series of questions to provide information analysts can use to estimate market value and replacement costs of major existing assets, including limited entry permits and catch share privileges, and the economic life of these major assets. NMFS uses these values to calculate the economic opportunity costs of capital goods and other assets that it in turn uses to calculate net economic benefits to the nation of industry participation. NMFS also uses them for conducting financial analyses as required by the RFA.

**Question 4. Fixed and Variable Costs:** For a fishing vessel, fixed costs are expenses that generally do not vary with the level, type and location of fishing activities. They are fixed over the short-term but some of them may be eliminated if a vessel owner decides not to engage in any fishing activity for a period of time. Examples of fixed cost include payments for interest and principal, vessel and equipment maintenance, vessel moorage or storage or gear storage, overhead, insurance, licenses, and permits. Conversely, variable costs are expenses that vary with the level, type and location of fishing activities. Examples of variable costs include payments for crew, food, fuel, bait, and ice. Both fixed and variable costs are necessary to: (1) estimate the net value of participation in the fishery; (2) assess the expected changes in net benefits due to proposed management actions or changes in environmental or market conditions; (3) estimate the income, value added, sales, and employment impacts of a fishery or proposed management actions; and (4) assess, in combination with catch and revenue information, the relative importance and dependence of the vessel on harvesting versus other income producing activities of the vessel. The fixed costs must be allocated among the various activities of a vessel to estimate the net economic value of an activity. The variable costs can be used for allocating fixed costs between different activities, as well to model when expenses are incurred and when revenues are received. For some purposes, such as for estimating productivity or explaining and predicting changes in costs, we need information for both the quantities and price of an input purchased. Similarly, to explain or predict changes in payments to the captain and crew, we need information on the current crew share systems.

**Question 5. Effort/Gear Descriptors:** The analysts can use the responses to these questions for fishing vessels to describe and quantify fishing effort in terms of crew size and gear deployed. This information can be used in developing models: (1) to estimate efficient fleet size in support such activities as fleet reduction programs and (2) to monitor, explain and predict changes in fishing costs and employment.

**Question 6. Catch and Revenue:** Revenue information, in conjunction with cost information, is necessary to derive net economic value; and revenue information from each activity can be used to allocate fixed costs between different activities and as part of the assessment of relative dependence on the fishery. If it is not available from other sources, fish prices information is

needed to help explain and predict changes in ex-vessel revenue. For fishing vessels delivering to fish handling facilities, questions about revenue are important to capture end-of-year settlements or in-kind payments not reflected in the trip level data (e.g., fish ticket, logbook and dealer report data). For fishing vessels delivering to motherships, these questions are particularly important because, with few exceptions, there are no trip level records for at-sea landings. Information on revenue from other fisheries is needed because of similar deficiencies in trip level data, and lack of access to confidential information for fisheries in some states. In addition, if the respondents calculate their net income based on their other answers and the result is out-of-line with their experience, they may stop to consider whether they have answered the preceding questions on costs and revenue correctly and entirely. Further, if respondents provide previously calculated net income without checking for consistency, or if analysts compare the reported values with trip level revenue information where available, analysts may derive a result different from the survey responses alerting them to some degree of incompleteness in either the survey or the responses to the questions.

**Question 7. Opportunity Cost of Capital:** The responses to these questions are used to calculate net economic benefits to the nation of industry participation, to determine alternative uses of capital under the existing regulatory environment, and to determine potential new uses of capital given changes in regulations and environmental or market conditions.

**Question 8. Regional Impact:** One assumption generally made in assessing the community or regional economic impacts of a fishing vessel is that all of its crew live in the coastal area of the vessel's homeport and spend most of their related earnings in that area. Similarly, current models assume most other expenses for the vessel occur in the port where fish are landed. However, given the ownership of multiple fishing vessels, vessels that operate out of multiple ports, and geographically mobile vessel crews, these simplifying assumptions may be erroneous. The additional information solicited in these questions is necessary to provide the ability to more accurately estimate the magnitude and geographic distribution of economic impacts.

Question 9. Labor and Demographics: NMFS uses this information to: (1) estimate the effects of fisheries and proposed fishery management actions on the fishing community; (2) determine alternative uses of capital and labor under the existing regulatory environment; (3) determine potential new uses of labor in light of regulatory change and changes in environmental or market conditions; and (4) determine general community employment. Income-related questions will allow a systematic assessment of the degree to which individuals are engaged in and dependent on fishing-related activities while questions on age, ethnicity, language and education will give social scientists a better grasp of issues related to socio-cultural background and specifically highlight potential issues, such as mobility, vulnerability and marginalization. Especially in small-scale fisheries, the fishing business and the household are often intricately entwined, making household demographic/labor questions critical to understanding the fishery.

**Question 10. Other:** The answers to questions concerning business strategy, fishery entry and exit, choice of fishing method, factors that affect fishing success, distribution and marketing, future fishing conditions, fisheries management priorities, impacts of COVID-19 to fishing activities, and attitudes or preferences questions are needed to understand the general business climate in which these vessels operate. Understanding these factors helps to distinguish between

impacts associated with fisheries management and synergistic or cumulative effects of the general economy; and to assess the bargaining and buying/selling strategies at various levels of the distribution chain. Understanding these factors greatly aids in predicting and interpreting changes in their output prices and input costs.

For all 10 types of information, NMFS 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 the response to Question 1.10 for more information on confidentiality and privacy. NMFS designed the information collection to yield data that meet all applicable information quality guidelines. Although the information collected is not expected to be disseminated directly to the public, results may be used in scientific, management, technical or general informational publications. Should NMFS decide to disseminate the information, it will be subject to the quality control measures and predissemination review pursuant to Section 515 of Public Law 106-554.

**Frequency:** For all fisheries, except the American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands small boat-based fisheries (an econ add-on to a creel survey), NMFS will collect the information at most only once during the three-year collection period approved by OMB. NMFS will collect the information for two years at a time for all five West Coast fisheries and for one year at a time for the other fisheries. For the Surveys of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands small boat-based fisheries, which is an ongoing, trip level, information collection, MNFS will collect information several times during a year from the same respondents.

**Data sharing:** NMFS will share summaries of the data and the results of its use with other organizations inside or outside the Department of Commerce or the government. NMFS will not share data from individual respondents unless it determines that there are adequate mechanisms and agreements to protect the confidentiality of the data from individual respondents.

**Collection requirement changes over time:** The overall collection requirements have not changed. However, some of the external factors that affect the economic performance and impacts of these 15 fisheries have changed. For example, the COVID-19 pandemic has been a large exogenous shock to many fisheries in 2020. To respond to this, NMFS added a few questions for surveys, which will collect information for the COVID-19 affected parts of 2020.

1.3. 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.

For the West Coast limited entry groundfish fixed gear fishery, the data collection does not involve the use of automated, mechanical or other technological techniques. Previous efforts by the Northwest Fisheries Science Center (NWFSC) have revealed that the telephone interviews and in-person interviews used in this collection are not well suited for electronic submission of responses. In prior efforts, the interviewers that are anticipated for this collection have

encountered numerous difficulties with electronic devices, which interferes with quickly recording responses. Similar difficulties this time could extend the length of the interview, which would further burden the interviewees and result in incomplete surveys. However, we do plan to make the OMB approved survey instrument available online on the NWFSC website for outreach and information purposes. A report summarizing the salient, aggregated results will be available on the NWSC website once the data collection and analysis are completed.

# 1.4. 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 Question 2.

We reviewed the existing literature, spoke with Pacific Fishery Management Council (PFMC) staff, members of the PFMC's Groundfish Management Team, and NMFS Western Regional Office who maintains the contact information for limited entry (LE) permit holders. We could not find any indication that our effort is duplicative of any work conducted since the last survey conducted by NWFSC in 2019.

## 1.5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

Most of the business entities in this information collection are small businesses. To increase efficiency and reduce the respondent's burden, we send out a copy of the survey with a cover letter, which will inform the respondent about the types of information (financial records, etc.) needed to complete the survey. The respondent will then have the option to complete the survey over the phone, via mail, or in-person, whichever is easiest for them. For those that choose to complete via in-person interview or phone, we intend to have a collection team of personnel who have been working with fishermen to complete these surveys since 2005, assisting with seven commercial fishery data collections. The personnel knowledge of how to handle individual situations will aid in reducing small business respondent burden.

# 1.6. 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 response applies to all 15 fisheries. Not conducting these collections or conducting them less frequently would have the following adverse cascading effects. It would decrease the ability of NMFS and the Councils to effectively monitor, explain and predict changes in the economic performance and impacts of federally managed commercial fisheries. That would prevent more than cursory efforts to comply with or support a variety of laws, Executive Orders and NOAA Fisheries strategies and policies, which require economic analyses. That would limit their use of a well-informed, science-based approach to the conservation and management of living marine resources and marine habitat in federally managed fisheries. There are no technical or legal obstacles to reducing the information collection burden.

## 1.7 Explain any special circumstances that would cause an information collection to be conducted in a manner:

This response applies to all 15 fisheries. This information collection is voluntary. Therefore, it does not require respondents to: 1) report information to the agency; 2) prepare a written response; 3) submit any document; 4) retain any records; or 5) submit proprietary trade secret, or other confidential information. NMFS has demonstrated that it has instituted procedures to protect information confidentiality to the extent permitted by law. This information collection is in connection with a statistical survey that is designed to produce valid and reliable results that can be generalized to the universe of study. This information collection uses statistical data classifications reviewed and approved by OMB. This information collection includes a pledge of confidentiality supported by disclosure and data security policies, which are consistent with the pledge and which do not unnecessarily impede sharing of data with other agencies for compatible confidential use.

1.8. If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden

The first two paragraphs of this response apply to all 15 fisheries. A <u>Federal Register</u> Notice published on April 13, 2020 (85 FR 20473) solicited public comments. We received no comments, which pertained to the PRA requirements of the information collection.

For each of the 15 fisheries, the success of a similar survey several years ago, as well as consultation with fishermen and others familiar with the fishery, indicate that there should be no issues regarding the availability of data, frequency of collection, the clarity of instructions and reporting format, or the requested data elements.

For the West Coast limited entry groundfish fixed gear fishery, we consulted PFMC staff, members of the PFMC's Groundfish Management Team, NMFS Western Regional Office, and Oregon Department of Fish and Wildlife regarding the availability of data for the survey population. Outside of this survey, we cannot identify cost and earnings data for the population.

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

This response applies to all 15 fisheries. There are no plans to provide any payments or gifts to respondents.

1.10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

This response applies to all 15 fisheries. The survey forms will contain the following language:

We appreciate the confidential nature of the data being collected by this survey. NMFS will handle individual survey data as confidential business information and a form of protected personal information and will maintain the confidentiality of the information consistent with legal authorities available to it, including but not limited to the Privacy Act (5 U.S.C. Section 552a) and the Trade Secrets Act (18 U.S.C. Section 1905). NMFS will protect individual survey data from public disclosure to the extent permitted by law and it has instituted procedures to provide that protection.

COMMERCE/NOAA Privacy Act Systems of Records 6 and 19, Fishermen's Statistical Data and Permits and Registrations for United States Federally Regulated Fisheries, respectively, cover the information collected for these fisheries.

Neither a SORN nor a PIA will be required.

1.11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

This response applies to all 15 fisheries. One potentially sensitive question included in several of these information collections is household income. Household income can be an important indicator of household economic resiliency and can be an important factor to consider when evaluating regulatory alternatives. For example, all else being equal, a regulation that disproportionately affects low-income households may be less preferred than one that more widely distributes economic impacts. In addition, combining respondents' household income information with home address data can be used to construct an indicator on community economic resilience, which may be useful when analyzing economic impact on communities as required under National Standard 8 of the MSA [MSA Section 301(a)(8))]. The steps to be taken to increase the response rates for this question include: 1) providing a similar explanation of the use of that information to potential respondents 2) collecting this and other demographic information directly from each individual -- not via the individual's employer, and 3) ensuring potential respondents that such information will be treated as confidential.

The other potentially sensitive question included in several of these information collections is race. NMFS can use race to identify vulnerable communities that could be impacted by regulatory alternatives and issues related to socio-cultural background, particularly in commercial fisheries with diverse backgrounds. Hence, race may be useful when analyzing economic impact on communities due to conservation and management measures as required under National Standard 8 of the MSA [MSA Section 301(a)(8))]. Information collections involving a question on race follow the OMB Standards for the Classification of Federal Data on Race and Ethnicity.

#### 1.12. Provide estimates of the hour burden of the collection of information.

The information in Table 1.12 is for all 15 fisheries. For the hourly wage rate for respondents, we used the average of the US national hourly mean wage rates for 1) Captains, Mates, and Pilots of Water Vessels (\$42.03, occ\_code 53-5021) and 2) Farming, Fishing, and Forestry Occupations (\$15.07, occ\_code 45-0000) at <a href="https://www.bls.gov/oes/current/oes\_nat.htm">https://www.bls.gov/oes/current/oes\_nat.htm</a> for 2019. We used the average for those two occupation codes for several reasons. First, there is not an occupation code specifically for the captains of fishing vessels. Second, the equivalent of an hourly wage rate varies among fisheries and captains. Third, we think the average of the two hourly mean wage rates is a reasonable proxy for the captains of fishing vessels. Finally, that

average hourly wage of \$28.55 is roughly consistent with the \$25.25 US national hourly mean wage rates for First-Line Supervisors of Farming, Fishing, and Forestry Workers (occ\_code 45-1011). We note any exceptions to the use of that hourly wage rate in the response for individual fisheries.

The estimate of the burden per response is based on consultation with fishermen and others familiar with this fishery. We provided opportunities for comments on that estimate in similar previously conducted surveys and in the 60-day Federal Register Notice for this information collection and received none. Unless noted otherwise, we do not expect the hour burden on respondents for a given fishery to vary widely. With one exception<sup>2</sup>, NMFS will not conduct theses information collections annually. Depending on the fishery, the plan is to conduct them every 3 to 8 years. However, because any number of things, including changing fishery conditions and management concerns, can affect the appropriate frequency of a survey for a specific fishery, NMFS is requesting approval to conduct each survey as frequently as every 3 years. To allow for this flexibility in determining the frequency of each of 14 surveys, we calculated the annual burdens and costs of each information collection as if we planned to conduct it every 3 years. This means that the actual average annual burdens and costs will be less than the estimates if we do not take advantage of the option to conduct them every 3 years. This statement applies to the burden and cost estimates in Tables 1.12 -1.15.

As discussed in Part B, Question 1.1, the NWFSC has conducted five previous economic cost earnings surveys of the limited entry fixed gear fleet. Based on these prior efforts, we expect a 55% response rate for this survey. With a survey population of 164 vessels, this implies 90 survey respondents for an annual collection, or an average of 30 over the three years because the plan is to conduct the survey only once over the three year period. The vast majority of respondents in the prior collection efforts run in the one-hour range and we estimate that, prior to the interview, two hours are needed for the respondent to compile financial records. Therefore, the estimated total respondent burden is 90 hours per year. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$2,570.

Table 1.12 Estimates of the Number of Respondents and Burden for Question 1.12.

Information Collection	Type of Respondent (e.g., Occupational Title)	# of Respondents / Year (a)	Annual # of Responses/ Respondent (b)	Total # of Annual Responses (c) = (a) x (b)	Burden Hrs/ Response (d)	Total Annual Burden Hrs (e) = (c) x (d)	Hourly Wage Rate (for Type of Respondent)	Total Annual Wage Burden Costs (g) = (e) x (f)
West Coast Limited Entry Groundfish Fixed Gear Fishery (0648-0773)	Captains and Fishermen	30.00	1	30.00	3	90.00	\$28.55	\$2,570
West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Fisheries	Captains and Fishermen	150.00	1	150.00	3	450.00	\$28.55	\$12,848
American Samoa Longline	Fishermen	4.67	1	4.67	1	4.67	\$13.21	\$62

<sup>2</sup> The exception is the economic add-on to a trip level creel survey for the American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands small boat-based fisheries.

Fishery								
Hawaii Longline Fishery	Captains	42.00	1	42.00	1	42.00	\$27.44	\$1,152
Hawaii Small Boat Fishery	Captains	166.67	1	166.67	0.75	125.00	\$27.44	\$3,430
American Samoa Small Boat Fishery	Fishermen	16.67	1	16.67	0.75	12.50	\$13.21	\$165
American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (0648-0635)	Fishermen	200.00	2.4	480.00	0.167	80.16	\$13.21	\$1,059
Mariana Archipelago Small Boat Fisheries (0648-0755)	Fishermen	66.00	1	66.00	0.75	49.50	\$13.21	\$654
USVI Small-Scale Fisheries	Captains and Fishermen	54.33	1	54.33	0.25	13.58	\$28.55	\$388
Puerto Rico Small-Scale Fisheries	Captains and Fishermen	410.00	1	410.00	1	410.00	\$28.55	\$11,706
Gulf of Mexico Inshore Shrimp Fishery	Captains and Fishermen	166.33	1	166.33	0.47	78.18	\$28.55	\$2,232
Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)	Captains and Fishermen	2.00	1	2.00	0.5	1.00	\$28.55	\$29
West Coast Coastal Pelagic Species Fishery	Captains and Fishermen	30.33	1	30.33	3	91.00	\$28.55	\$2,598
West Coast Swordfish Fishery (0648-0751)	Captains and Fishermen	16.33	1	16.33	0.51	8.33	\$28.55	\$238
West Coast North Pacific Albacore Fishery	Captains and Fishermen	20.00	1	20.00	1	20.00	\$28.55	\$571
Totals		1,375		1,655		1,476		\$39,700

1.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

This response applies to all 15 fisheries. There are no capital/start-up or ongoing operation/maintenance costs associated with this information collection. Respondents will use envelopes with prepaid postage for any information collected by mail. The information in Table 1.13 is for all 15 fisheries.

Table 1.13 Estimates of Capital/Start-Up or Ongoing Operation/Maintenance Costs for Question 1.13.

Information Collection	# of Respondents / Year (a)	Annual # of Responses / Respondent (b)	Total # of Annual Responses (c) = (a) x (b)	Cost Burden / Respondent (h)	Total Annual Cost Burden (i) = (c) x (h)
West Coast Limited Entry Groundfish Fixed Gear Fishery (0648-0773)	30	1	30	0	0
West Coast Open Access Groundfish, Non- tribal Salmon, Crab, and Shrimp Fisheries	150	1	150	0	0
American Samoa Longline Fishery	4.67	1	4.67	0	0
Hawaii Longline Fishery	42	1	42	0	0
Hawaii Small Boat Fishery	166.67	1	166.67	0	0

American Samoa Small Boat Fishery	16.67	1	16.67	0	0
American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (0648- 0635)	200	2.4	480	0	0
Mariana Archipelago Small Boat Fisheries (0648-0755)	66	1	66	0	0
USVI Small-Scale Fisheries	54.33	1	54.33	0	0
Puerto Rico Small-Scale Fisheries	410	1	410	0	0
Gulf of Mexico Inshore Shrimp Fishery	166.33	1	166.33	0	0
Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)	2	1	2	0	0
West Coast Coastal Pelagic Species Fishery	30.33	1	30.33	0	0
West Coast Swordfish Fishery (0648-0751)	16.33	1	16.33	0	0
West Coast North Pacific Albacore Fishery	20	1	20	0	0
TOTALS	1,375		1,655		0

1.14. 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.

NMFS employees at each of four Science Centers will have federal oversight, data collection, analysis, report writing, and administrative responsibilities associated with these information collections. We estimate the costs of meeting those responsibilities at each Science Center based on the pay grade of each NMFS employee with those responsibilities and the percentage of each employee's time needed to meet those responsibilities. We estimated the costs of the contracts to administer the surveys based on the costs of similar current or recent contracts. In addition to the costs by Science Center, there is an \$85,000 cost for the NMFS Office of Science and Technology for a NMFS employee who provided oversight and for the contractor who assisted in the development of this ICR package. The estimated total cost incurred by the federal government by implementing these information collections is \$970,254, which averages \$323,418 per year over the three-year authorization period for this bundled package of information collections. Table 1.14 provides a detailed breakdown of these costs to the Federal government by Science Center and cost category. For the West Coast limited entry groundfish fixed gear fishery, we report the federal government cost under NWFSC cost description.

**Table 1.14 Federal Government Cost Estimates for Question 1.14.** 

NWFSC \Cost Descriptions	Grade/ Step	Loaded Salary /Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight	ZP-4	\$195,431	1%		\$1,954
Data collection/analysis	ZP-4	\$195,431	2%		\$3,909
Data collection/analysis	ZP-4	\$149,612	2%		\$2,992
Administrative					\$0
Some other duty					\$0
Contractor Cost					\$270,000
Travel					
Other Costs:					
Printing/Postage					

TOTAL					\$278,855
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PIFSC Cost Descriptions	Grade/ Step	Loaded Salary Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight, Data Analysis, Report Writing	ZP-4	\$210,219	27%		\$56,597
Federal Oversight	ZP-4	\$210,219	5%		\$10,107
Contractor Cost					
Economist from joint research institute for data analysis and report writing		\$158,000	22%		\$34,942
Graduate assistant from joint research institute for data collection, database design and data entry	-	\$36,800	60%	-	\$22,080
Translator		\$44,000	25%	-	\$11,000
Contractor for survey implementation	-				\$50,666
Travel					\$8,000
Other Costs: Printing/Postage					\$0
TOTAL					193,392

**Table 1.14 Continued** 

SEFSC \Cost Descriptions	Grade/ Step	Loaded Salary Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight	ZP-4	\$210,219	7%		\$14,015
Data collection/analysis	ZP-4	\$210,219	14%		\$29,431
Administrative	ZP-4	\$210,219	3%		\$5,606
Some other duty					\$0
Contractor Cost					\$133,333
SE Region					
Travel					\$5,333
Other Costs:					
Printing/Postage					
TOTAL					\$187,718

SWFSC Cost Descriptions	Grade/ Step	Loaded Salary Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight	ZP-4	\$156,850	3%		\$4,706
Data collection/analysis	ZP-4	\$156,850	45%		\$70,583
Administrative					
Some other duty					
Contractor Cost					\$150,000
Travel					
Other Costs:					
Printing/Postage					
TOTAL					\$225,289

Office of Science and Technology (OST) Cost Descriptions	Grade/ Step	Loaded Salary Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight	ZP-4	\$200,000	5%		\$10,000
Data collection/analysis					
Administrative					
Some other duty					
Contractor Cost					\$75,000
Travel					
Other Costs:					
Printing/Postage					
TOTAL					\$85,000
GRAND TOTAL All Science Centers and OST					\$970,254

#### 1.15. Explain the reasons for any program changes or adjustments reported in ROCIS.

Table 1.15 includes the changes in the numbers of respondents and responses, the burden hours, labor costs, and miscellaneous costs; and explains the reasons for these changes for all 15 fisheries.

**Table 1.15 Estimates for Question 1.15.** 

	Responde	ents/Year	Respons	ses/Year	Burden H	ours/Year	
Information Collection	Current Renewal / Revision	Previous Renewal / Revision	Current Renewal / Revision	Previous Renewal / Revision	Current Renewal / Revision	Previous Renewal / Revision	Reason for change or adjustment
West Coast Limited Entry Groundfish Fixed Gear Fishery (0648-0773)	30.00	90	30.00	90	90.00	270	Updated to reflect new respondent pool and changes to estimate annual, not total, quantities
West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Fisheries	150.00	0	150.00	0	450.00	0	New collection under OMB Control No. 0648-0773
American Samoa Longline Fishery	4.67	0	4.67	0	4.67	0	New collection under OMB Control No. 0648-0773
Hawaii Longline Fishery	42.00	0	42.00	0	42.00	0	New collection under OMB Control No. 0648-0773
Hawaii Small Boat Fishery	166.67	0	166.67	0	125.00	0	New collection under OMB Control No. 0648-0773
American Samoa Small Boat Fishery	16.67	0	16.67	0	12.50	0	New collection under OMB Control No. 0648-0773
American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (0648-0635)	200.00	245 (0648- 0635)	480.00	600 (0648- 0635)	80.16	100 (0648- 0635)	Updated to reflect new respondent pool and changes to estimate annual, not total, quantities
Mariana Archipelago Small Boat Fisheries (0648-0755)	66.00	280 (0648- 0755)	66.00	280 (0648- 0755)	49.50	210 (0648- 0755)	Updated to reflect new respondent pool and changes to estimate annual, not total, quantities
USVI Small-Scale Fisheries	54.33	0	54.33	0	13.58	0	New collection under OMB Control No. 0648-0773
Puerto Rico Small-Scale Fisheries	410.00	0	410.00	0	410.00	0	New collection under OMB Control No. 0648-0773
Gulf of Mexico Inshore Shrimp Fishery	166.33	0	166.33	0	78.18	0	New collection under OMB Control No. 0648-0773
Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)	2.00	6 (0648- 0631)	2.00	6 (0648- 0631)	1.00	3 (0648- 0631)	Updated to reflect changes to estimates of annual, not total, quantities
West Coast Coastal Pelagic Species Fishery	30.33	0	30.33	0	91.00	0	New collection under OMB Control No. 0648-0773
West Coast Swordfish Fishery (0648-0751)	16.33	17 (0648- 0751)	16.33	17 (0648- 0751)	8.33	17 (0648- 0751)	Updated to reflect new respondent pool and changes to estimate annual, not total, quantities
West Coast North Pacific Albacore Fishery	20.00	0	20.00	0	20.00	0	New collection under OMB Control No. 0648-0773
Total for Collection	1,375	90	1,655	90	1,476	270	
Difference	-60 adjı	285 ustment iscretion	-60 adjı	5 <b>65</b> ustment iscretion	-180 adj	206 justment iscretion	

Table 1.15 (Continued)

Information Callegation	Labor Costs		Miscellaneous Costs		December the second divides at	
Information Collection	Current	Previous	Current	Previous	Reason for change or adjustment	
West Coast Limited Entry Groundfish Fixed Gear Fishery (0648-0773)	\$2,570	\$7,709	0	0	Updated to reflect changes to estimates of annual, not total, burden hours and a revised hourly wage rate	
West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Fisheries	\$12,848	\$O	0	0	New collection under OMB Control No. 0648-0773	
American Samoa Longline Fishery	\$62	\$0	0	0	New collection under OMB Control No. 0648-0773	
Hawaii Longline Fishery	\$1,152	\$0	0	0	New collection under OMB Control No. 0648-0773	
Hawaii Small Boat Fishery	\$3,430	\$0	0	0	New collection under OMB Control No. 0648-0773	
American Samoa Small Boat Fishery	\$165	\$0	0	0	New collection under OMB Control No. 0648-0773	
American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (0648-0635)	\$1,059	\$1,321	0	0	Updated to reflect changes to estimates of annual, not total, burden hours and a revised hourly wage rate	
Mariana Archipelago Small Boat Fisheries (0648-0755)	\$654	\$2,774	0	0	Updated to reflect changes to estimates of annual, not total, burden hours and a revised hourly wage rate	
USVI Small-Scale Fisheries	\$388	\$0	0	0	New collection under OMB Control No. 0648-0773	
Puerto Rico Small-Scale Fisheries	\$11,706	\$0	0	0	New collection under OMB Control No. 0648-0773	
Gulf of Mexico Inshore Shrimp Fishery	\$2,232	\$0	0	0	New collection under OMB Control No. 0648-0773	
Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)	\$29	\$86	0	0	Updated to reflect changes to estimates of annual, not total, burden hours and a revised hourly wage rate	
West Coast Coastal Pelagic Species Fishery	\$2,598	\$0	0	0	New collection under OMB Control No. 0648-0773	
West Coast Swordfish Fishery (0648- 0751)	\$238	\$220	0	0	Updated to reflect changes to estimates of annual, not total, burden hours and a revised hourly wage rate	
West Coast North Pacific Albacore Fishery	\$571	\$0	0	0	New collection under OMB Control No. 0648-0773	
Total for Collection	\$39,700	\$12,110	0	0		
Difference	\$27	,590		0		

1.16. 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.

For this fishery, we anticipate the information collected will be disseminated to the public or used to support publicly disseminated information. NMFS designed the information collection to yield data that meet all applicable information quality guidelines. Information in tabulation form will be disseminated to the public in a NOAA Technical Memoranda similar to Lian (2010, 2012a). Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to Section 515 of Public Law 106-554. When writing final reports and publishing the findings of this research, tabulations of individual responses will occur at a high enough level of aggregation so that data for no single individual can be identified.

In addition to the summary of these data in a Technical Memoranda, the data gathered will be used to address a wide range of issues important to the West Coast Regional Office, PFMC, and WA, OR, and CA state fish and wildlife agencies. The Input-Output Model for Pacific Coast Fisheries (IO-PAC) (Leonard and Watson, 2011), will utilize these data. It is used by the PFMC to estimate the economic impacts of fisheries biannually for the Pacific Coast Groundfish Harvest Specifications and annually for the Stock Assessment and Fishery Evaluation report for ocean salmon fisheries. In addition, the PFMC uses the IO-PAC model to assess numerous other prospective management changes that are expected to impact commercial fishing effort. It has been applied in several peer-reviewed studies (Kaplan and Leonard 2012; Seung et al. 2014; Leonard and Steiner 2017; Richerson et al. 2018; Hodgson et al. 2018). Before the IO-PAC model is used in the fishery management process, it (together with the data collected described herein), will be reviewed by the Scientific and Statistical Committee of the PFMC.

The timeline for the data collection is as follows. Data collection period: Sept. 2022-Nov. 2022. Technical Memoranda creation: Completed Feb. 2023. Incorporation of data into IO-PAC: Completed March 2023.

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

This response applies to all 15 fisheries. Each form will display the OMB control number and expiration date.

# 1.18. Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

This response applies to all 15 fisheries. NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b)(3).

The following table, which identifies the characteristics of each information collection, provides a clear visual of the commonalities and differences among the 15 information collections.

#### Tabular summary of the characteristics of the 15 information collections.

Number	1	2	3
Science Center	NWFSC	NWFSC	PIFSC
Survey Name	West Coast Limited Entry Groundfish Fixed Gear Economic Data Collection	West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Economic Data Collection	American Samoa Longline Survey
Current or Previous OMB Control #	0648-0773	0648-0369	0648-0724
Expiration date	11/30/2021	1/31/2014	1/31/2019
Renewal (Y/N) and currently approved (C)	Y and C	N	N
Survey Type	Cost and Earnings	Cost and Earnings	Cost and Earnings
Used to estimate and monitor changes in (1)	The economic condition and economic impacts of the fishery	The economic condition and economic impacts of the fishery	Economic performance
NMFS POC	Jerry Leonard	Jerry Leonard	Minling Pan
Most recent data collected for	2017 and 2018 in one survey	2012 and 2013 in one survey	2016
Future Plans	Collect data for 2020 and 2021 in a single survey	Collect data for 2019 and 2020 in a single survey	Collect data for 2021
Potential respondent universe	All owners of all active commercial fishing vessels holding a West Coast (Washington, Oregon, and California) limited entry groundfish permit with a fixed gear endorsement, that were active during 2019, where "active" is well defined	All owners of non-tribal commercial fishing vessels with (1) at least \$1,000 of West Coast landings during 2018, (2) no limited entry groundfish permit during 2018, and (3) at least one trip targeting open access groundfish, salmon, crab or shrimp, which is determined by a majority (>50%) of revenue from one of the four species groups.	All owners or operators of the active American Samoa longline vessels
Source of sample frame	Federal permit files and state landings data base	Federal permit files, state permit files and state landings data base	Federal logbook database for the American Samoa longline fishery

Number	1	2	3
Census	Y	N	Y
Random Sample		Y	
Stratified		44% of each stratum	
Random Sample			
Strata		Four strata defined by geographic area: WA, OR, Northern CA, and Southern CA	
Desired frequency	Every two or three years	Every two or three years	Every few years
Response Method	Respondents' options: in- person interviews, telephone or mail	Respondents' options: in- person interviews, telephone or mail	In-person interviews
Expected Response Rate	55%	45%	80%
Actual Response Rate(s) for Most Recent Survey(s)	50-59%	44%	77-88%
Burden Hours per Completed Survey	3	3	1
Expected/ Target Completed Surveys per Year	30	150	5
Expected Total Burden Hours/Year	90	450	5
Data Used to Test and Adjust for Non- Response Bias	Vessel physical characteristics and vessel landings (weight and dollar value) by date, species, gear type, and port	Vessel physical characteristics and vessel landings ()weight and dollar value by date, species, gear type, and port)	Data on vessel physical characteristics and landings (location, timing, gear, species, target types (tuna or swordfish), and CPUE - number caught per 1000 hooks) are available for both survey respondents and non-respondents from the federal logbook

Number	4	5	6
Science Center	PIFSC	PIFSC	PIFSC
Survey Name	Hawaii Longline Survey	Hawaii Small Boat	American Samoa Small Boat
		Economic Survey	Survey
Current or	0648-0369	0648-0691	0648-0691
Previous OMB			
Control #			
Expiration date	1/31/2014	3/31/2017	3/31/2017
Renewal (Y/N)	N	N	N
and currently			
approved (C)			
Survey Type	Cost and Earnings	Cost and Earnings	Cost and Earnings
Used to estimate	Economic performance	Economic performance	Economic performance
and monitor changes in (1)			
_ , ,	Minling Dec	Tarada II anda l	Leadin II and al
NMFS POC	Minling Pan	Justin Hospital	Justin Hospital
Most recent data collected	2012	2013	2013
for			
Future Plans	Collect data for 2019	Collect data for 2019	Collect data for 2020
Potential	All owners or operators of	All fishermen who held a	Small boat fishermen with
respondent	Hawaii-based longline	State of Hawaii CML and	landings in American Samoa
universe	vessels that were active	with the following criteria	5
	during 2019.	that we considered	
		comprising the small boat	
		fishery: fishermen who	
		caught, landed, and sold at	
		least one marine life using	
		small vessels during 2019	
		and with valid mailing address; but excluded	
		charter, longline, aquarium,	
		and precious coral fisheries.	
Source of	Federal logbook database	State of Hawaii Division of	Estimated population from
sample frame	for the Hawaii longline	Aquatic Resources CML file	boat-based creel survey
•	fishery	•	

3.T 3		_	
Number	4	5	6
Census	Y	N	Y
Random Sample		Y	
Stratified		Y	
Random Sample			
Strata		Primary gear usage (7 strata)	
Desired	Every few years	Every few years	Every few years
frequency			
Response	In-person interviews	Mailed survey with a web-	In-person interviews
Method	_	based option	-
Expected	84%	50%	84%
Response Rate			
Actual Response	79-89%	47-51%	84%
Rate(s) for Most			
Recent			
Survey(s)			
Burden Hours			
per Completed	1	0.75	0.75
Survey			
Expected/			
Target			
Completed	42	167	17
Surveys per			
Year			
Expected Total			
Burden	42	125	13
Hours/Year			
Data Used to	Data on vessel physical	Data on primary gear usage	Data on gear usage
Test and Adjust	characteristics and landings	(handline, troll, spear, etc.)	(handline, troll, spear, etc.)
for Non-	(location, timing, gear,	are available in the Hawaii	are available for both survey
Response Bias	species, target types (tuna	Division of Aquatic	respondents and non-
	or swordfish), and CPUE -	Resources' CML records for	respondents from the boat-
	number caught per 1000 hooks) are available for	both survey respondents and non-respondents	based creel survey
	both survey respondents	non-respondents	
	and non-respondents from		
	the federal logbook		
	the reactur rogototic		

Number	7	8	9
Science Center	PIFSC	PIFSC	SEFSC
Survey Name	Trip Level Economic Surveys of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (an econ add-on to a creel survey)	Cost Earnings Survey of Mariana Archipelago Small Boat Fleet	USVI Fisheries Economic Survey (Socio-Economic Profile of Small-Scale Commercial Fisheries (SSCF) in the U.S. Caribbean)
Current or Previous OMB Control #	0648-0635	0648-0755	0648-0667
Expiration date	9/30/2020 <sup>3</sup>	9/30/2020 4	5/31/2016
Renewal (Y/N) and currently approved (C)	Y and C	Y and C	N
Survey Type	Trip cost add-on to an existing creel survey	Cost-earnings and demographic data	Cost and Earnings
Used to estimate and monitor changes in (1)	Economic performance	Economic and demographic conditions	Economic performance
NMFS POC	Minling Pan	Justin Hospital	Scott Crosson
Most recent data collected for	Ongoing collection	2017/2018	2014
Future Plans	Continue this on-going collection	Collect data for 2023	Collect data for 2020
Potential respondent universe	Small boat fishermen landing in American Samoa, Guam and CNMI	All small boat fishermen with landings in 2018 in Guam or in CNMI	All commercial saltwater fishermen in the USVI
Source of sample frame	WPacFIN creel survey expansion methodologies	WPacFIN estimates of the number of active small boats in Guam and CNMI and independent estimates of the additional small boats in the island of Tinian and in the island of Rota.	Licensed fishermen file from the USVI Division of Fish and Wildlife

<sup>3</sup> This information collection is under review by OMB, which will extend the expiration data one month at a time until it takes final action.

<sup>4</sup> The same applies to this expiration date too.

NTL	7	0	0
Number	7	8	9
Census	N	Y	N
Random Sample	Y		Y
Stratified	Y		Y
Random Sample			
Strata	Ramps/docks and dates		Two areas
Desired	Ongoing collection	Every few years	Every few years
frequency			
Response	In-person interviews	In-person interviews	In-person interviews
Method	_	_	_
Expected	32-84% (varies by area)	31% and 67% in the two	68%
Response Rate		areas	
Actual Response	32-84% (5-year means vary	30-32% and 62-71% in the	68%
Rate(s) for Most	by area)	two areas	
Recent			
Survey(s)			
Burden Hours			
per Completed	0.167	0.75	0.25
Survey			
Expected/			
Target			
Completed	200	66	54
Surveys per			
Year			
Expected Total			
Burden	33	50	14
Hours/Year			
Data Used to	The boat registration		
Test and Adjust	number is recorded on the		
for Non-	boat logs and on the		
Response Bias	completed interviews so		
	that respondents and non-		
	respondents can be		
	identified by fishing method		

Number	10	11	12
Science Center	SEFSC	SEFSC	SEFSC
Survey Name	Puerto Rico Fisheries	Gulf of Mexico Inshore	Economic Expenditure
	Economic Survey (Socio-	Shrimp Fishery Economic	Survey of Golden Crab
	Economic Profile of Small-	Survey	Fishermen in the U.S. South
	Scale Commercial Fisheries		Atlantic Region Info from
	(SSCF) in the U.S.		current submission)
	Caribbean)		
Current or	0648-0667	None	0648-0631
Previous OMB			
Control #			
Expiration date	5/31/2016	None	5/31/2023
Renewal (Y/N)	N	N	Y and C
and currently			
approved (C)			
Survey Type	Cost and Earnings	Cost and Earnings	Cost and Earnings
Used to estimate	Economic performance	Economic performance and	Economic performance and
and monitor		impacts	impacts
changes in (1)			
NMFS POC	Juan Agar	Christopher Liese	Scott Crosson
Most recent	2016	2011	2016
data collected			
for			
Future Plans	Collect data for 2021	Collect data for 2021	Collect data for 2019
Potential	All commercial saltwater	All commercial shrimpers in	Golden crab permits owners
respondent	fishermen in Puerto Rico	state waters excluding	
universe		federal shrimp vessel permit	
		holders	
Source of	Puerto Rico trip ticket and	State license files and federal	Federal permit files
sample frame	commercial fishermen census databases	shrimp permit file	

	1		1
Number	10	11	12
Census	Y	N	Y
Random Sample		Y	
Stratified		Y	
Random Sample			
Strata	Four regions (post-sample)	5 states	
Desired	Every few years	Every few years	Every few years
frequency			
Response	In-person interviews with	Mailed survey	Mail survey but option of
Method	optional telephone		in-person interviews if
	interviews		necessary
Expected	82%	31%	100%
Response Rate			
Actual Response	82%	31%	100%
Rate(s) for Most			
Recent			
Survey(s)			
Burden Hours			
per Completed	1	0.47	0.5
Survey			
Expected/			
Target			_
Completed	410	166	2
Surveys per			
Year			
Expected Total Burden	140	=0	
Burden   Hours/Year	410	78	1
			TI 1000/
Data Used to	Local trip ticket data		The 100% response rate
Test and Adjust for Non-			expected eliminates the need
			to test or correct for non-
Response Bias			response bias

Number	13	14	15
Science Center	SWFSC	SWFSC	SWFSC
Survey Name	West Coast Coastal Pelagic Species Fishery Economic Survey	West Coast Swordfish Fishery Cost and Earnings Survey	West Coast North Pacific Albacore Fishery Economic Survey
Current or Previous OMB Control #	prev. 0369	0648-0751	0648-0706
Expiration date	7/31/2009	6/30/2023	12/31/2017
Renewal (Y/N) and currently approved (C)	N	Y and C	N
Survey Type	Cost and Earnings	Mainly Cost and Earnings	Cost and Earnings
Used to estimate and monitor changes in (1)	Economic performance and impacts	Economic performance and impacts	Economic performance and impacts
NMFS POC	James Hilger	Steve Stohs	Steve Stohs
Most recent data collected for	2008	2009	1999
Future Plans	Collect data for 20114 and 2020 in a single survey	Collect data for 2018-19 and 2019-20 seasons in a single survey	Collect data for 2019 and 2020 in a single survey
Potential respondent universe	All owners of a commercial fishing vessel that participated in the CPS fishery during 2014 or 2019, where "participated in" is specifically defined	Owners or operators of all active West Coast vessels primarily targeting swordfish and tuna in 2018-19 and 2019-20, pilots and processors that serve the industry and recent swordfish fishery participants who are currently inactive.	All fishing vessel owner/operators in the West Coast North Pacific Albacore Fishery during the 2019 and 2020 seasons
Source of sample frame	Federal and state permit/registration files and state landings data base	Federal and state permit/registration files and state landings data base	Federal and state permit/registration files and state landings data base

Number	13	14	15
Census	Y	Y	N
Random Sample			Y
Stratified Random Sample			Y
Strata			9 strata defined by 3 vessel length class and 3 home port state
Desired frequency	Every few years	Every few years	Every few years
Response Method	Respondents' options: a telephone or video call interview or mail	Respondents' options: a telephone or video call interview or mail	Respondents' options: a telephone or video call interview or mail
Expected Response Rate	48%	57%	50%
Actual Response Rate(s) for Most Recent Survey(s)	49	36-54%	50%
Burden Hours per Completed Survey	3	0.51	1
Expected/ Target Completed Surveys per Year	30	16	20
Expected Total Burden Hours/Year	91	8	20
Data Used to Test and Adjust for Non- Response Bias	Vessel physical characteristics and vessel landings (weight and dollar value) by date, species, gear type, and port	Vessel physical characteristics and vessel landings ()weight and dollar value by date, species, gear type, and port)	Vessel physical characteristics and vessel landings (weight and dollar value) by date, species, gear type, and port Nonresponse bias is not anticipated due to a random relationship between survey response and the information requested in the information collection

<sup>(1)</sup> References to how and where these data have been used and requirements for their use are included in Appendices B and A, respectively.

- 2. West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Fisheries
- 2.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

2.2 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.

See response 1.2 above, it applies to all 15 fisheries.

2.3 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.

See response 1.3 above, it applies to this fishery too.

2.4 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 Question 2.

We reviewed the existing literature, spoke with PFMC staff, members of the PFMC's Groundfish Management Team, and staff from Oregon Department of Fish and Wildlife. We could not find any indication that our effort is duplicative of any work conducted since the last survey conducted by NWFSC in 2014.

2.5 If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

Response 1.5 applies to this fishery too.

2.6 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.

See response 1.6 above, it applies to all 15 fisheries.

2.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

2.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Response 1.8 applies to this fishery too.

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

There are no plans to provide any payments or gifts to respondents.

2.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

2.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

#### 2.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

As discussed in Part B, Question 2.1, the NWFSC has conducted three previous surveys of the open access fleet in this collection. Based on prior efforts, we anticipate an overall response rate of 44.6%. The population consists of 2,311 commercial fishing vessels. Of these, we intend to sample 1,009 vessels. This implies 450 respondents or 150 per year over three years because we

plan to conduct the survey only once over a three year period. The vast majority of respondents in the prior collection efforts run in the one-hour range and we estimate that, prior to the interview, two hours are needed for the respondent to compile financial records. Therefore, the estimated total respondent burden is 450 hours per year. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$12,848.

2.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

2.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under NWFSC cost description.

2.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

2.16 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.

The first part of response to Question 1.16 applies to this fishery too.

The timeline for the data collection is as follows. Data collection period: May 2021-July 2021. Technical Memoranda creation: Complete Sept. 2021. Incorporation of data into IO-PAC: Complete Oct. 2021.

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

Each form will display the OMB control number and expiration date.

# ${\bf 2.18~Explain~each~exception~to~the~certification~statement~identified~in~``Certification~for~Paperwork~Reduction~Act~Submissions.''}$

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b)(3).

### 3. American Samoa Longline Fishery

3.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

3.2 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.

See response 1.2 above, it applies to all 15 fisheries.

3.3 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.

For this fishery, we will conduct in-person interviews. As noted in the response to Question 1.3, in-person interviews are not well suited for electronic submission of responses. However, we do plan to make the OMB approved survey instrument available online on the Pacific Island Fisheries Science Center (PIFSC) website for outreach and information purposes. A report summarizing the salient, aggregated results will be available on the PIFSC website once the data collection and analysis are completed.

3.4 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 Question 2.

The PIFSC implemented a continuous economic data collection program in 2006. It is an add-on to the NOAA Fisheries Pacific Islands Regional Office (PIRO) observer program, it collects American Samoa longline fishing trip cost data on the observed trips, and it is restricted to the fishing trip cost items. Due to the low observer coverage and the voluntary nature of the economic data collection program, it only collects fishing trip costs for about 13% of total trips. This proposed information collection of vessel-level cost-earnings data of American Samoa longline fleet not only covers fishing trip costs (especially for the vessels without trip cost data by the observer add-on), more importantly, it collects other vessel level information, including annual fixed costs, labor costs of crew and captain, fish sale costs, and also owner/owner operator's characteristics. Given the high response rates from the past American Samoa longline cost-earnings survey (~80% to 90%, see details in Part B, Question 3.1), this proposed information collection will allow us to evaluate fishers' net revenues/losses at the vessel level and provide an indicator of the economic health of the fishery. Because the last data collection was done in 2017 (for 2016 operations), with the results summarized in Pan 2019), the data and

the research based on those data are outdated and inadequate to support current management actions.

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

We will use several methods to minimize burden. Participation in the survey is voluntary, and interviews will be conducted at times and places that are convenient for fishermen. This will minimize any potential disruption to fishermen's fishing practices. The interviewer is trained to request permission to do a survey. If a fisherman refuses to participate in the interview or if the interviewer senses a fisherman does not want to provide data, the interviewer will terminate the interview immediately and thank the fisherman for his/her time.

3.6 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.

See response 1.6 above, it applies to all 15 fisheries.

3.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

3.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

We consulted with the Pelagic Fisheries Ecosystem Scientist Mark Fitchett at the Western Pacific Regional Fishery Management Council (WPRFMC) and Chief Fisheries Biologist Domingo Ochavillo at the American Samoa Department of Marine and Wildlife Resources. Mark Fitchett responded by email on May 2, 2020 and Domingo Ochavillo responded by email on May 12, 2020. Table 3.8 records their specific responses.

Table 3.8 Specific consultant responses concerning the American Samoa Longline Fishery survey

	Responses from Mark Fitchett	Responses from Domingo Ochavillo
Q1. Do you think the economic data in the survey are readily available?	Yes, I think the data for the survey is readily available.	Yes. Most of the questions can be answered right the way. Some questions like vessel purchased date need to look into the records or their documents.
Q2. For the frequency of collection, do you think it is adequate?	I think the frequency of the surveys is sufficient – however, I would suggest amending frequency in response to any regime changes in the fishery – like when gear changes occur over a rapid period of time or if there is an economic event that impacts the islands. Right now the fishery is experiencing a reduction in effort, catches, and political obstacles	I think so. It is adequate for every five or six years
Q3. Do you think the fishermen had clear instructions to answer the survey?	Yes.	Yes. OK.
Q4. The estimated interviewing time per respondent is 60 minutes. Do you think it is reasonable? If not, what do you think is the actual interviewing time per respondent?	Yes. Some may take a long time to respond due to poor record keeping, but 60 minutes is ample time.	I think so.
Q5. What do you think on the data elements to be recorded, disclosed, or reported?	The status quo is sufficient.	Need to keep in mind of the "Less than three" confidential rule, only report in summary (at least sum or average of three vessels or above).

To address the comment to amend frequency of the surveys in response to any regime changes in the fishery, we have requested approval to conduct the survey as frequently as once every 3 years if necessary. In addition, we will consider conducting a separate socioeconomic study about the fishery if some significant changes in the fishery occur and urgent economic analysis becomes necessary.

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

There are no plans to provide any payments or gifts to respondents.

3.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

3.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

#### 3.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections.

As discussed in Part B, Question 3.1, for this fishery we estimated the number of respondents based on the number of active vessels in the American Samoa longline fleet in 2019 (17 vessels, from the mandatory federal logbooks submitted to NMFS) and the average response rate (80%) from the past three cost-earnings studies of the American Samoa longline fleet. We anticipate 14 surveys will be completed in 2022 (or an average 4.67 per year during the OMB PRA three-year approval period for this information collection) and each survey will take about 1 hour. The total burden is estimated to be 4.67 hours per year. Using the \$13.21 average hourly wage for 'Farming, Fishing, and Forestry Occupation' in Guam in May 2019, the estimated annualized labor cost to respondents for the hour burden for the collection is \$62. The hourly wage in Samoa is not available.

3.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

3.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under PIFSC cost description.

3.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

3.16 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.

For this fishery, we expect to implement the data collection in the second half of 2022 until the end of 2022. We expect to complete the data analysis by the end of 2023. We will publish the results as a NOAA technical report in the third quarter of 2024 and it will be available on the PIFSC website.

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

Each form will display the OMB control number and expiration date.

3.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

### 4. Hawaii Longline Fishery

4.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

4.2 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.

See response 1.2 above, it applies to all 15 fisheries.

4.3 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.

For this fishery, we will conduct in-person interviews, which are not well suited for electronic submission of responses. However, we do plan to make the OMB approved survey instrument available online on the PIFSC website for outreach and information purposes. A report summarizing the salient, aggregated results will be available on the PIFSC website once the data collection and analysis are completed.

4.4 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 Question 2.

The PIFSC implemented a continuous economic data collection program for this fishery in 2004. It is an economic add-on to the NOAA Fisheries Pacific Islands Regional Office (PIRO) observer program, it collects Hawaii longline fishing trip cost data on the observed trips, and it is restricted to fishing trip cost items. Due to the low observer coverage and the voluntary nature of that economic data collection program, it only collects fishing trip costs for about 15% of total trips. This proposed information collection of cost-earnings data of the Hawaii longline fleet not only covers fishing trip costs (especially for the vessels without trip cost data by the observer add-on), more importantly, it collects other vessel level information, including annual fixed costs, labor costs of crew and captain, fish sale revenue, and also information on owner/owner operator's characteristics. Given the high response rates from the past Hawaii longline cost-earnings surveys (~80% to 90%, see details in Part B, Question 4.1), this proposed information collection will allow us to evaluate fishers' net revenues/losses at the vessel level and provide an indicator of the economic health of the fishery. Because the last data collection was done in 2013 (for 2012 operations, with the results summarized in Kalberg and Pan 2016), these data and the research based on them are outdated and inadequate to support current management actions.

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

We will use several methods to minimize burden. Participation in the survey is voluntary and interviews will be conducted at times and places that are convenient for fishermen. This will minimize any potential disruption to fishermen's fishing practices. Because a portion of Hawaii longline vessels owners are Vietnamese and Korean, the PIFSC will hire Vietnamese and Korean translators to conduct interviews, to minimize the language barrier and burden on non-English speaking fishermen. Interviewers are trained to request permission to do a survey. If a fisherman refuses to participate in the interview or if the interviewer senses a fisherman does not want to provide data, the interviewer will terminate the interview immediately and thank the fisherman for his/her time.

4.6 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.

See response 1.6 above, it applies to all 15 fisheries.

4.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

4.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

We consulted with the Hawaii Longline Association Executive Director Eric Kingma, and the Vietnamese Interpreter Chelsea Tran who conducted interviews for the last Hawaii longline survey. Eric Kingma was interviewed by NMFS Supervisory Economist Justin Hospital on May 1, 2020, and Chelsea Tran responded by email on April 24, 2020. Table 4.8 records their specific responses.

Table 4.8 Specific consultant responses concerning the Hawaii Longline Fishery survey.

	Responses from Eric Kingma	Responses from Chelsea Tran
Q1. Do you think the economic data in the survey are readily available?	YES. This survey has been implemented a number of times over the years and the questions are relatively consistent. We have met with NMFS staff to improve question design.	Yes, with some explanations. If the interviewee is the owner, he/she is more likely able to answer economic related questions.
Q2. For the frequency of collection, do you think it is adequate?	YES. Probably should collect this data every 5 years, that seems like a reasonable period to capture any major changes. It has probably been too long right now, 3 years maybe be too often.	It is somewhat "thin" (as far as what I learned from the last surveys, there were so many changes in the industry which might impact on general dynamic of longline industry in Hawaii).
Q3. Do you think the fishermen had clear instructions to answer the survey?	YES. I think the past survey forms have been clear on how to answer the questions. They have also collected data in-person in the past which allows for clarifications.	As long as language use should not be too "academic". Interpreter/supervisor had to give examples for better explanation.
Q4. The estimated interviewing time per respondent is 60 minutes. Do you think it is reasonable? If not, what do you think is the actual interviewing time per respondent?	YES. That's probably reasonable, maybe a bit of a conservative estimate. Guidance to the fishermen in advance of the survey, to help them know what questions are being asked, can allow them to do some pre-work, gather their paperwork and would probably allow them to answer the questions quicker.	At the beginning of the cost-earning survey, it took me roughly an hour or even more to get done with one survey. But when I got myself familiar with the questions, it was about 40 to 50 mins per interview. I've been working with several projects for Hawaii longline fishery, I feel like if the questionnaire is not too long, people are more willing to talk. But it depends, sometimes if I "catch" people at the right time, they are willing to talk as long as I want.
Q5. What do you think on the data elements to be recorded, disclosed, or reported?	I think you are asking the right questions and I think people are generally honest about their responses. We find the reports to be helpful.	From what I remember from that study, the terminology used was not so "friendly", the part that took time in that survey was to explain what does it means by this or that. People are easy to be confused with technical terms. I feel like the more simple language is used, the faster the survey will be.

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

There are no plans to provide any payments or gifts to respondents.

4.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

4.11 Describe Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

4.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections.

As discussed in Part B, Question 4.1, for this fishery we estimated the number of respondents based on the number of active vessels in the Hawaii longline fleet in 2019 (150 vessels, from the mandatory federal logbooks submitted to NMFS) and the average response rate (84%) from the past four cost-earnings studies of the Hawaii longline fleet. We anticipate 126 surveys will be completed in 2020 (or 42 per year during the OMB PRA three-year approval period for this information collection) and each survey will take about 1 hour. The total burden is estimated to be 126 hours for the three years; therefore, the annualized burden is 42 hours. Using the \$27.44 average hourly wage for 'Captains, Mates, and Pilots of Water Vessels' in Hawaii in May 2019,<sup>5</sup> the estimated annualized labor cost to respondents for the hour burden for the collection is \$1,152.

4.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.\

<sup>5</sup> See https://www.bls.gov/oes/current/oes\_hi.htm#53-0000.

4.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under PIFSC cost description.

4.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

4.16 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.

For this fishery, we expect to implement the data collection in the second half of 2020 until the end of 2020. We expect to complete the data analysis by the end of 2021. We will publish the results as a NOAA technical report in the third quarter of 2022 and it will be available on the PIFSC website.

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

Each form will display the OMB control number and expiration date.

4.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

#### 5. Hawaii Small Boat Fishery

5.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

5.2 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.

See response 1.2 above, it applies to all 15 fisheries.

5.3 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.

For this fishery, we will conduct the survey using mail and Internet. Because email addresses are available for almost all of the target population (see response to Part B, Questions 5.1) and small boat fishermen, in general, are technology savvy as they are required to submit their monthly catch reports electronically to the Hawaii Division of Aquatic Resources, we will have an option for the respondents to answer the survey online, using an unique login name for survey access. If fishermen choose not to fill out the survey online, we will provide the hard copy of the survey via mail and they can return the survey by using the pre-paid return envelope. We do plan to make the OMB approved survey instrument available online on the PIFSC website for outreach and information purposes. A report summarizing the salient, aggregated results will be available on the PIFSC website once the data collection and analysis are completed.

5.4 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 Question 2.

We have contacted the local fishery agency, Hawaii Division of Aquatic Resources, to inquire about their upcoming data collection efforts and they are not planning any data collection initiatives dealing with fishing expenses, fishing income, and other socioeconomic aspects of Hawaii boat-based fisheries in the upcoming years. In addition, there are no other divisions in the PIFSC that have done or plan to collect cost-earnings data of Hawaii small boat fishery. Because the last cost-earning data collection was done in 2014 (for 2013 operations), with the results summarized in Chan and Pan (2017), we propose updating our knowledge of economic conditions of the Hawaii small boat fishery in 2020 (based on 2019 operation) by renewing the previously approved cost-earnings survey of this fishery.

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

We will use several methods to minimize burden. We will conduct the survey through mail and online methodology and participation in the survey is voluntary. If a fisherman does not want to participate, he/she can simply disregard the survey.

5.6 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.

See response 1.6 above, it applies to all 15 fisheries.

5.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

5.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

We consulted with the Pelagic Fisheries Ecosystem Scientist Mark Fitchett at the WPRFMC, and James Barlow, who is a small boat fisherman in Hawaii who responded to the last Hawaii small boat economic survey. Mark Fitchett responded by email on May 1, 2020 and Jamie Barlow responded by email on April 24, 2020. Table 5.8 records their specific responses.

Table 5.8 Specific consultant responses concerning the Hawaii Small Boat Fishery survey.

	Responses from Mark Fitchett	Responses from James Barlow
Q1. Do you think the economic data in the survey are readily available?	Yes, I think the data for the survey is readily available	I believe that I had to estimate the best I could given that I did not have my records in front of me. But in general I did my best to answer them.
Q2. For the frequency of collection, do you think it is adequate?	I think the frequency of the surveys is sufficient – however, I would suggest amending frequency in response to any regime changes in the fishery – like when gear changes occur over a rapid period of time or if there is an economic event that impacts the islands.	I think doing the survey would be best if it was done every 5 years. That way we had a solid frequency and also could capture trends of the changing fishery. If we go more than 7 years we miss seeing those micro scale changes
Q3. Do you think the fishermen had clear instructions to answer the survey?	Yes. It is pretty explicit.	I don't completely recall all the questions from the 2014 survey, but I believe the survey was clear. However, asking fisherman to estimate trip expenses and yearly expenses is often really difficult to accurately do if they don't keep good records. So a lot of guess work is possible.
Q4. The estimated interviewing time per respondent is 45 minutes. Do you think it is reasonable? If not, what do you think is the actual interviewing time per respondent?	I think that it is doable is much less than 45 minutes. Some individuals may take more time if they have records to consult with.	I think it took me about 35-40 min, and that seemed reasonable.
Q5. What do you think on the data elements to be recorded, disclosed, or reported?	I think the way that data is disclosed and recorded is sufficient.	I think all the questions were fine, being mindful to not be too invasive in their personal finances is important; and I think the survey did a good job of skirting around that.

Because we agree with the comment that it would be best if this survey were done every 5 years and that it should be done at least every 7 years, we plan to conduct this survey at least every 7 years but have requested approval to conduct it every 3 years when appropriate.

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

There are no plans to provide any payments or gifts to respondents.

5.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

5.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

#### 5.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections.

As discussed in Part B, Question 5.1, for this fishery we plan to draw a sample of 1,000 small boat fishermen from all active small boat commercial fishermen in 2019 (1,318 fishermen, from the Hawaii Division of Aquatic Resources' record of Commercial Marine License). We based the expected response rate of 50% on the actual rates for the past two cost-earnings studies of the Hawaii small boat fishery. We anticipate 500 surveys will be completed in 2020 (or 166.7 per year during the OMB PRA three-year approval period for this information collection) and each survey will take about 45 minutes. The total burden is estimated to be 375 hours for three years and the annualized burden is 125 hours. Using the \$27.44 average hourly wage for 'Captains, Mates, and Pilots of Water Vessels' in Hawaii in May 2019,<sup>6</sup> the estimated annualized labor cost to respondents for the hour burden for the collection is \$3,430.

5.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

<sup>6</sup> See https://www.bls.gov/oes/current/oes\_hi.htm#53-0000.

5.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost PIFSC cost description.

5.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

5.16 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.

For this fishery, we expect to implement the data collection in the second half of 2020 until the end of 2020. A brochure summarizing the results will be developed for outreach and timely dissemination of survey results to the fishing community and fishery managers in mid-2021. We expect to complete the data analysis by the end of 2021. We will publish the results as a NOAA technical report in the third quarter of 2022 and it will be available on the PIFSC website.

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

Each form will display the OMB control number and expiration date.

5.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

### 6. American Samoa Small Boat Fishery

6.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

6.2 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.

See response 1.2 above, it applies to all 15 fisheries.

6.3 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.

For this fishery, we will conduct in-person interviews, which are not well suited for electronic submission of responses. However, we do plan to make the OMB approved survey instrument available online on the PIFSC website for outreach and information purposes. A report summarizing the salient, aggregated results will be available on the PIFSC website once the data collection and analysis are completed.

6.4 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 Ouestion 2.

We contacted the local fishery agency, American Samoa Department of Marine and Wildlife Resources (DMWR), to inquire about their upcoming data collection efforts and they are not planning any data collection initiatives dealing with fishing expenses, fishing income, and other socioeconomic aspects of boat-based fishery in the upcoming years.

Although the PIFSC started a longitudinal survey to collect fishing trip cost data in American Samoa in 2009, it is restricted to a few basic fishing cost items like fuel cost, ice cost, cost of bait and chum, and cost of fishing gear lost (OMB Control No: 0648-0635). This proposed information collection of cost-earnings data in the American Samoa will allow us to evaluate fishers' net revenues/losses and provide an indicator of the economic health of the fishery. Because small boat fishing in the American Samoa includes a large subsistence component, the information collected will also allow us to evaluate how the subsistence value of fishing offsets any potential losses from commercial fishing operations. Because the last data collection was done in 2014 (for 2013 operations), and no report has been published), we propose updating our knowledge of economic conditions of the small boat fishery in American Samoa in 2021 (based

on 2020 operation) by renewing the previously approved cost-earnings survey of that fishery.

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

We will use several methods to minimize burden. Participation in the survey is voluntary and interviews will be conducted at times and places convenient for fishermen. This will minimize any potential disruption to fishermen's fishing practices. The PIFSC will contract with a local fisheries staff or outside contractor with local community connections and Samoan language proficiency to conduct interviews, to minimize the language barrier and burden on non-English speaking fishermen. The interviewer is trained to request permission to do a survey. If a fisherman refuses to participate in the interview or if the interviewer senses a fisherman does not want to provide data, the interviewer will terminate the interview immediately and thank the fisherman for his/her time.

6.6 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.

See response 1.6 above, it applies to all 15 fisheries.

6.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

6.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

We consulted with the Island Fisheries Ecosystem Scientist Marlowe Sabater at the WPRFMC, and the boat-based creel survey manager Tepora Toliniu Lavata'i. Marlowe Sabater responded by email on May 1, 2020 and Tepora responded by email on May 14, 2020. Table 6.8 records their specific responses.

Table 6.8 Specific consultant responses concerning the American Samoa Small Boat Fishery survey.

	Responses from Marlowe Sabater	Responses from Tepora Toliniu Lavata'i
Q1. Do you think the economic data in the survey are readily available?	Yes. I believe the fishermen are comfortable enough to provide accurate economic information. With enough outreach and direct interaction, fishermen are willing to provide that information.	Some but not all the information is readily available when these surveys are conducted.
Q2. For the frequency of collection, do you think it is adequate?	For American Samoa, the frequency is probably adequate given how small the territory is with its economic situation mostly dependent on grants and aid. However, it is difficult to make a valued judgement given we have not tried doing it at a finer temporal scale.	I think the survey should be conducted every 3 or 5 years instead. A lot can happen in 7 years. At this point, you could be interviewing fairly new fishermen/women and you've lost a portion of the participants that have been fishing longer.
Q3. Do you think the fishermen had clear instructions to answer the survey?	Yes. Since the data collection involved a knowledgeable interviewer, one can explain the question and elaborate on some unclear responses. For American Samoa though, it would be good to have a Samoan translation since they are mostly traditional compared to other areas.	It would be dependent on how the surveyors conduct the survey.
Q4. The estimated interviewing time per respondent is 45 minutes. Do you think it is reasonable? If not, what do you think is the actual interviewing time per respondent?	Yes. Samoans relied on oral history to carry out their culture and tradition over several centuries. 45 minutes is sufficient and that it just a talk story session from their POV.	I think you would need up to an hour per participant to complete the survey. There is a lot of information expected to recall on fishing activities throughout the year, especially the financial portion of the survey.
Q5. What do you think on the data elements to be recorded, disclosed, or reported?	The survey is capturing the pertinent information needed for a thorough analysis.	The survey gives a general idea of the fishing activities and the investment by fishermen and women in the small boat fishery. There isn't much in the survey that reflects the importance of the small boat fishery to the fishermen/women by determining the value of what is lost when he/she is not fishing and why. The cultural aspect should be reflected throughout the survey as well.

To address the comment that the estimated interviewing time per respondent would be up to an hour, we will make sure the interviewers will have proper training to get familiar with the questionnaire before conducting the interviews, so that the interviewing process will go faster.

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

There are no plans to provide any payments or gifts to respondents.

6.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

6.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

### 6.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections.

As discussed in Part B, Question 6.1, for this fishery we estimated the number of respondents based on the number of small boat fishermen in the American Samoa small boat fishery (60 fishermen) and the average response rate (84%) from the past boat-based creel survey (2011-2018) that targeted the same population. We anticipate 50 surveys will be completed in 2021 (or 16.7 per year during the OMB PRA three-year approval period for this information collection) and each survey will take about 45 minutes. The total burden is estimated to be 38 hours; therefore, the annualized burden estimate is 12.5 hours. Using the \$13.21 average hourly wage for 'Farming, Fishing, and Forestry Occupation' in Guam in May 2019,<sup>7</sup> the estimated annualized labor cost to respondents for the hour burden for the collection is \$165. The American Samoa hourly wage is not available.

6.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

<sup>7</sup> See https://www.bls.gov/oes/current/oes\_gu.htm#45-0000.

6.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under PIFSC cost description.

6.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

6.16 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.

For this fishery, we expect to implement the data collection in the second half of 2021 until the end of 2021. We expect to complete the data analysis by mid-2021. We will publish the results as a NOAA technical report in the first quarter of 2022 and it will be available on the PIFSC website.

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

Each form will display the OMB control number and expiration date.

6.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

- 7. American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands Small Boat-Based Fisheries (0648-0635)
- 7.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

7.2 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.

See response 1.2 above, it applies to all 15 fisheries.

7.3 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.

For this fishery, the proposed data collection of fishing expenses data will be conducted through a voluntary, in-person intercept interview methodology, the same method that is used by the boat-based interview of the creel survey. The data are collected in conjunction with the catch and effort data that are already being collected in the **Boat-based Creel Survey** in the three island areas. The Boat-based Creel Survey includes two sub-surveys (more details at https://inport.nmfs.noaa.gov/inport/item/5612): 1) a Boat-based Participation Count to collect participation data around the island, and 2) a Boat-based Access Point Survey. The Boat-based Access Point Survey collects two types of data during a randomly selected survey date at the selected port, including a **Boat-based Boat Log** that logs all the boats going out and coming back and a **Boat-based Interview** that intercepts fishermen after their fishing trip about the catch and effort information, the species composition, the percentage of catch that is sold. The data collected are then expanded to estimate total landings by gear type for these three areas. The boat-based interview (Access Point Survey) is voluntary and in-person. Our trip-level economic survey is an add-on to the Boat-based Interview Form for the Access Point Survey. Given the long history of the creel survey program, the collection of the trip expenses data is also voluntary and in-person. The data collection does not involve any use of automated, electronic, mechanical, or other technological techniques or other forms of information technology. The economic data collection is an add-on to the boat-based in-person interviews and the data are recorded manually on the paper survey. As the fishing expenses data is for that particular fishing trip, it is effective (better economic scale) to obtain the fishing expenses at the same time with the boat-based in-person interview. Interviewers will not use laptops or other computers to directly enter the answers being provided because the interview location is usually near the water.

We do plan to make copies of the OMB approved survey instrument available online for outreach and information purposes.

# 7.4 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 Ouestion 2.

We contacted the local agencies that support the Boat-based Creel Survey programs in American Samoa, Guam, and CNMI to inquire about their upcoming data collection efforts; none of them planned any new data collection initiatives dealing with trip-level fishing expenses of boat-based fisheries in the upcoming years. The Boat-based Creel Survey programs are organized by the local agencies in partnership with the WPacFIN, which is housed within the PIFSC. The participating agencies include the American Samoa Department of Marine and Wildlife Resources (DMWR), the Guam Department of Agriculture's Division of Aquatic and Wildlife Resources (DAWR), and the CNMI government Department of Lands and Natural Resources' Division of Fish & Wildlife (DFW).

The periodical cost-earnings survey on the same population is scheduled in 2024 based on 2023 operation (OMB control #0648-0755). The cost-earnings study is intended to have a snapshot on the vessel level economic performance for the small boat fisheries, instead to track the dynamic trend of key economic indicators.

Compared with the one-time cost-earnings study described above, the trip-level continuous data collection program is unique because it is 1) an on-going, long-term and trip-based data collection project, 2) focused only on a few major trip expense items, 3) concurrent with the data collected from the creel survey, 4) cost saving since it is done by adding on an existing continuous data collection program. If we were to start a new trip-level continuous economic survey program independently from the creel survey, the cost to administrate two separate surveys is much higher than the proposed survey/project (see response in Question 7.14 for cost). In addition to the cost saving, additional economics of scale can be achieved when collecting trip cost data in conjunction with the creel survey as this allows the linkage of trip cost data with trip efforts and trip revenues data collected in the creel survey and therefore enhances the use of information and economic analyses as mentioned in Question 7.2.

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

Fishermen censuses suggest that most commercial fishing operations are owner or family operated small businesses. We will take several steps to minimize the burden to these small businesses. First, following the same sampling method as the Boat-based Interview portion of the creel survey, interviews are conducted only on the randomly selected sample dates when fishermen finish their fishing trip. Second, the participation in the survey is voluntary. Interviewers are trained to request permission to do a survey. If a fisherman refuses to do the survey or if the interviewers sense a fisherman does not want to provide data, the interviewers will terminate the interview immediately and thank the fisherman for his/her time. Third, only

five major trip expense items and one question about engine type are asked, with the actual time to complete the questions be between 5 to 10 minutes.

7.6 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.

See response 1.6 above, it applies to all 15 fisheries.

7.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

7.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

We consulted with the three creel survey data managers in each of the island areas, to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, on the data elements to be recorded and on the accuracy of the burden estimates. All managers gave very positive responses to the current on-going program.

For CNMI, the fishery data specialist Jude Lizama was contacted by email and he replied on March 5, 2020. For American Samoa, the boat-based creel survey manager Tepora Toliniu Lavata'i was contacted by email and she replied on April 3, 2020. For Guam, the offshore biologist Thomas Flores, Jr. was contacted by email and he replied on March 30, 2020. The table below records their specific responses.

Q1. Do you think the economic data in the survey are readily available?	Jude Lizama (CNMI) Yes, fishermen were able to answer all economic information requested.	Tepora Toliniu Lavata'i (American Samoa) Yes, economic information is readily available when we conduct our program surveys.	Thomas Flores (Guam) Yes, the fishermen are able to answer the economic information requested.
Q2. For the frequency of collection, do you think it is adequate?	Yes, collection frequency is adequate since they are almost always collected during boat-based creel surveys.	Yes, the information provided by fishermen is adequate.	When I work a creel survey, the frequency of collection is low because most fishermen I interview are in a hurry once our creel questions are asked.
Q3. Do you think the fishermen had clear instructions to answer the survey?	Yes, fishermen understood what they were being asked.	We have trained data collectors that ask fishermen the questions on the survey. The fishermen clearly understand the meaning of these questions. Further explanation is provided if fishermen do not understand.	Yes.
Q4. The estimated interviewing time per respondent is 10 minutes. Do you think it is reasonable? If not, what do you think is the actual interviewing time per respondent?	Collecting all data (e.g. catch, economic, and FAD) takes approximately 10 minutes depending on the amount of catch. The time it takes to collect economic data takes less than two minutes since straightforward questions are being asked. I think these are reasonable.	The time allocated for economic information for every fishing trip is enough to gather all the information needed.	Ten minutes is not reasonable. 1-2 minutes (are sufficient).
Q5. What do you think on the data elements to be recorded?	I believe they sufficiently fulfill the objectives of economic data collection since they are brief and clear enough for fishermen to provide and for staff to record and enter.	I think the information gathered paints a holistic picture of the fishing trips and how much the fishermen invest in every trip.	The fishermen expenditure data we collect is just descriptive of what they spend to go on a fishing trip. Because the data is for NOAA, I'm assuming the data elements are OK since this is what NOAA requested for.

To address the comment that the estimated interviewing time per respondent (ten minutes) is "not reasonable", we contacted Thomas Flores about this and he clarified that usually the interviews took much less than 10 minutes because the survey only has a few trip cost items,

some interviews took only 1-2 minutes to complete the questions while a few cases took longer, depending on the fishermen.

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

There are no plans to provide any payments or gifts to respondents.

7.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

7.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

#### 7.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections.

As discussed in Part B, we estimate the annual number of respondents, number of responses per respondent, and total responses in each area, based on the average number of responses to the economic surveys in Guam (2013-2019), CNMI (2011-2019), and American Samoa (2011-2019). The number of respondents in each area is estimated based on the average number of unique boats interviewed in economic surveys in each island areas. The number of responses per participant is derived from the average number of interviews conducted at different trips during different times of the year. Table 7.1 in Part B shows the average number of respondents (boats) and the average number of responses (trips) to the economic surveys in the three island areas. We anticipate 480 economic surveys annually and each survey takes about 10 minutes. The total burden hours are estimated to be 80. Using the \$13.21 average hourly wage for 'Farming, Fishing, and Forestry Occupation' in Guam in May 2019 (the hourly wage in CNMI and American Samoa is not available), the estimated annualized labor cost to respondents for the hour burden for the collection is \$1,059. Table 1.12 shows the details.

7.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden

<sup>8</sup> See https://www.bls.gov/oes/current/oes\_gu.htm#45-0000

### already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

7.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under PIFSC cost description.

7.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

7.16 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.

For this fishery, the information collection is an add-on to an ongoing creel survey that collects trip effort and catch data. We will publish a summary of the collected data on the PIFSC website to show the trends of fishing expenses. On an annual basis, we will include these economic data in the Stock Assessment and Fishery Evaluation (SAFE) reports for the WPRFMC. We plan to publish a NOAA technical report summarizing the longitudinal results in 2024 and it will be available on the PIFSC website.

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

Each form will display the OMB control number and expiration date.

## 7.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

- 8. Mariana Archipelago Small Boat Fisheries (0648-0755)
- 8.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

8.2 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.

See response 1.2 above, it applies to all 15 fisheries.

8.3 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.

For this fishery, the proposed data collection does not involve the use of any of the above information technology techniques. The data collection will be conducted through a voluntary, in-person survey methodology because no existing contact information or permitting systems are available for most of the active fishermen and in-person surveys in the past have received high response rates and support from the fishing community.

We do plan to make a copy of the cost-earnings survey instrument for Mariana Archipelago small boat fleet available online for outreach and information purposes.

8.4 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 Question 2.

We contacted local fishery agencies: Guam Department of Agriculture's Division of Aquatic and Wildlife Resources (DAWR), and CNMI government Department of Lands and Natural Resources' Division of Fish & Wildlife (DFW) to inquire about their upcoming data collection efforts; none of them have planned data collection initiatives dealing with fishing expenses, fishing income, and other socioeconomic aspects of boat-based fisheries in the upcoming years.

A literature review was conducted to find studies that collect boat-based cost-earnings data in the Marianas and literatures on this topic are all outdated (see Appendix B for past studies). Although PIFSC started implementing a longitudinal survey to collect fishing trip cost data in Guam and the CNMI in 2011 and 2009, respectively, it is restricted to a few basic fishing cost items like fuel cost, ice cost, cost of bait and chum, and cost of fishing gear lost (OMB Control No: 0648-0635). This proposed information collection of cost-earnings data in the Marianas will

allow us to evaluate fishers' net revenues/losses and provide an indicator of the economic health of the fisheries. Because small boat fishing in the Marianas also includes a large subsistence component, the information collected will also allow us to evaluate how the subsistence value of fishing offset any potential losses from commercial fishing operations. Since the last cost-earnings study of the Marianas small boat fleet was conducted in 2018/2019, we propose updating our knowledge of economic conditions of small boat fisheries in these areas in 2024 (based on 2023 operation) by renewing the previously approved cost-earnings survey of Mariana Archipelago small boat fleet.

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

Small boat fishing in Guam and the CNMI include owner or family-operated small businesses. To minimize burden, the survey will be conducted through in-person surveys at community meetings where fishermen will be in attendance, and for those who are not able to attend the community meetings, interviews will be conducted at times and places that are convenient to fishers. This will minimize any potential disruption to fishers' fishing practices. Participation in the survey is voluntary. If a fisher does not want to participate, he/she can simply decide not to participate in the in-person interview. In addition, we intend to follow the survey strategy that was successfully implemented and received high response rates in the Marianas during the Marianas Archipelago small boat cost-earnings survey conducted in 2011 (Hospital and Beavers, 2012, 2014) and 2018/2019. In-person surveys will be administered by a contractor with good connections with the local fishing communities and considerable groundwork will be done within the community prior to the survey implementation to get a good understanding of fishery participation levels. The survey instrument for this study will be a slightly shorter version (5 fewer questions) than the one that was used in the cost-earnings study conducted in 2011 (Hospital and Beavers, 2012, 2014) to minimize burden. The drop in the number of questions are due to outdated socioeconomic issues, e.g. questions related to Marianas Trench Marine National Monument and impacts to fishing trips due to military exercises, and questions that were not essential to the socioeconomic aspects of the fisheries, e.g. number of hours in a fishing trip, seasonality for pelagic fish, bottomfish, and reef fish.

# 8.6 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.

See response 1.6 above, it applies to all 15 fisheries.

# 8.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

### 8.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

We consulted with two persons who have experience with the previous survey implementation in Marianas, to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, on the data elements to be recorded and on the accuracy of the burden estimates. These include Clayward Tam from the Pacific Islands Fisheries Group, an organization that assisted with the data collection in 2011 and 2018/2019, and Felix Reyes who is the WPRFMC Guam Island Coordinator that helped to implement the survey in 2018/2019. Clayward Tam was interviewed by phone by Justin Hospital on March 20, 2020 and Felix Reyes responded by email on April 9, 2020. The table below records their specific responses.

	Responses from Clayward Tam	Responses from Felix Reyes
Q1. Do you think the economic data in the survey are readily available?	We [Pacific Islands Fisheries Group] assisted in collecting the data for the Marianas economic fishing survey in 2011 and 2018. The community received advanced notice of the survey and the type of information that would be asked, so most were able to complete the surveys rather easily. I don't think we can get this information from anywhere else.	Yes. When I did the surveys for Guam the interest by fishermen to participate was high and only had a couple of declines but that's due to the fishermen being busy prepping to go or just returned and want to go home.
Q2. For the frequency of collection, do you think it is adequate?	We did the surveys in 2011 and 2018 it seems like a reasonable time frame between surveys. A lot had changed over that time. I suppose if you did the survey again in 5 or so years that would make sense.	Yes. But I recommend 3-5 years.
Q3. Do you think the fishermen had clear instructions to answer the survey?	We didn't encounter any problems with the surveys. There was advance notice on the type of questions being asked and why. Also the results from the 2011 survey were shared so most people knew what to expect in 2018, and early summaries of the 2018 survey have been shared with the community. We used community members with fishing experience to do in-person interviews so I think it went well.	Yes. Nobody had any problems with the questions.
Q4. The estimated interviewing time per respondent is 45 minutes. Do you think it is reasonable? If not, what do you think is the actual interviewing time per respondent?	I think most of the interviews took less time – maybe 30 minutes or so, but 45 minutes is a reasonable estimate to work through the survey for some people who may take more time.	No. 45 minutes is too long (overestimate). I suggest 15-30 minutes. I found it much easier if I were to ask the questions and fill out the survey form. It makes the process go faster.
Q5. What do you think on the data elements to be recorded?	The information in the survey is very important to understand the fisheries and the fishing community. The surveys collected important information on fishing behavior, the costs of fishing, levels of fishing investment, and social and cultural importance of fisheries. We don't have this information from any other source from what I know. In fact, I don't think we have any other fishing data for the islands of Rota and Tinian. Economic questions are important for understanding how the fisheries are doing, but in these island communities the social and cultural questions are especially important because fishing is different than the mainland.	Yes. The information that can be derived from the survey is important for fisheries management, but also for the local community.

To address the comment that the estimated interviewing time per respondent to be 45 minutes is too long, we will make sure the interviewers will have proper training to get familiar with the questionnaire before conducting the interviews, so that the interviewing process will go faster.

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

There are no plans to provide any payments or gifts to respondents.

8.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

8.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

#### 8.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections.

For this fishery, we estimate the annual number of respondents based on the estimated number of unique boats in 2018 and the average percent of estimated active vessels responded from the past two cost-earnings studies of Mariana Archipelago small boat fleet. Because this is a one-time survey will be conducted in 2024, the frequency of responses per participant is 1. We anticipate 198 cost-earnings surveys will be completed in 2024 (or 66 per year) and each survey is about 45 minutes. The total burden hours are estimated to be 149 for three years and the annualized burden hours is approximately 50. Using the average hourly wage for 'Farming, Fishing, and Forestry Occupation' in Guam in May 2019 (\$13.21), <sup>9</sup> the estimated annualized labor cost to respondents for the hour burden for the collection is \$654. Table 1.12 shows the details.

<sup>9</sup> See https://15.18www.bls.gov/oes/current/oes\_gu.htm#45-0000

8.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

8.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under PIFSC cost description.

8.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

8.16 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.

For this fishery, we expect to implement the data collection in the second half of 2024 until the end of 2024. A brochure summarizing the results will be developed for outreach and timely dissemination of survey results to the fishing community and fishery managers in mid-2025. We expect to complete the analysis of the data by the end of 2025. The results will be published as a PIFSC technical report in 2026 and it will be available on PIFSC website.

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

Each form will display the OMB control number and expiration date.

8.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

- 9. United State Virgin Islands (USVI) Small-Scale Fisheries
- 9.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

9.2 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.

See response 1.2 above, it applies to all 15 fisheries.

9.3 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.

For this fishery, the socio-economic data needed will be collected using in-person interviews. We will intercept fishermen during their annual in-person fishing license renewal process by the U.S. Virgin Islands (USVI) Division of Fish and Wildlife (DFW). In-person interviews during license renewal are convenient for the fishermen, more versatile and less burdensome than mail surveys or making an appointment for an in-person interview. Moreover, in-person interviews allow the interviewer to help clarify questions, if necessary.

We do not anticipate using laptops or other electronic devices to record the answers as this can interfere with quickly entering data. Typing verbatim could extend the length of the interview, which would further burden the interviewees and possibly result in incomplete surveys.

The data collected will not be available to the public over the internet given their confidential nature. However, a report summarizing the salient, aggregated results will be available online once the data collection and analysis are completed.

9.4 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 Question 2.

We contacted the Caribbean Fishery Management Council (CFMC) and the U.S. Virgin Islands Division of Fish and Wildlife (DFW) to inform them about our intention to collect socioeconomic data and to inquire about other on-going or prospective data collections in the area. These agencies noted that they were neither planning nor aware of any current or planned data collections that targeted commercial fishermen.

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

Most commercial fishing operations in the U.S. Caribbean are owner or family-operated small businesses. We have taken several steps to minimize the burden on these small businesses. Most importantly, we designed the survey instrument so that only the minimum data requirements for present and future management needs are collected. Surveys will be available in English and Spanish to reduce any burden to non-English speaking fishermen. Responses to the in-person interviews will be voluntary. Fishermen who do not wish to participate in the interviews can choose not to participate. To minimize any potential disruption in general and to their fishing practices in particular, we "piggyback" on the USVI DFW annual in-person license renewal process.

9.6 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.

See response 1.6 above, it applies to all 15 fisheries.

9.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

9.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

There is common agreement among stakeholders and staff at the Caribbean Fishery Management Council and the NMFS Regional Office that updating the economic data for this fishery is important for the ongoing management process.

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

There are no plans to provide any payments or gifts to respondents.

9.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

9.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

#### 9.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

For this fishery, the 15-minute burden per response includes the time for the interviewer reading the instructions, reading the questions, receiving and writing the answers to complete the survey instrument. This estimate is based on the type of questions asked, length of the survey instrument, and contractor's experience conducting a similar survey. The interviews themselves do not vary much in length, though introductions and pre- and post-"small talk" can vary substantially depending on each respondent and interview situation. As discussed in Part B, Question 9.1, we plan to randomly sample 240 fishermen in the USVI in the survey year. With a 68% response rate, we expect to have 163 respondents in total or 54.3 per year during the OMB PRA three-year approval period for this information collection and an average annual burden of almost 14 hours. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$388.

9.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

9.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SEFSC cost description.

9.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

9.16 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.

For this fishery and funding permitting, we anticipate completing the data collection in the U.S. Virgin Islands by the end of 2021. We expect to complete the analysis of the data in 2022. We plan to publish a technical report describing the salient results of this study. The report should be available online by January 2023. As the focus of this data collection is basic descriptive economic information, we will use no particularly complex analytical techniques.

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

Each form will display the OMB control number and expiration date.

9.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

### 10. Puerto Rico Small-Scale Fisheries

10.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

10.2 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.

See response 1.2 above, it applies to all 15 fisheries.

10.3 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.

For this fishery, the socio-economic data needed will be primarily collected using in-person interviews (or telephone interviews in cases where it is easier for respondents). We do not anticipate using online questionnaires because of the limited access to the internet in some parts of the U.S. Caribbean. In addition, in-person interviews are preferable because many of the answers do not lend themselves to simple 'yes/no' answers and because of the presence of openended questions, which are burdensome to complete in written form (inadvertently leading to higher non-response rates). Moreover, in-person interviews allow the interviewer to explore the logic and/or reasoning behind the ranking of 'Likert scale' answers.

The contractor does not anticipate using laptops or other electronic devices to record the answers since some of the questions are open ended. Typing verbatim could extend the length of the interview, which would further burden the interviewees and possibly result in incomplete surveys.

The data collected will not be available to the public over the internet given its confidential nature. However, a report summarizing the salient, aggregated results will be available online once the data collection and analysis are completed.

10.4 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 Question 2.

We contacted the Caribbean Fishery Management Council (CFMC) and Puerto Rico's Department of Natural and Environmental Resources (DNER) to inform them about our intention to collect socio-economic data and to inquire about other on-going or prospective data

collections in the area. These agencies noted that they were neither planning nor aware of any current or planned data collections that targeted commercial fishermen.

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

Most commercial fishing operations in the U.S. Caribbean are owner or family-operated small businesses. We have taken several steps to minimize the burden on these small businesses. First, we designed the survey instrument so that only the minimum data requirements for present and future management needs are collected. Second, surveys will be available in English and Spanish to reduce any burden to non-English speaking fishermen. Third, responses to the in-person interviews will be voluntary. Fishermen who do not wish to participate in the interviews can choose not to partake. Fourth, we will conduct the interviews at times and places that are convenient for fishermen. This will minimize any potential disruption to their fishing practices.

# 10.6 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.

See response 1.6 above, it applies to all 15 fisheries.

# 10.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

10.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

There is common agreement among stakeholders and staff at the Caribbean Fishery Management Council and the NMFS Regional Office that updating the economic data for this fishery is important for the ongoing management process.

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

There are no plans to provide any payments or gifts to respondents.

10.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

10.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

## 10.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

For this fishery, the one hour per response burden includes the time for the interviewer reading the instructions, reading and reviewing the questions, receiving an answer, and completing the survey instrument. This estimate is based on the type of questions asked, length of the survey instrument, and contractor's experience conducting this survey before. The interviews themselves do not vary much in length, though introductions and pre- and post-"small talk" can vary substantially depending on each respondent and interview situation. As discussed in Part B, Question 10.1, we plan to randomly sample 1,500 fishermen in Puerto Rico in the survey year. With an 82% response rate, we expect to have 1,230 respondents in total or 410 per year during the OMB PRA three-year approval period for this information collection and an average annual burden of 410 hours. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$11,706.

10.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

10.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SEFSC cost description.

10.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

10.16 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.

For this fishery and funding permitting, we anticipate completing the data collection in Puerto Rico by the end of 2022. We expect to complete the analysis of the data in 2023. We plan to publish a technical report describing the salient results of this study. The report should be available online by January 2024. As the focus of this data collection is basic descriptive economic information, we will use no particularly complex analytical techniques.

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

Each form will display the OMB control number and expiration date.

10.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

## 11. Gulf of Mexico Inshore Shrimp Fishery

11.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

11.2 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.

See response 1.2 above, it applies to all 15 fisheries.

11.3 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.

For this fishery, we will conduct the data collection as a self-administered mail survey. Given our experiences with surveys of this population, a very low impact (burden) approach, such as a short mail survey, is necessary to obtain fishermen's cooperation. For a fishery with potential respondents spread across a large area encompassing five large state, a mail survey is more cost-effective than one based on in-person interviews.

We will contact all vessel owners by mail. They are asked to return the completed survey instrument to us in an enclosed, pre-paid envelope. If we receive no response, we will send up to two further survey packages. If telephone numbers are available, we will also contact non-responders by phone and urge them to return the survey. We will not collect information during the phone call (we will send a further survey instrument by mail, fax, or email – if requested).

There will be no other means, electronic or otherwise, to submit data or information for the purposes of this study. NMFS or a contractor will enter the survey responses into an electronic Oracle database. The analytical results of studies based on these data will be disseminated in internal and public fishery management reports and peer-reviewed publications. Some of these will be available over the internet.

11.4 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 Question 2.

This is the only systematic and region-wide economic data collection in the Gulf of Mexico inshore shrimp fisheries. Hence, there is no duplication of economic information. We have consulted experts on these fisheries in academia and state agencies.

The data collection is complementary to the Annual Economic Survey of Federal Gulf and South Atlantic Shrimp Permit Holders (OMB CONTROL NO. 0648-0591). Vessels holding a federal shrimp permit are excluded from this Gulf Inshore Shrimp survey to avoid any redundant response.

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

The data collection is intended to provide insight into the activities and financial performance of commercial fishermen who harvested shrimp from state or inshore Gulf of Mexico waters. The vast majority (92% in 2012) owned and operated their own vessels. The average vessel is less than 40 feet long and more than three-quarters have fiberglass or wood hulls. As such, the inshore shrimp fishery consists of small-scale vessels and hence small businesses.

We will collect only the minimum data to meet the current and future needs of NMFS management and permitting programs. The information requested should be available to the respondent in the course of normal business operations. Keeping additional records is not needed and hence the burden is low. To simplify the process further, the survey collects aggregate annual data and will be timed to coincide with tax season.

# 11.6 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.

See response 1.6 above, it applies to all 15 fisheries.

# 11.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

11.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

There is common agreement among stakeholders and staff at the Gulf and S. Atlantic Fishery Management Councils and the NMFS Regional Office that updating the economic data for this fishery is important for the ongoing management process

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

There are no plans to provide any payments or gifts to respondents.

11.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

11.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

# 11.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

For the main survey for this fishery, the 30 minute per response burden includes the time for the respondent to read the cover letter and instructions, read and review the questions, and complete the survey instrument. We base this estimate on the type of questions asked, the length of the survey instrument, and our experience conducting this survey before. As discussed in Part B, Question 11.1, we plan to randomly sample 1,500 fishermen in the survey year. With a 31% response rate, we expect to have 465 respondents in total or 155 per year during the OMB PRA three-year approval period for this information collection and an average annual burden of almost 78 hours. In addition to the main survey, we will conduct a small non-response survey to calibrate our results. With a sample of 104, an expected response rate of 31%, and a burden of five minutes per response, that small survey is expected to result in 34 respondents and 2.8 burden hours in total or approximately 11 respondents and 1 burden hour per year. Therefore, the total annual number of respondents and burden hours for the two parts of this information collection combined are approximately 166 and 79, respectively. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$2,232 (see Table 1.12).

11.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

11.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SEFSC cost description.

11.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

11.16 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.

For this fishery and funding permitting, we anticipate completing the mail survey during the first half of 2022, when respondents have complete 2021 annual financial data in hand (at tax time). We expect to complete the analysis of the data during the second half of 2022. We will publish summary statistics of these data in standardized tables in a NMFS economic report. The report should be available online by end of the March 2023. As the focus of this data collection is basic descriptive economic information, we will use no particularly complex analytical techniques. The analytical results of studies based on these data are planned to be disseminated in internal and public fishery management reports, and peer-reviewed publications. Some of these will be available over the internet.

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

Each form will display the OMB control number and expiration date.

11.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

- 12. Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)
- 12.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

12.2 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.

See response 1.2 above, it applies to all 15 fisheries.

12.3 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.

For this fishery, the proposed data collection will utilize both voluntary, self-administered mail surveys and follow-up in-person interviews (if necessary). There are only eleven golden crab permits in existence, and they are currently owned by six individuals in conjunction with their spouses or their corporations. No more than five licenses have been active in any of the past five years. Because the population of active permit owners is extremely small, it is essential to make a complete census of the golden crab participants. Self-administered mail surveys will be the initial instrument, but telephone or in-person interviews will be used if necessary to complete the data collection or to clarify answers.

Initially, we will contact all potential respondents via an introductory letter to inform them about the upcoming data collection. Subsequently, permit owners will be provided with the self-administered survey instrument, and asked to return it completed using an enclosed postage prepaid envelope. If no response is received, we will contact the permit owners by phone and urge them to return the completed survey, followed by a site visit if necessary. All data will be entered into a desktop computer.

The data collected will not be available to the public over the internet given its confidential nature. However, analytical results of studies based on these data will be disseminated in internal and public fishery management reports and peer-reviewed publications. Some of these studies will be available online.

# 12.4 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 Question 2.

We have investigated to find whether there are any federal or state efforts to collect similar socio-economic information from the golden crab fishery. The state of Florida is not planning any such survey, and at a recent meeting of the North American Association of Fisheries Economists (NAAFE), informal talks discovered no other efforts directed towards this fishery. Dr. Crosson has attended meetings of the South Atlantic Fishery Management Council (SAFMC) Golden Crab Advisory Panel, and none of the fishermen there were aware of any efforts by academic or state researchers to collect economic data for this fishery.

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

Many commercial fishing operations are owner- or family-operated small businesses, including all six (6) members of this fishery. We have taken several steps to minimize the burden to these small businesses. First, we designed the survey instrument so that only the minimum data requirements for present and future management needs are collected. This will minimize any potential disruption to permit owners' fishing practices. Second, permit owners who receive the self-administered survey will be provided with postage-paid return envelopes. Third, a periodic (once every three years) data collection cycle will reduce the burden on respondents.

# 12.6 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.

See response 1.6 above, it applies to all 15 fisheries.

# 12.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

12.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

There is common agreement among stakeholders and staff at the S. Atlantic Fishery Management Council and the NMFS Regional Office that updating the economic data for this fishery is important for the ongoing management process.

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

There are no plans to provide any payments or gifts to respondents.

12.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

12.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

# 12.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

For this fishery, we estimate that the number of respondents will be six and the time per response is about one half hour, for a total burden of three hours. The one half-hour per response burden includes the time for reading the instructions, reviewing the questions, and completing (and mailing, if necessary) the survey instrument. Because we will conduct the survey just once during the OMB PRA three-year approval period for this information collection, we expect the average annual numbers of respondents and burden hours to be 2 and 1, respectively. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$28.55.

12.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

12.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SEFSC cost description.

12.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

12.16 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 will use the data collected for this fishery to assess the economics of the golden crab fishery. Descriptive and analytical reports will include summaries of data. These reports will not release or reveal confidential information. Depending on the availability of funds, we anticipate that reports will be available January 2021. These reports will likely be available in pdf format on the NMFS Southeast Fisheries Science Center's web site.

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

Each form will display the OMB control number and expiration date.

12.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

## 13. West Coast Coastal Pelagic Species Fishery

13.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

13.2 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.

See response 1.2 above, it applies to all 15 fisheries.

13.3 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.

Given the challenges created by the COVID-19 pandemic, in-person interviews are not a viable option for the near future. Therefore, for this fishery, each potential respondent will have the option to submit the information by a telephone or video call interview or by mail. Based on the success of many similar surveys the NWFSC and Southwest Fisheries Science Center (SWFSC) have conducted without the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology, we do not plan to use such techniques. We are concerned that adopting a more technically advanced approach for a fishery with a small number of vessels would not be cost effective and could adversely affect the response rates of potential respondents who are comfortable with the collection methods we plan for this information collection.

13.4 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 Question 2.

We reviewed the existing literature, spoke with PFMC staff, members of the PFMC's Coastal Pelagic Species Management Team, Coastal Pelagic Species Advisory Subpanel, California Department of Fish and Wildlife, and staff of the Oregon Department of Fish and Wildlife, the Washington Department of Fish and Wildlife, and the NMFS Western Regional Office who maintains the contact information for coastal pelagic species (CPS) permit holders. We could not find any indication that our effort is duplicative of any work conducted since the last survey conducted by the SWFSC, which was fielded between 2007 and 2009.

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

Most of the business entities in this information collection are small businesses. To increase efficiency and reduce the respondent's burden, we will send out two mailings. First, we will mail an advance letter, which will inform the respondent about the survey and provide them an opportunity to schedule a telephone or video call interview. Second, we will mail a package consisting of: 1) a cover letter; 2) a copy of the survey, which will inform the respondent about the types of information (e.g., financial records) needed to complete the survey; and 3) an envelope with prepaid postage, in case a respondent prefers to submit information by mail. Therefore, the respondent will have the option to submit the requested information by mail or a telephone or video call interview, whichever is easiest for them. For those that choose to submit the information via a telephone or video call interview, we intend to have a collection team with experience working with the West Coast Coastal Pelagic Species Fishery on economic data collections. The personnel knowledge of how to handle individual situations will aid in reducing small business respondent burden.

# 13.6 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.

See response 1.6 above, it applies to all 15 fisheries.

# 13.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

13.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

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

There are no plans to provide any payments or gifts to respondents.

13.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

13.11 Describe Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

## 13.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

As discussed in Part B, Question 13.1, the SWFSC CPS survey is in part based on past survey efforts of the NWFSC. Based on the results of the NWFSC's cost and earning survey effort, the SWFSC expects a 55% response rate for federal CPS limited entry and live-bait vessels, and a 44% response rate for CPS open access vessels. With a total survey population of 190 vessels, this implies 91 survey responses for an annual collection, or an average of 30.3 over the three years because we plan to conduct the survey only once over the period. For the vast majority of respondents in the prior collection efforts, the time required to submit the information was in the one-hour range and we estimate that, prior to the interview, two hours are needed for the respondent to compile financial records. Therefore, the estimated total respondent burden is 91 hours per year. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$2,598.

13.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

13.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SWFSC cost description.

13.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

13.16 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.

For this fishery, we will report the survey results in a SWFSC administrative or technical report and publish the report on the NMFS web site. The report will include descriptive statistics (such as mean and standard deviation) of the various cost and earnings categories.

NMFS will use the survey results to support: 1) studies prepared for the Pacific Fisheries Management Council (PFMC) and NMFS management; 2) discussions at professional conference and public meetings; and 3) the development of technical guides and papers. All reporting of survey results will conform to data confidentiality requirements. Qualified researchers with confidentiality agreements will have access to raw data for performing future analyses.

For the West Coast Coastal Pelagic Species Fishery, we anticipate using no complex analytical techniques. We plan to conduct the information collection from September through November 2020 and prepare for the public a summary report to describe the contents of the database by February 2021. However, limitations on the ability to conduct the information collection under the COVID-19 situation may delay completion.

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

Each form will display the OMB control number and expiration date.

13.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

## 14. West Coast Swordfish Fishery (0648-0751)

14.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

14.2 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.

See response 1.2 above, it applies to all 15 fisheries.

14.3 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.

Given the challenges created by the COVID-19 pandemic, in-person interviews are not a viable option for the near future. Therefore, for this fishery, each potential respondent will have the option to submit the information by a telephone or video call interview or by mail.

Based on the success of many similar surveys the NWFSC and SWFSC have conducted without the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology, we do not plan to use such techniques. We are concerned that adopting a more technically advanced approach for a fishery with a small number of vessels would not be cost effective and could adversely affect the response rates of potential respondents who are comfortable with the collection methods we plan for this information collection.

# 14.4 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 Question 2.

The last cost earnings survey of the West Coast Drift Gillnet and Harpoon fleet was conducted in 2010 and was administered by Hanan & Associates, Inc. We are not aware of any other surveys currently or planned to collect cost and earnings data at the vessel level in this fishery. Vessel information, which is available from other sources, is included for identification or validation purposes.

PacFIN compiles a database of individual vessel landings records submitted by the California Department of Fish and Wildlife. PacFIN records represent mandatory landings records (fish tickets) submitted by species measured by weight and ex vessel revenues; however, no cost data are collected.

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

The potential respondent universe for this survey is the owners or operators of all active West Coast vessels primarily targeting swordfish and tuna in 2018-19 and 2019-20 along with pilots and processors that serve the industry. To minimize the burden on small businesses or other small entities, the sample frames for the West Coast Albacore Fishery and West Coast Swordfish Fishery will exclude vessels with greater than fifty percent dependence on a non-highly migratory species fishery. To further reduce the burden, we provide intended respondents the broadest possible range of options to complete a survey. They will have the choice to provide the survey information by a telephone or video call interview or by mail. For mail returns, we may make follow-up phone calls to clarify responses or obtain missing information. We will also minimize the burden to vessel owners by providing each vessel owner with a copy of the survey prior to his/her telephone or video call interview so he/she can have relevant records available for the interview. This will decrease the need for a second interview.

# 14.6 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.

See response 1.6 above, it applies to all 15 fisheries.

# 14.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

14.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

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

There are no plans to provide any payments or gifts to respondents.

14.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

14.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

## 14.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden costs for this fishery.

For this fishery, the public reporting burden for this voluntary collection of information is estimated to range from 15 minutes for past fishery participants to 60 minutes for current participants and average about 30 minutes (or 0.51 hours, see Part B, Table 14.1) per respondent. This includes the time required to read the introductory statement, gather business information necessary to complete the survey, and set up and complete the telephone or video call with the contractor, or complete and mail the survey. As discussed in Part B, Question 14.1, the total targeted population is 94 and the combined response rate is expected to be about 52%, resulting in approximately 49 completed surveys for an annual collection. As a result, the survey is expected to impose 25 burden hours on the U.S. West Coast commercial swordfish fishing industry over the three years collection period. However, because we will conduct the survey just once during the three-year duration of this information collection, the expected average annual numbers of respondents and burden hours are approximately 16.3 and 8.3, respectively. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$238.

14.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

14.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SWFSC cost description.

14.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

14.16 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.

The first part of response 13.16 applies to this fishery too.

For the West Coast Swordfish Fishery Survey, we anticipate using no complex analytical techniques. The information collection is scheduled to begin as soon as feasible in the summer of 2020, and to be completed by March 15, 2021, including a published report documenting the results of this information collection. However, limitations on the ability to conduct this information collection under the COVID-19 situation may delay completion.

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

Each form will display the OMB control number and expiration date.

14.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

## 15. West Coast North Pacific Albacore Fishery

15.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

See response 1.1 above, it applies to all 15 fisheries.

15.2 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.

See response 1.2 above, it applies to all 15 fisheries.

15.3 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.

See response 14.3 above, it applies to this fishery too.

15.4 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 Question 2.

The questions for the West Coast Albacore Fishery information collection are generally for fishing cost items that are not available from other sources, such as landings reports, logbooks or permit files. Vessel information, which is available from other sources, is included for identification or validation purposes.

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

To minimize the burden on small businesses or other small entities, the sample frame for the West Coast Albacore Fishery will exclude vessels with greater than fifty percent dependence on a non-highly migratory species fishery. In order to minimize the burden, we provide intended respondents the broadest possible range of options to complete a survey. They will have the choice to provide the survey information by a telephone or video call interview or by mail. For mail returns, we may make follow-up phone calls to clarify responses or obtain missing information. We will also minimize the burden to vessel owners by providing each vessel owner with a copy of the survey prior to his/her telephone or video call interview so he/she can have relevant records available for the interview. This will decrease the need for a second interview.

15.6 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.

See response 1.6 above, it applies to all 15 fisheries.

15.7 Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines,

NMFS will conduct this collection in a manner consistent with OMB guidelines. See response 1.7 above for more details.

15.8 If applicable, provide a copy and identify the date and page number of publications 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 describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The first two paragraphs of response 1.8 above apply to this fishery too.

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

There are no plans to provide any payments or gifts to respondents.

15.10 Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

See response 1.10 above, it applies to all 15 fisheries.

15.11 Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

See response 1.11 above, it applies to all 15 fisheries.

15.12 Provide estimates of the hour burden of the collection of information.

See Table 1.12 for burden hour estimates for all 15 information collections and see response 1.12 for the source of the average hourly wage rate we used to estimate total annual wage burden

costs for this fishery.

For the West Coast Albacore Fishery, the one hour per response burden is based on an estimate of roughly one minute per survey question. Much of the information is readily available from respondents' tax filings or financial records, suggesting that one minute per question may overestimate the response time. However, additional time may be required to access financial records and locate the requested information. As discussed in Part B, Question 15.1, we expect to receive 60 completed surveys. As a result, the survey is expected to impose 60 burden hours on the West Coast albacore fishing industry. However, because we will conduct the survey just once during the three-year duration of this information collection, the expected average annual numbers of respondents and burden hours are each 20. Given the equivalent of an average hourly wage for captains and fishermen of \$28.55, the estimated total annual wage burden costs are \$571.

15.13 Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

See Table 1.13 for burden cost estimates for all 15 information collections.

15.14 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.

Table 1.14 shows the cost estimates for all 15 information collections. For this information collection, we report the federal government cost under SWFSC cost description.

15.15 Explain the reasons for any program changes or adjustments reported in ROCIS.

See Table 1.15 for information for all collections.

15.16 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.

The first part of response 13.16 applies to this fishery too.

For the West Coast North Pacific Albacore Fishery, we anticipate using no complex analytical techniques. We expect to conduct the North Pacific Albacore information collection following the end of the 2020 fishing season (i.e. Fall 2020) and complete a report summarizing the results by fall of 2021. However, limitations on the ability to conduct this information collection under the COVID-19 situation may delay completion.

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

Each form will display the OMB control number and expiration date.

# 15.18 Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

NMFS certifies compliance with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b) (3).

# FORMS page

NOTE 1: Each Information Collection must have either a CFR citation  $\overline{OR}$  a form/guide/etc. or the application will not allow the IC to be entered.

NOTE 2: An Information Collection may have multiple forms; please mark this clearly.

		1		1		1	
Information Collection (IC) (must match Q12 of Supporting Statement Part A)	Is this a New IC (Form) (Y / N)	CFR Citation for IC	Full Name of Associated Form(s)	Obligation to Respond: Mandatory / Voluntary / Required to Obtain or Retain Benefits (select one)	# of Small Entities Completing Form	Can the Form be Submitted Electronically ? (Y/N)	% of Form Submitted Electronical
West Coast Limited Entry Groundfish Fixed Gear Fishery (0648- 0773)	Y		West Coast Limited Entry Groundfish Fixed Gear Economic Data Collection	Voluntary	30	N	0%
West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Fisheries	Y		West Coast Open Access Groundfish, Non-tribal Salmon, Crab, and Shrimp Economic Data Collection:	Voluntary	150	N	0%
American Samoa Longline Fishery	Y		American Samoa Longline Survey	Voluntary	5	N	0%
Hawaii Longline Fishery	Y		Hawaii Longline Survey	Voluntary	42	N	0%
Hawaii Small Boat Fishery	Y		Hawaii Small Boat Economic Survey	Voluntary	167	Y	20%
American Samoa Small Boat Fishery	Y		American Samoa Small Boat Survey	Voluntary	17	N	0%
American Samoa, Guam, and the Commonwealt h of the Northern Mariana Islands Small Boat-Based Fisheries (0648-0635)	Y		Trip level Economic surveys of American Samoa (ESAS), Guam, and the Commonwealth of the Northern Mariana Islands (CNMI) small boat-based fisheries	Voluntary	200	N	0%

Mariana Archipelago Small Boat Fisheries (0648-0755)	Y	Cost earnings survey of Mariana Archipelago small boat fleet	Voluntary	66	N	0%
USVI Small- Scale Fisheries	Y	USVI Fisheries Economic Survey (Socio-Economic Profile of Small-Scale Commercial Fisheries (SSCF) in the U.S. Caribbean)	Voluntary	54	N	0%
Puerto Rico Small-Scale Fisheries	Y	Puerto Rico Fisheries Economic Survey (Socio-Economic Profile of Small-Scale Commercial Fisheries (SSCF) in the U.S. Caribbean)	Voluntary	410	N	0%
Gulf of Mexico Inshore Shrimp Fishery	Y	Gulf of Mexico Inshore Shrimp Fishery Economic Survey	Voluntary	166	N	0%
Golden Crab Fisheries in the U.S. South Atlantic Region (0648-0631)	Y	Economic Expenditure Survey of Golden Crab Fishermen in the U.S. South Atlantic Region	Voluntary	2	N	0%
West Coast Coastal Pelagic Species Fishery	Y	West Coast Coastal Pelagic Species Fishery Economic Survey	Voluntary	30	N	0%
West Coast Swordfish Fishery (0648- 0751)	Y	West Coast Swordfish Fishery Cost and Earnings Survey	Voluntary	16	N	0%
West Coast North Pacific Albacore Fishery	Y	West Coast North Pacific Albacore Fishery Economic Survey	Voluntary	20	N	0%

All forms are marked as new because the forms changed. If the current 5 ICs, which are current, should be marked as not new, edits are necessary.

Very few if any of the respondents are not small entities; therefore, I used the number of respondents for this column.

Adrienne, I think you agreed to make the entries in the "CFR Citation for IC" column, if any are needed.

# APPENDIX A: Economic Data Requirements for Federally Managed Commercial Fisheries

### Introduction

NMFS uses economic data and the models and analyses they support to monitor, explain and predict changes in the economic performance and impacts of federally managed fisheries. The legal and policy requirements for economic data and analyses are intended to promote better informed conservation and management decisions on the use of living marine resources and marine habitat in federally managed fisheries by improving the ability of NMFS and the Councils to monitor, explain and predict those changes.

In this appendix, we address the following 13 laws, Executive Orders (EOs) and NOAA Fisheries strategy and policy statements with requirements for economic data, models and analyses.

- 1. The Magnuson-Stevens Fishery Conservation and Management Act (MSA)
- 2. The Marine Mammal Protection Act (MMPA)
- 3. The Endangered Species Act (ESA)
- 4. The National Environmental Policy Act (NEPA)
- 5. The Regulatory Flexibility Act (RFA)
- 6. EO 12866 (Regulatory Planning and Review)
- 7. EO 13771 (Reducing Regulation and Controlling Regulatory Costs)
- 8. EO 13840 (Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States)
- 9. The NOAA Fisheries Guidelines for Economic Reviews of Regulatory Actions
- 10. The NOAA Fisheries Strategic Plan 2019-2022 (Strategic Plan)
- 11. The NOAA Fisheries Ecosystem-Based Fishery Management (EBFM) Road Map
- 12. The NOAA Fisheries National Bycatch Reduction Strategy
- 13. NOAA's Catch Share Policy

We use the terms "needed" and "required", with respect to economic data, to refer to data that would support more than a highly superficial effort to comply with or support those laws, EOs and statements.

### 1. MSA

In addition to identifying the importance of economic information, the MSA includes requirements that NMFS and the Councils can at best meet superficially without basic economic data. Specifically, NMFS and the Councils need economic data to meet and/or to know if they have met each of the 10 National Standards, 9 of the 15 required provisions of a Fishery Management Plan (FMP), some discretionary provisions of an FMP, and some of the required actions by the Secretary. Below, we present examples of the most explicit MSA requirements for economic data.

### 1.1 National Standards

### **National Standard 1:**

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry (see 16 USC Ch 38 §1851 (a)(1)).

As defined in the MSA (see 16 USC Ch 38 §1802(33)), "The term "optimum", with respect to the yield from a fishery, means the amount of fish which—(A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (B) is prescribed on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant social, economic, or ecological factor; and (C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery."

NMFS requires basic economic data and the economic models and analyses they support to determine the amount of fish that "will provide the greatest overall benefit to the Nation" and whether there are economic factors that justify setting the OY below the MSY.

### National Standard 2:

Conservation and management measures shall be based upon the best scientific information available (see 16 USC Ch 38 §1851 (a) (2)).

Various sections of the MSA make it clear that scientific information includes economic information. Further, current NOAA guidelines for National Standard 2 explicitly state that:

Fishery conservation and management require high quality and timely ... economic ... scientific information to effectively conserve and manage living marine resources.

Management decisions should recognize the ... economic (e.g., loss of fishery benefits) risks associated with the sources of uncertainty and gaps in the scientific information.

Each SAFE (Stock Assessment and Fishery Evaluation) report should contain the following scientific information when it exists: ... Pertinent economic ... information for assessing the success and impacts of management measures or the achievement of objectives of each FMP.

The "best scientific information available" requirement of NS2 is not the same as the "best reasonably obtainable information" requirement of EO 12866.

### **National Standard 3:**

To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination (see 16 USC Ch 38 §1851 (a)(3)).

NMFS principally uses biological information to identify the range of a stock of fish and the interrelated stocks of fish. However, stocks of fish can be interrelated due to fishing vessels that participate in multiple fisheries, take multiple species in a fishery, and stocks that compete in similar markets. NMFS can use economic data to address these additional stock interactions.

# **National Standard 4:**

Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges (see 16 USC Ch 38 §1851 (a)(4)).

NMFS uses basic economic data, including cost and earnings data for participants in the fishery, to identify some of the effects of such allocations and therefore to provide information that is useful in determining whether such allocations are "fair and equitable." In addition, economic data are useful in determining what constitutes "an excessive share of such privileges."

### National Standard 5:

Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose (see 16 USC Ch 38 §1851 (a)(5)).

NMFS uses cost and earnings data and other data to evaluate the effects of proposed measures on efficiency.

### **National Standard 6:**

Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches (see 16 USC Ch 38 §1851 (a)(6)).

The "variations among and contingencies in fisheries" are in part defined in terms of economic variables. Therefore, NMFS requires basic economic data to meet this standard.

### **National Standard 7:**

Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication (see 16 USC Ch 38 §1851 (a)(7)).

NMFS needs economic data, including cost and earnings data, to determine if it has met this national standard.

### National Standard 8:

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 by utilizing economic and social data that meet the requirements of paragraph (2), 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 (see 16 USC Ch 38 §1851 (a)(8)).

There is an explicit requirement to use the best available economic and social data to meet this national standard. Specifically, we need economic data to predict the extent to which we expect conservation and management measures to provide for the sustained participation and to minimize adverse economic impacts.

#### National Standard 9:

Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch (see 16 USC Ch 38 §1851 (a)(9)).

Congress and NMFS have made it clear that the broadly defined benefits and costs of further reductions in the levels of bycatch or discard mortality rates are critical for determining if further reductions are practicable. Therefore, NMFS requires economic data to determine if we have met this national standard.

### National Standard 10:

Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea (see 16 USC Ch 38 §1851 (a)(10)).

NMFS uses economic data in determining what further improvements in safety are practicable and, therefore, if it has met this national standard.

## 1.2 Regional Fishery Management Councils

The following two MSA requirements for Council Scientific and Statistical Committees (SSCs) make it explicit that basic economic data, models and analyses are part of the scientific information that the Councils are required to consider.

Each Council shall establish, maintain, and appoint the members of a scientific and statistical committee to assist it in the development, collection, evaluation, and peer review of such statistical, biological, economic, social, and other scientific information as is relevant to such Council's development and amendment of any fishery management plan (see 16 USC Ch 38 §1852 (g)(1)(A)).

Each scientific and statistical committee shall provide its Council ongoing scientific advice for fishery management decisions, including ... reports on social and economic impacts of management measures ... (see 16 USC Ch 38 §1852 (g)(1)(B)].

# 1.3 FMP Required Provisions

NMFS needs basic economic data to meet 9 of the 15 MSA required provisions for FMPs prepared by either a Council or the Secretary. The following are the four most explicit examples of those required provisions.

FMPs are required to "contain a description of the fishery, including, but not limited to … the cost likely to be incurred in management, actual and potential revenues from the fishery …" (see 16 USC Ch 38 §1853 (a)(2)). We need basic economic data to describe the cost likely to be incurred in management and the actual and potential revenues from the fishery.

FMPs are required to "include a fishery impact statement for the plan or amendment .... which shall assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures ... and possible mitigation measures" (see 16 USC Ch 38 §1853 (a)(9)). We need economic data to assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures and possible mitigation measures.

FMPs are required to "include a description of the commercial, recreational, and charter fishing sectors which participate in the fishery, including its economic impact ..." (see 16 USC Ch 38 §1853 (a)(13)). We need economic data to describe the fishing sectors of a fishery and to estimate and describe the economic impacts.

FMPs are required to "to the extent that rebuilding plans or other conservation and management measures which reduce the overall harvest in a fishery are necessary, allocate, taking into consideration the economic impact of the harvest restrictions or recovery benefits on the fishery participants in each sector, any harvest restrictions or recovery benefits fairly and equitably among the commercial, recreational, and charter fishing sectors in the fishery;" (see 16 USC Ch 38 §1853 (a)(14)). NMFS needs economic data to: (1) identify and consider either the economic impact of the harvest restrictions or the recovery benefits on the fishery participants in each sector and (2) determine if the associated impacts and benefits are allocated fairly and equitably.

The MSA recognizes the importance of economic data for its effective implementation. Therefore, it requires each FMP to "specify the pertinent data which shall be submitted to the Secretary with respect to commercial, recreational, charter fishing, and fish processing in the fishery, including ... economic information necessary to meet the requirements of this chapter (see 16 USC Ch 38 §1853 (a)(5)).

# **1.4 Discretionary Provisions**

NMFS needs basic economic data for some of the discretionary provisions of FMPs. For

example, it needs such data to "take into account ... the economics of the fishery" when establishing a limited access system for the fishery in order to achieve optimum yield (see 16 USC Ch 38 §1853 (b)(6)(C)). Similarly, it needs economic data to meet the following MSA requirements for a limited access privilege program (LAPP) or to determine if it has met these requirements.

- 1. Contribute to reducing capacity if established in the fishery with overcapacity (16 USC Ch 38 §1853a (c)(1)(B)).
- 2. Promote fishing safety, fishery conservation and management; and social and economic benefits (16 USC Ch 38 §1853a (c)(1)(C)).
- 3. Monitor and review the program to determine progress in meeting the goals of the program and this Act, and any necessary modification of the program to meet those goals (16 USC Ch 38 §1853a (c)(1)(G)).
- 4. Develop a community sustainability plan that demonstrates how the plan will address the social and economic development needs of coastal communities (16 USC Ch 38 §1853a (c)(3)(A)(i)(IV).
- 5. Consider the economic barriers to access to fishery and the existence and severity of projected economic and social impacts associated with implementation of limited access privilege programs on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or subregion (16 USC Ch 38 §1853a (c)(3)(B)).

# 1.5 Action by the Secretary

Finally, NMFS requires basic economic data and the economic models and analyses they support to meet more than superficially the following three required actions by the Secretary.

- 1. Review the plan or amendment to determine whether it is consistent with the national standards, the other provisions of this Act, and any other applicable law (16 USC Ch 38 §1854 (a)(1)(A)).
- 2. Evaluate the proposed regulations to determine whether they are consistent with the fishery management plan, plan amendment, this Act and other applicable law (16 USC Ch 38 §1854 (b)(1)).
- 3. Allocate both overfishing restrictions and recovery benefits fairly and equitably among sectors of the fishery (16 USC Ch 38 §1854 (e)(4)(B)).

# 2. Marine Mammal Protection Act (MMPA)

When prescribing conservation regulations, under the MMPA, NMFS must take into account the economics of the fishery, the availability of existing technology, and existing state or regional

fishery management plans (16 U.S.C. § 1387(f)). We need basic economic data to do that.

# 3. Endangered Species Act (ESA)

The ESA includes requirements for economic data and analysis. For example, under §4(b)(2), NMFS must consider the economic and other effects of critical habitat designation. Similarly, under §4(f), which governs recovery plans for listed species, NMFS must develop "estimates of the time required and the cost to carry out those measures needed to achieve the [recovery] plan's goal and to achieve intermediate steps toward that goal." We need basic economic data for the commercial fisheries to meet those requirements effectively.

# 4. National Environmental Policy Act (NEPA)

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. NMFS is to do this with "a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences ... in planning and in decision-making ...." [NEPA Sec. 102(2)(A)] and, further, to "identify and develop methods and procedures, ....., which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations" [NEPA Sec. 102(2)(B)]. In addition, NOAA's NEPA implementation guidelines require that the environmental impact statement (required under NEPA Sec. 102(2)(C)(i)) include biological, ecological, economic, and social consequences. NMFS needs economic data and the models they support to conduct the required analyses and to predict the behavioral response of fishermen and others that affect the biological, ecological, economic, and social consequences.

# 5. Regulatory Flexibility Act (RFA)

If the agency does not have a factual basis for a determination that there are not a substantial number of directly regulated small entities or that no significant adverse impact on directly regulated small entities will occur, it must prepare an initial regulatory flexibility analysis (IRFA) and a final regulatory flexibility analysis (FRFA). The IRFA: (1) describes the impact of the proposed rule on small entities [Sec. 603(a)] and (2) identifies the directly regulated small entities and any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and that minimize any significant economic impact of the proposed rule on small entities [Sec. 603(c)]. Each FRFA is required to describe the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes [Sec. 604(a)(5)]. In addition, several Sections of the RFA require Federal agencies to analyze the effects of regulations to determine whether an action will have or has had "a significant economic impact on a substantial number of small entities." Cost, revenue and ownership information for the specific activity in question (e.g., commercial fishing), as well as some level of general information on the full range of income producing activities in which firms are engaged are necessary to effectively conduct the RFA analyses. The RFA also requires that agencies consider all affiliations, worldwide, of regulated entities such as ownership affiliations and cooperative affiliations.

# 6. EO 12866 "Regulatory Planning and Review"

EO 12866 (58 FR 51735, October 4, 1993) requires analysis of the impacts of regulations implementing fishery conservation and management actions. Specifically, it includes the following requirements.

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach [Sec. 1(a)].

Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic and other information concerning the need for, and consequences of, the intended regulation" [Sec. 1(b)(7)].

In an effort to meet the requirements of EO 12866, NMFS or a Council prepares a Regulatory Impact Review (RIR) for each proposed regulatory action. The economic data, models and analyses used in an RIR in part determine its success in meeting those requirements and contributing to having a well-informed regulatory decision.

## 7. EO 13771 "Reducing Regulation and Controlling Regulatory Costs"

EO 13771 (82 FR 9339, January 30, 2017) is intended to manage the costs of government regulation on private industry. It requires that "any new incremental costs associated with new regulations shall, to the extent permitted by law, be offset by the elimination of existing costs associated with at least two prior regulations." In addition, it states that "the head of each agency shall identify, for each regulation that increases incremental cost, the offsetting regulations … and provide the agency's best approximation of the total costs or savings associated with each new regulation or repealed regulation" (see Sec 3). NMFS needs economic data, models and analyses to meet these requirements.

# 8. EO 13840 "Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States"

Two of the seven stated policies of EO 13840 (83 FR 29431; June 22, 2018) require economic data, models and analyses. Those two policies are as follows:

(d) facilitate the economic growth of coastal communities and promote ocean industries, which employ millions of Americans, advance ocean science and technology, feed the American people, transport American goods, expand recreational opportunities, and enhance America's energy security;

(e) ensure that Federal regulations and management decisions do not prevent productive and sustainable use of ocean, coastal, and Great Lakes waters;

# 9. NOAA Fisheries Guidelines for Economic Reviews of Regulatory Actions<sup>10</sup>

NMFS issued the guidelines, in part, to assist in understanding and meeting the analytical requirements of EO 12866 and the RFA for regulatory actions it plans to promulgate. EO 12866 and the RFA are two of the most direct mandates for the preparation of economic analyses and, therefore, for economic data.

Largely, the EO 12866 and RFA include similar requirement for economic analyses. The guidelines include the following two principal differences.

- 1. The RFAA must address the impacts of a proposed rule only on small entities subject to the regulation (i.e., small entities to which the rule will directly apply) and not on all small entities that are affected by the regulation (i.e., small entities to which the rule will indirectly apply).
- 2. Impacts under EO 12866 need not be identified at the vessel or firm level in the RIR, whereas, these levels remains the focus of the RFAA.

The guidelines note the analyses are intended to identify the economic effects of the preferred action and alternative actions, in contrast to taking "no action", where "The types of effects to consider include the following:

- 1. Changes in net benefits within a benefit-cost framework;
- 2. Changes in the distribution of benefits and costs among groups of individuals, businesses of differing sizes, and other entities (including small communities and governmental entities);
- 3. Changes in income and employment;
- 4. Cumulative impacts of regulations; and
- 5. Changes in other social concerns.

More specifically, the guidelines include the following examples of the information that an RIR for commercial fishery management actions should provide:

- 1. Expected levels or changes in participation (number of fishing vessels) and activity (number of fishing trips, days at sea, etc.);
- 2. Expected levels or changes in harvests (commercial, recreational, and subsistence) and their distribution by sector;
- 3. Expected changes in commercial ex-vessel prices;

<sup>10</sup> See "Guidelines for Economic Reviews of National Marine Fisheries Service Regulatory Actions" (NMFS, 2007)

- 4. Expected changes in harvesting costs (fixed and variable costs, including capital and labor costs);
- 5. Expected levels and costs of processing.
- 6. Expected changes in benefits or costs incurred by specific user groups, including effects on small entities;
- 7. Expected effects on employment;
- 8. Expected effects on profits, competitive position, productivity or efficiency of individual fishermen, user groups, or fishing communities;
- 9. Expected effects on the reporting burden.
- 10. Expected impacts on consumer surplus;
- 11. Expected management and implementation costs attributable to the action, including enforcement costs;
- 12. Expected effects on non-use values; and
- 13. Expected effects on fishing capacity.

The guidelines state, "The proper comparison is with the action to without the action, rather than to before and after the action, since certain changes may occur even without action and should not be attributed to the regulation." Economic data, including cost and earnings data, and the models and analyses they support are required for more than a very superficial attempt to analyze those types of effects and to provide those types of information for the proper comparison. This conclusion applies to both quantitative and qualitative analyses intended to meet the requirements of EO 12866 and the RFA.

## 10. NOAA Fisheries Strategic Plan 2019-2022

NOAA Fisheries Strategic Plan 2019-2022 (Strategic Plan) addresses the importance of economic data. For example, the Mission and Mandates Section includes the following three statements concerning the requirements for economic data.

NOAA Fisheries is responsible for the stewardship of the nation's ocean resources and their habitat. We provide vital services for the nation ... all backed by sound science and an ecosystem-based approach to management.

The U.S. science-based fishery management process, as mandated by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and other acts, is designed to provide optimum yield while preventing overfishing and taking into account the protection of habitat and marine ecosystems.

We also conduct extensive data collection programs in collaboration with states, and provide ... socioeconomic information required for the federal management of fisheries

and their essential habitats.

The first two statements make it clear that: (1) NOAA Fisheries meets its stewardship responsibilities and provides vital services for the nation using sound science and an ecosystem-based approach to management and (2) a science-based fishery management process is mandated. The third statement and the separate discussions of the MSA and the NOAA Fisheries EBFM Road Map make it clear that economic data for federally managed commercial fisheries are among the information NOAA Fisheries requires for the successful implementation of a science-based ecosystem approach to management. For example, the determination of optimum yield (OY) requires economic data because the MSA defines OY partly in terms the amount of fish that will provide the greatest overall benefit to the Nation.

The Meeting the Challenges Section of the Strategic Plan lists 12 "high-priority areas of focus highlighted in this plan." Below, we discuss two of those high-priority areas of focus and the associated need for economic data.

**Maximize the economic yield of U.S. fisheries**, enhancing the value of our fisheries to local fishing communities and the U.S. economy.

NOAA Fisheries requires economic data to determine the fishery conservation and management actions that it expects to enhance the value of our fisheries, as well as to measure and explain changes in their value.

**Integrate ecosystem considerations** into stock assessments, fishery management, and aquaculture.

As noted above and in the separate discussions of the NOAA Fisheries EBFM Road Map, EBFM, which Integrates ecosystem considerations into fishery management, requires economic data.

The Strategic Plan identifies three Plan goals and key strategies for meeting them, which provide additional information concerning the requirements for economic data.

# Goal 1: Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability

The Strategic Plan states "NOAA Fisheries expects to amplify the economic value of U.S. seafood production by optimizing commercial harvest... Effective science-based management is essential to reaching optimum yield while preventing overfishing." Economic data are among the information NOAA Fisheries uses for effective science-based management, which includes determining the optimum commercial harvest and identifying the conservation and management actions that it expects will increase the economic value of commercial fisheries while ensuring their sustainability.

With respect to the requirements for economic data, the two most relevant key strategies for meeting Goal 1 and the identified requirements for economic data are discussed below.

## Manage stocks for Optimum Yield

The stated strategy is to, among other things, "improve economic performance." NOAA Fisheries requires economic data to identify OY, to identify the expected effects on economic performance of alternative conservation and management actions and to monitor and explain changes in economic performance.

# Modernize fishery information collection, management, and dissemination systems, and enhance cooperative data collection and sharing

The stated strategy is to "Support and coordinate with states to advance user-centered fishery information networks and data platforms, with greater efficiency and lower cost, to improve the ability to effectively manage stocks. Partner with industry to supplement the collection of additional valuable data and share fishery data (as appropriate) with the public and other industry partners." The strategy applies to a broad range of data including economic data.

# Goal 2: Conserve and recover protected species while supporting responsible fishing and resource development

With respect to the requirements for economic data, the most relevant key strategy for meeting Goal 2 and the identified requirements for economic data are discussed below.

## Minimize bycatch and entanglement of protected species while supporting fisheries

The stated strategy is to "Support continued fishing opportunities and aquaculture by understanding and minimizing protected species interactions and mortality. Work with the fishing industry, scientists, environmental organizations, academia, and other stakeholders to develop bycatch and entanglement prevention measures domestically and internationally." The separate discussion of the National Bycatch Reduction Strategy recognizes the need for economic data to identify effective and efficient bycatch and entanglement prevention measures.

# Goal 3: Improve organizational excellence and regulatory efficiency

The Strategic Plan states, "Improving business processes and implementing best practices conducted in a priority-based environment, along with continuous regulatory reform, will ensure our operations best support our customers and partners." With respect to the requirements for economic data, the three most relevant key strategies for meeting Goal 3 and the identified requirements for economic data are discussed below.

#### Institutionalize prioritization and performance management practices

For this key strategy, NOAA Fisheries is to "Use priority-based methodologies to optimize investments for maximum economic return while meeting conservation mandates. Analyze performance, risk and opportunities to ensure the best value to the American public." Economic data are required to assess economic return and to analyze performance, risk and opportunities.

# Review agency regulations and remove or modify rules that unnecessarily burden businesses and economic growth

To meet this key strategy, NOAA Fisheries will "Implement Executive Order 13771 by reviewing regulations to identify and modify or repeal rules that are outdated, unnecessary, or ineffective. Continue to work with the regional fishery management councils to identify additional potential flexibilities for regulated entities that maximize fishing opportunities, while continuing to meet conservation objectives." As noted in the separate section on EO 13771, economic data are required for the effective and efficient implementation of that EO. For example, NOAA Fisheries uses economic data to estimate how alternative management actions will burden businesses and economic growth.

## Institutionalize the use of innovative technologies

To meet this key strategy, NOAA Fisheries intends to "Support the development, leveraging, and use of powerful technologies (e.g., ... advanced ... electronic reporting) for ... enhancing and improving the accuracy of observing systems, and collecting and sharing data in cost-effective, transparent, and real-time approaches. Work with industry, academia, and other partners to test, deploy, and use these technologies." Some of these technologies apply to economic data. For example, electronic reporting and observing systems, such as observer and electronic logbook programs, can be efficient methods for collecting some economic data.

## 11. EBFM Road Map

The NOAA Fisheries Ecosystem-Based Fisheries Management Road Map includes many statements that demonstrate the importance of economic data, models and analyses for successfully implementing EBFM. The following are four examples of those statements.

- 1. NOAA Fisheries defines EBFM as "a systematic approach to fisheries management in a geographically specified area that contributes to the resilience and sustainability of the ecosystem; recognizes the physical, biological, economic, and social interactions among the affected fishery-related components of the ecosystem, including humans; and seeks to optimize benefits among a diverse set of societal goals."
- 2. A national review of the data collection programs is needed across a wide range of disciplines, including but beyond the typical abundance and basic biological and catch data. For instance, needs that warrant inventory to identify gaps include ... broader economic data ...
- 3. NOAA Fisheries supports the consideration of and efforts to take into account various trade-offs when considering the independent and the cumulative effects of natural and human pressures on the ecosystem, including: Analyze trade-offs to optimize total benefits from all fisheries within each ecosystem or jurisdiction. This will be done by taking into account statutory mandates (e.g., MSA, Marine Mammal Protection Act (MMPA), ESA, National Aquaculture Act, etc.), regional socio-economic considerations

. . . .

4. Evaluating cumulative impacts of proposed management actions for LMRs, their ecosystems, and associated coastal communities, as well as identifying alternative actions that achieve societal goals will further inform EBFM decisions. Cumulative and synergistic impacts are difficult to identify on a species-by-species basis, and systemic analyses will help to identify any such impacts.

## 12. National Bycatch Reduction Strategy

The National Bycatch Reduction Strategy includes various statements that demonstrate the importance of economic data, models and analyses for reducing bycatch and discard mortality effectively and efficiently. They include the following two selected research and develop actions.

- 1. Improve understanding of the economic and other social factors contributing to bycatch, and identify regulatory and market incentives that might increase utilization of economic discards.
- 2. Assess how technology is developed and adopted in fisheries and how technological advances can affect bycatch reduction, including improvements in post-release mortality.

They also include the following two selected conserve and manage actions.

- 1. Analyze the effectiveness of incentive-based approaches to environmental management, (e.g., catch shares, risk pools, cooperatives, dynamic area management), and consider their application to bycatch reduction programs.
- 2. Improve understanding of the socio-economic, and other environmental trade-offs of bycatch reduction to better inform stakeholders and to support management decisions and postregulation analyses.

## 13. NOAA's Catch Share Policy

NOAA's Catch Share Policy contains many guidance, requirements and commitment statements that NOAA Fisheries cannot meet more than superficially without basic economic data and the models and analyses they support. Here are three examples.

- 1. Councils and NOAA must establish relevant performance measures. Performance metrics for some of the typical fishery goals may include ... what were the impacts on fishing communities, participation and entry into the fishery; what happened to prices, revenues and profits.
- 2. Performance measures need to be linked back to the initial objectives in a FMP. Many current FMPs have general and sometimes vague objectives. Objectives for biological, economic and social outcomes should be readily measurable, such as ... improving socioeconomic conditions for fishery participants and/or fishery-dependent communities.

3. Catch shares can result in fishery improvements in many areas but the metrics chosen to monitor performance should not be limited by the current availability of data. It is important to ensure in the catch share design stage that share holders will supply relevant data to monitor program performance in return for their allocation. This includes obtaining more specific biological and economic performance data from the participants, all in accordance with applicable law governing maintenance of business trade secrets and confidentiality of data.

# APPENDIX B: References to the Use of Data Collected in NMFS Voluntary Cost and Earnings Information Collections for Commercial Fisheries by Fisheries Science Center<sup>11</sup>

#### 1. Northeast Fisheries Science Center

Ardini, G., T.B. Murphy, S. Werner and M. Bailey, forthcoming 2020. NEFSC Technical Memo. An Overview of the Social Sciences Branch (SSB) Fixed Cost Survey in the Northeast: Protocol and Results for Survey Years 2011, 2012, and 2015.

Zou, C. 2019. Economic Profile of Lobster Fishery in Northeast U.S. Unpublished Manuscript. Analysis of fixed costs data to inform economic impacts of lobster fishery gear restrictions to protect Atlantic right whales.

Demarest, Chad. 2015. Preliminary Evaluation of the Impact of Groundfish Sector-Funded At Sea Monitoring on Groundfish Fishery Profits, Presentation to the New England Fisheries Management Council, June 15, 2015,

Performance review for the limited access general category scallop IFQ fishery (2010-2015), completed in 2017.

Amendment 19 and Framework 27 to the Scallop FMP. Estimation of fixed costs for the limited access general category scallop fleet.

Das, Chhandita, 2016. Fisheries annual fixed cost data collection and estimation methodology: An application in the Northeast, U.S. Marine Policy 71:184-195.

Walden, J.B., 2013 Economic Health of the Northeast (U.S.) Multispecies Trawl Fleet 1996–2010. Fisheries Research, 2013 (139):198-204. https://doi.org/10.1016/j.fishres.2012.10.002

#### 2. Northwest Fisheries Science Center

Lian, C.E. 2012a. West Coast limited entry groundfish cost earnings survey: Protocol and results for 2008. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-121, 62 p. <a href="https://www.nwfsc.noaa.gov/assets/">https://www.nwfsc.noaa.gov/assets/</a>

25/4425 01232013 114027 LESurvey2008TM121WebFinal~Std.pdf

Lian, C.E. 2012b. West Coast open access groundfish and salmon troller survey: Protocol and results for 2005 and 2006. U.S. Dept. Commer., NOAA Tech. Memo. NMFSNWFSC-116, 52 p. <a href="https://www.nwfsc.noaa.gov/assets/">https://www.nwfsc.noaa.gov/assets/</a>

25/1842 03292012 154938 TrollerSurveyTM116WebFinal.pdf

<sup>11</sup> The Alaska Fisheries Science Center is not included because none of its cost and earnings surveys for commercial fisheries is voluntary.

Lian, C.E. 2010. West Coast limited entry groundfish trawl cost earnings survey protocols and results for 2004. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-107, 35 p. <a href="https://repository.library.noaa.gov/view/noaa/3765">https://repository.library.noaa.gov/view/noaa/3765</a>

Hodgson E., I. Kaplan, K. Marshal, J. Leonard, T. Essington, S. Busch, E. Fulton, C. Harvey, A. Hermann, and P. McElhany. (2018). Spatially variable ocean acidification and its consequences in the California Current: interactions between oceanography, food webs, and fishing communities. Ecological Modeling 385.

Richerson K., J. Leonard, D. Holland. (2018). Predicting the economic impacts of the 2017 West Coast salmon troll ocean fishery closure. Marine Policy 95: 142-152.

Seung, C. K., Waters, E. C. and Leonard, J. L. (2014), Assessing multiregional economic impacts of Alaska fisheries: A computable general equilibrium analysis. Review Urban & Regional Devel, 26: 155-175.

Kaplan, I. Leonard, J. (2012). From Krill to Convenience Stores: Forecasting the Economic and Ecological Effects of Fisheries Management on the US West Coast. Marine Policy 36: 947–954.

Leonard, J., and E. Steiner (2017). Initial Economic Impacts of the U.S. Pacific Coast Groundfish Fishery Individual Fishing Quota Program. North American Journal of Fisheries Management 37, 4.

Leonard, J., and P. Watson. (2011). Description of the input-output model for Pacific Coast fisheries. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-111, 64 p.

In addition to their use in the references listed above, the cost and earnings data collected in surveys conducted by the NWFSC have been used in a variety of PFMC documents, including EISs, RIRs, RFAs, and Salmon SAFE (Stock Assessment and Fishery Evaluation) reports.

#### 2.1 I-O Model Review Comments

The initial SSC review of IO-PAC is under Agenda Item G.9.b Supplemental SSC Report, November 2009 Scientific and Statistical Committee Report on Part 2-Management Recommendations For 2011-2012 Fisheries https://www.pcouncil.org/wp-content/uploads/bb 2009 11 G9b SUP SSC 1109.pdf

The SSC report includes the following statements.

In early October 2009 the IO-PAC model was reviewed by a panel of independent experts. The panelists included one Committee of Independent Experts (CIE) reviewer (Dr. Alan Hodges of the University of Florida) and two other reviewers (Dr. Scott Steinback of the NMFS/NEFSC and Dr. James Kirkley of the Virginia Institute of Marine Science). Among other things, the panel was asked to evaluate whether the model represented best available science for assessing regional economic impacts of changes in commercial harvest of Pacific groundfish.

Each of the three reviewers provided a separate review of the IO-PAC model. Their conclusions and recommendations reflect considerable consensus regarding the utility of the model and recommendations for improvement. Their overall conclusion regarding IO-PAC is best summarized by Dr. Hodges as follows:

In general, it was found that the regional modeling approach followed by the NWFSC represents the state of the art and best professional practice in regional economic impact analysis. The modeling and supporting data are strongest for analysis of impacts of changes in groundfish harvests. The model was well documented, such that its technical merit could be fully appraised.

The SSC concurs with the external reviewers' overall assessment of IO-PAC as well as their specific recommendations for improvement.

The second SSC review is in Statement of the SSC Economics and Groundfish Subcommittees' Reviews Conducted In 2012-13 of Data and Models to Be Used in the Socioeconomic Analysis for the 2015-16 Groundfish Biennial Specifications Process.

http://www.pcouncil.org/wp-content/uploads/

SSC GFSUB ECONSUB STATEMENT JUN2013BB.pdf

The following statements concerning the IO-PAC Model are in ATTACHMENT 4, Statement of the SSC Economics and Groundfish Subcommittees IO-PAC Model and the Economic Data Collection Program.

- 1. The IO-PAC model is used in the groundfish specifications (Spex) process to evaluate the regional economic impacts of management alternatives. In October 2009, the NWFSC sponsored a CIE review of an earlier version of IO-PAC, which the SSC also reviewed in November 2009. Subsequent changes to the model have been substantial enough to warrant a new review at this time.
- 2. A number of changes to IO-PAC have occurred since the SSC's last review. These changes include addition of a recreational component, data updates, addition of more commercial fisheries (at-sea groundfish, crab, salmon, and shrimp) and a processing sector, major changes in model construction, and some changes in model assumptions. The SSC-E/GF supports these changes as improvements to the model and endorses use of the model for management.
- 3. SSC-E/GF review focused on the accuracy of specific assumptions in IO-PAC, the sensitivity of model results to those assumptions, and which assumptions are likely to have the greatest influence on model outputs.
- 4. IO-PAC can be used to estimate income and employment impacts at port group, State and coastwide levels. **Impacts estimated for each port group within a state do not add up to state-level impacts, nor do state-level impacts add up to coastwide impacts.** This is

a logical function of how IO-PAC (as well as other regional impact models) are structured. **This should be clearly explained whenever IO-PAC results are provided.** 

## 3. Pacific Islands Fisheries Science Center

Since 2018, the economic data (cost, price, revenue, and net revenue) are included in all the plan team SAFE reports (Socioeconomics Section).

Hawaii Small Boat Survey: This brochure presents findings from the Pacific Islands Fisheries Science Center (PIFSC) 2014 cost-earnings study of the Hawaii small boat fleet.

2012 Costs and Earnings for Hawaii's Longline Fishery: This brochure presents findings from the Pacific Islands Fisheries Science Center (PIFSC) 2012 cost-earnings study of the Hawaii-based longline fleet and compares them to the findings from two similar previous studies to depict changes in economic conditions for that fleet.

Pan M, Chan HL and Kalberg K. 2012. Tracking the changes of economic performance indicators for the main U.S. commercial fisheries in the Pacific islands region. Pacific Islands Fisheries Science Center Internal Report IR-12-039, 18 p.

Pan M. 2019. Cost-earnings study and economic performance analysis of the American Samoa longline pelagic fishery—2016 operation and recent trends. NOAA Tech Memo. NMFS-PIFSC85, 35 p. doi:10.25923/jemx-6804

Pan M. 2019. Tracking Changes on Fishery Economic Performance. Pacific Islands Fisheries Science Center, PIFSC Special Publication, SP-19-004, 6 p. <a href="https://doi.org/10.25923/zv14-9m26">https://doi.org/10.25923/zv14-9m26</a>.

Pan M. 2018. Tracking changes on fishery economic performance -- continuous economic data collection programs for the Hawaii and American Samoa longline fisheries 2005-2016. U.S. Dept. of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-PIFSC-73, 48 p. <a href="https://doi.org/10.25923/hqhf-d906">https://doi.org/10.25923/hqhf-d906</a>.

Pan M., Arita S., Bigelow K. 2017. Cost-earnings study of the American Samoa longline fishery based on vessel operations in 2009 and recent trend of economic performance. Pacific Islands Fisheries Science Center, PIFSC Administrative Report, H-17-01, 43 p. https://doi.org/10.7289/V5/AR-PIFSC-H-17-01.

Kalberg KO, Pan M. 2016. 2012 economic cost earnings of pelagic longline fishing in Hawaii. U.S. Dept. of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-PIFSC-56, 60 p. <a href="https://doi.org/10.7289/v5/tm-pifsc-56">https://doi.org/10.7289/v5/tm-pifsc-56</a>.

Pan M. 2015. Economic performance and status of American Samoa longline fishery, 2014. Pacific Islands Fisheries Science Center, PIFSC Internal Report, IR-15-015, 9 p

Pan M. 2014. Economic performance and status of American Samoa longline fishery. Pacific Islands Fisheries Science Center, PIFSC Internal Report, IR-14-020, 6 p.

Pan M. 2014. Economic characteristics and management challenges of the Hawaii pelagic longline fisheries: Will a catch share program help? Marine Policy 44: 18-26. https://doi.org/10.1016/j.marpol.2015.08.008.

Chan HL, Pan M. 2017. Economic and social characteristics of the Hawaii small boat fishery 2014. U.S. Dept. of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-PIFSC-63, 97 p. https://doi.org/10.7289/V5/TM-PIFSC-63.

Chan HL, Pan M. 2019. Vessel level annual cost-earnings study of the Hawaii offshore handline fishery and the Hawaii small boat commercial fishery, 2014. U.S. Dept. of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-PIFSC-80, 50 p. <a href="https://doi.org/10.25923/zffy-5a13">https://doi.org/10.25923/zffy-5a13</a>.

Chan HL, Pan M. 2019. Tracking economic performance indicators for small boat fisheries in America Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. U.S. Dept. of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-PIFSC-79, 76 p. <a href="https://doi.org/10.25923/8etp-x479">https://doi.org/10.25923/8etp-x479</a>.

Hospital J, Beavers C. 2012. Economic and social characteristics of Guam's small boat fisheries. Pacific Islands Fisheries Science Center Administrative Report H-12-06, 59 p. + Appendices.

Hospital J, Beavers C. 2012. Economic and social characteristics of bottomfish fishing in the main Hawaiian Islands. Pacific Islands Fisheries Science Center Administrative Report H-12-01, 43 p. + Appendix.

Hospital J, Beavers C. 2014. Catch shares and the main Hawaiian Islands bottomfish fishery: Linking fishery conditions and fisher perceptions. Marine Policy 44: 9-17. https://doi.org/10.1016/j.marpol.2013.08.006.

Hospital J, Beavers C. 2014. Economic and social characteristics of small boat fishing in the Commonwealth of the Northern Mariana Islands. Pacific Islands Fisheries Science Center Administrative Report H-14-02, 58 p. + Appendices.

Western Pacific Fishery Management Council (WPFM): 2018 FEP Annual Stock Assessment and Fishery Evaluation (SAFE) Reports: <a href="http://www.wpcouncil.org/annual-reports/">http://www.wpcouncil.org/annual-reports/</a>

#### 4. Southeast Fisheries Science Center

Yandle, T. and S. Crosson. 2015. Whatever happened to the wreckfish fishery? An evaluation of the oldest finfish ITQ program in the United States. Marine Resource Economics 30(2): 193-217. <a href="http://envs.emory.edu/home/documents/Faculty/yandle-docs/Whatever%20happened%20to%20the%20wreckfish%20fishery.pdf">http://envs.emory.edu/home/documents/Faculty/yandle-docs/Whatever%20happened%20to%20the%20wreckfish%20fishery.pdf</a>

Yandle, T. and S. Crosson. 2015. 20122013 Fishing Year Economics of the Wreckfish Fishery: This sheet presents information from an economic survey of permitted boats harvesting wreckfish in the area under the jurisdiction of the South Atlantic Fishery Management Council and compares it to the findings from a similar study for the 1992-1993 fishing year to depict changes in economic conditions for that fishery.

Review of the Wreckfish Individual Transferable Quota Program of the South Atlantic Fishery Management Council, August 2019:

https://safmc.net/download/FinalWreckfishITQReview.pdf

This report notes that the South Atlantic Fishery Management Council (Council) is required by the Magnuson-Stevens Fishery Conservation and Management Act to review the Wreckfish ITQ program every five to seven years. The Council initially reviewed the program in 2009. This review is the first subsequent review. This review examines how the Wreckfish ITQ program has changed between the baseline time period (2009/2010 – 2011/2012 fishing years) and the review time period (2012/2013 – 2016/2017 fishing years) with respect to various social, economic, biological, and administrative factors, and offers conclusions and recommended changes to the program based on the findings.

The SAMFC (South Atlantic Fishery Management Council) currently uses information from the last economic survey of the fleet in its Golden Crab Fishery Management Plan to manage the fishery.

# 4.1 Additional SEFSC, GMFMC and SAFMC references to the use of similar economic data

Liese, C., M. Travis, D. Pina, and J. Waters. 2009. The Annual Economic Survey of Federal Gulf Shrimp Permit Holders: Report on the Design Implementation, and Descriptive Results for 2006.-Miami, FL. NOAA Technical Memorandum NMFS-SEFSC-584, 91 p.

Liese, C., M. Travis, and J. Waters. 2009. An Annual Economic Survey of Federal Gulf Shrimp Permit Holders: Implementation and Descriptive Results for 2007.-Miami, FL. NOAA Technical Memorandum NMFS-SEFSC-590, 97 p.

Liese, C. and M. Travis. 2010. The Annual Economic Survey of Federal Gulf Shrimp Permit Holders: Implementation and Descriptive Results for 2008.-Miami, FL. NOAA Technical Memorandum NMFS-SEFSC-601, 99 p.

Liese, C. 2011. 2009 Economics of the federal Gulf shrimp fishery annual report. NOAA Fisheries, Southeast Fisheries Science Center, Miami Laboratory, Miami, Florida.

Liese, C. 2015. 2010 Economics of the federal Gulf shrimp fishery annual report. NOAA Fisheries, Southeast Fisheries Science Center, Miami Laboratory, Miami, Florida.

Liese, C. 2015. 2011 Economics of the federal Gulf shrimp fishery annual report. NOAA Fisheries, Southeast Fisheries Science Center, Miami Laboratory, Miami, Florida.

Liese, C. 2014. Economics of the Federal Gulf Shrimp Fishery - 2012.-Miami, FL. NOAA Technical Memorandum NMFS-SEFSC-668, 26 p.

Liese, C. 2016. 2013 Economics of the federal Gulf shrimp fishery annual report. NOAA Fisheries, Southeast Fisheries Science Center, Miami, Florida.

Liese, C. 2018. Economics of the Federal Gulf Shrimp Fishery - 2015. NOAA Technical Memorandum NMFS-SEFSC-722, 26 p.

Overstreet, E., L. Perruso, and C. Liese. 2018. Economics of the U.S. South Atlantic Snapper-Grouper Fishery - 2016. NOAA Technical Memorandum NMFS-SEFSC-730. 104 p.

Overstreet, E. and C. Liese. 2018. Economics of the Gulf of Mexico Reef Fish Fishery - 2015.-Miami, FL. NOAA Technical Memorandum NMFS-SEFSC-724. 78 p. doi: 10.25923/e6hw-2435

GMFMC (Gulf of Mexico Fishery Management Council). 2018. "Grouper Tilefish Individual Fishing Quota Program: Five-Year Review." 156 pp + app. http://gulfcouncil.org/wp-content/uploads/1Grouper-Tilefish-IFQ-Review.pdf

GMFMC. 2019. Final Shrimp Amendment 18 to the Fishery Management Plan for The Shrimp Fishery of the Gulf of Mexico, U.S. Waters

This report includes key economic and financial characteristics of federally-permitted Gulf shrimp vessels, which are based on a series of annual reports on the economics of the federal Gulf shrimp fishery for the years 2006 through 2014 (Liese 2011, 2013a, 2013b, 2014, 2016, 2018; Liese and Travis 2010; Liese et al. 2009a, 2009b). These reports present the results of the Annual Economic Survey of Federal Gulf Shrimp Permit Holders. The first survey, which was administered in 2007, collected data for the 2006 fishing year.

Richardson, E. J. 1994. "Wreckfish Economic and Resource Information Collection with Analysis for Management." A report pursuant to National Oceanic and Atmospheric Administration Award No. NA37FF0047–01.

SAFMC (South Atlantic Fishery Management Council). 1990. Amendment 3 to the Snapper Grouper Fishery Management Plan. South Atlantic Fishery Management Council, 1 Southpark Cir., Suite 306, Charleston, S.C. 29407-4699.

SAFMC (South Atlantic Fishery Management Council). 1991a. Amendment 5 to the Snapper Grouper Fishery Management Plan. South Atlantic Fishery Management Council, 1 Southpark Cir., Suite 306, Charleston, S.C. 29407-4699.

SAFMC (South Atlantic Fishery Management Council). 1991b. Amendment 4 to the Snapper Grouper Fishery Management Plan. South Atlantic Fishery Management Council, 1 Southpark Cir., Suite 306, Charleston, S.C. 29407-4699.

SAFMC 2009. Draft Wreckfish Individual Transferable Quota (ITQ) Program Review. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Suite 210, North Charleston, South Carolina 29405.

SAFMC 2011. Comprehensive Annual Catch Limit (ACL) Amendment for the South Atlantic Region. Amendment 2 to the Fishery Management Plan for the Dolphin Wahoo Fishery of the Atlantic, Amendment 2 to the Fishery Management Plan for Pelagic Sargassum Habitat of the South Atlantic Region, Amendment 5 to the Fishery Management Plan for the Golden Crab Fishery of the South Atlantic Region, and Amendment 25 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Suite 210, North Charleston, South Carolina 29405.

SAFMC (South Atlantic Fishery Management Council). 2012. Amendment 20A to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Assessment, Regulatory Flexibility Analysis, Regulatory Impact Review, and Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 128 pp. plus appendices.

SAFMC (South Atlantic Fishery Management Council). 2015a. Regulatory Amendment 22 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Assessment, Regulatory Flexibility Analysis, and Regulatory Impact Review. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC (South Atlantic Fishery Management Council). 2015b. Amendment 35 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Assessment, Initial Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC (South Atlantic Fishery Management Council). 2016a. Amendment 36 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Impact Statement, Initial Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC (South Atlantic Fishery Management Council). 2016b. Regulatory Amendment 35 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Assessment, Regulatory Flexibility Analysis, and Regulatory Impact Review. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC (South Atlantic Fishery Management Council). 2017a. Amendment 41 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Environmental Assessment, Regulatory Impact Review, Regulatory Flexibility Analysis, and Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC (South Atlantic Fishery Management Council). 2017b. Amendment 37 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Impact Statement, Regulatory Impact Review, Regulatory Flexibility Analysis, and Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

#### 5. Southwest Fisheries Science Center

Smith, James, Desiree Tommasi, Jonathan Sweeney, Stephanie Brodie, Heather Welch, Elliott Hazen, Barbara Muhling, Stephen Stohs, and Michael Jacox. 2019. 'Lost opportunity: quantifying the dynamic economic impact of time-area fishery closures' accepted publication in Journal of Applied Ecology.

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#### 6. National References

NMFS. 2011. A Users Guide to the National and Coastal State I/O Model. <a href="https://www.st.nmfs.noaa.gov/documents/commercial-seafood-impacts-2007-2009.pdf">www.st.nmfs.noaa.gov/documents/commercial-seafood-impacts-2007-2009.pdf</a>.

Anderson, L.G. and M.C. Holliday (eds.) 2007. The Design and Use of Limited Access Privilege Programs. NOAA Technical Memorandum NMFS-F/SPO-86. <a href="https://www.fisheries.noaa.gov/resource/document/design-and-use-limited-access-privilege-programs">https://www.fisheries.noaa.gov/resource/document/design-and-use-limited-access-privilege-programs</a>

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Brinson, A.A. and E.M Thunberg. 2016. Performance of federally managed catch share fisheries

in the United States. Fisheries Research, 179, pp. 213-225. <a href="https://www.st.nmfs.noaa.gov/Assets/economics/catch-shares/documents/Catch-Shares-Report FINAL.pdf">https://www.st.nmfs.noaa.gov/Assets/economics/catch-shares/documents/Catch-Shares-Report FINAL.pdf</a>

NMFS. 2017a. Guidance for Conducting Review of Catch Share Programs. Fisheries Management Catch Share Procedural Directive 01-121-01. 18 pp.

NMFS. 2017b. Fisheries Economics of the United States, 2015. U.S. Dept. of Commerce, NOAA Tech. Memo. NMFS-F/SPO-170, 247 pp. <a href="https://www.fisheries.noaa.gov/resource/document/fisheries-economics-united-states-report-2015">https://www.fisheries.noaa.gov/resource/document/fisheries-economics-united-states-report-2015</a>.

Thunberg, E., J. Agar, S. Crosson, B. Garber-Yonts, A. Harley, A. Kitts, T. Lee, C. Lian, C. Liese, M. Pan, L. Perruso, G. Silva, D. Squires, E. Steiner, and S. Stohs. 2015. A Snapshot of NOAA Fisheries Data Collection of Commercial Fishery Costs. U.S. Dept of Commer., NOAA Technical Memorandum NMFS-F/SPO-154, 331 p.