

SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Survey to Collect Economic Data from Recreational Anglers along the Atlantic Coast
OMB Control No. 0648-0783

Abstract

This request is for a revision and extension to a currently approved information collection. The first data collection effort in 2019 under OMB Control Number 0648–0783 was to assess how changes in saltwater recreational fishing regulations affect angler effort, angler welfare, fishing mortality, and future stock levels. That data collection effort focused on anglers who fished for Atlantic cod and haddock off the Atlantic coast from Maine to Massachusetts (North Atlantic Recreational Fishing Survey I). In 2020, the collection was revised to remove the cod and haddock survey and add a survey focused on anglers who fish for summer flounder, black sea bass, and scup along the Atlantic coast from Massachusetts to North Carolina (North Atlantic Recreational Fishing Survey II). In 2022, the collection was revised again to re-add the original cod and haddock survey back to this control number (North Atlantic Recreational Fishing Survey III). This revision will re-add the survey focused on summer flounder, black sea bass, and scup (North Atlantic Recreational Fishing Survey IV) that was inadvertently removed in the last revision.

The objective of these surveys will remain exactly the same as the previous surveys conducted under this control number. That is, to statistically assess how anglers respond to changes in management options and fishing regulations (e.g., bag limits, size limits, dates of open seasons, etc.). The survey data will provide the information fisheries managers need to conduct updated analysis of the socio-economic effects to recreational anglers and to coastal communities of proposed changes in fishing regulations. The recreational fishing community and regional fisheries management councils now rely on species-specific socio-economic studies of recreational fishing for analyses of fisheries policies. These surveys will address the stated need for more species-specific studies.

Justification

- 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.**

The Northeast Fisheries Science Center (NEFSC) is sponsoring this project to elicit preferences for anglers targeting summer flounder, black sea bass, and scup. Understanding angler preferences is a critical step in determining how fishing regulations affect angler effort, angler welfare, fishing mortality, and future stock levels. The statistical model being used to meet this research objective requires fishing-related and socioeconomic data on users of these fisheries. To collect this information, the NEFSC seeks to implement an updated North Atlantic Recreational Fishing Survey (herein called NARFS IV), a questionnaire directed toward recreational anglers

who fish for summer flounder and black sea bass from Massachusetts to North Carolina.

Results of NARFS IV will be directly incorporated into a bioeconomic simulation model developed by the NEFSC and that NOAA Fisheries, the Mid-Atlantic Fisheries Management Council (MAFMC), and the Atlantic States Marine Fisheries Commission began using in 2022 to select management options that have the highest probability of achieving annual allowable catch limits (ACLs), while simultaneously maximizing angler benefits. As the results of this data collection effort will have direct policy implications, it is important to periodically update the underlying model information because angler preferences, or the population itself, can change over time. The data collected in NARFS IV will be used to update the bioeconomic model so that the models' parameters reflect current fishery conditions and angler preferences.

Building upon our findings from the first summer flounder, black sea bass, and scup survey (NARFS II), anglers' utility will be specified according to α -Maxmin Expected Utility (Gilboa et al. 1989, Ghirardato et al. 2004). This specification nests a von Neumann Morgenstern utility with constant absolute risk aversion (CARA) within the framework of ambiguity and allows for joint estimation of both risk and ambiguity preferences by anglers. Specifically, an agent with α -Maxmin preferences evaluates a choice by considering the weighted average of the worst expected payoff and the best expected payoff with α and $1-\alpha$ being the two respective weights. The parameter α reflects the agent's attitude towards ambiguity. This is not a technicality, but rather a potentially important issue because, (i) as anglers in the focus groups conducted for the previous surveys stressed, in fishing you never know in advance how many fish you will bring home; luck plays a significant role; and (ii) because many anglers seem to focus primarily on the probability of achieving the extreme outcomes –bringing home zero fish versus filling the cooler up to the bag limit– when deciding whether to go fishing. Thus, policy instruments such as size and bag limits likely impact anglers' welfare and participation not only through their effect on the expected catch and keep, but more generally through their effect on the probability of achieving different catch outcomes. These effects can only be quantified using data explicitly designed to elicit attitudes towards risk and ambiguity.

More broadly, this survey builds upon the methodological lessons we learned from our previous survey efforts. Specifically, how to properly convey risk and uncertainty regarding catch distributions in the questionnaire design. During the focus groups conducted for NARFS II under this control number, we presented participants with several versions of the questions involving pie charts, that is, uncertain keep. The specification of these questions was informed by Holt and Laury (2002) multiple price lists, as well as recent efforts to convey risky outcomes (e.g. Huber et al. 2010, Harrison 2014, Dimmock et al. 2015). Focus groups participants found these questions to more realistically reflect the recreational fishing experience, in which variability of the catch is such a salient feature, than the design employed in the first NARFS in which catch outcomes were predetermined and deterministic. In fact, some of the focus groups participants suggested that this feature is what makes recreational fishing appealing to them in the first place. We think this small addition will improve the quality of the preference data collected and the overall survey response rate.

Overall, the data and models reliant on such data will inform management decisions of the NEFMC, operating under the authority of the [Magnuson-Stevens Fishery Conservation and Management Act](#) (16 U.S.C. 1801 et seq.).

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.

The data collected from NARFS IV will be used to estimate a model of angler behavior, the economic component of the bioeconomic simulation model described in our response to question A1. This simulation model is now employed annually by NEFSC scientists to predict the types of management policies that will be expected to achieve conservation objectives, while simultaneously maximizing the well-being of anglers. The MAFMC and the ASMFC, in turn, then select one of the modeled outcomes as the preferred alternative and forward this recommendation to the NOAA Fisheries Regional Administrator for approval and implementation during the next fishing year. Use of the modeling approach by the MAFMC and the ASMFC increases the likelihood that black sea bass and summer flounder management policies will meet intended conservation objectives because anglers' preferences and well-being are explicitly considered.

Each section of the survey instrument is described in more detail below.

Section A: Your Recreational Fishing Experiences

The first question in this section of the survey will be used to screen out respondents without summer flounder, black sea bass, and scup fishery experience, which we define as those who have not gone recreational fishing for summer flounder, black sea bass, and/or scup in the last five years. Anglers that haven't fished for these species within the past five years will only respond to the first question then be directed to skip to the last section of the survey (Section D) to answer demographic questions. By asking all license holders (eligible and ineligible) to complete the survey we will be able to assess relative sample representativeness by comparing the characteristics of our sample (e.g., avidity and demographics) to the characteristics of the population of recreational anglers at large, which can be found in NOAA-sponsored nationwide angler expenditure reports. As the characteristics of summer flounder and black sea bass anglers may differ from the population of anglers as a whole, we need information from both types of anglers to assess sample representativeness.

The remaining four questions in this section are intended only for respondents who have gone recreational fishing for either of the three species in the past five years. These questions provide information on avidity, fishing mode, and boat ownership. The answers to these questions will be used to model the opt-out option (i.e. specified using a choice specific constant and anglers' characteristics).

Section B: Your Saltwater Fishing Trips

The next section of the survey contains a set of Choice Experiment (CE) questions. These questions are designed to elicit the tradeoffs anglers make between two fishing trips that vary in the number of legal and sub-legal summer flounder, black sea bass, and scup caught, regulations, total number of fish that could be kept and must be released, trip cost, trip length, and not going saltwater fishing. After presenting respondents with these fishing and non-fishing options, the questions ask respondents to select the option they would take if given the opportunity. Responses to these questions are the key source of data required to estimate the economic model

of angler behavior. Table 1. summarizes the attributes and levels to include in the CE questions.

Table 1. NARFS IV Survey Attributes and Levels

Attribute	Level range
<u>Number of legal-sized summer flounder caught</u>	<u>1-7</u>
<u>Number of undersized summer flounder caught</u>	<u>0-15</u>
<u>Number of legal-sized black sea bass caught</u>	<u>1-8</u>
<u>Number of undersized black sea bass caught</u>	<u>0-15</u>
<u>Number of legal-sized scup caught</u>	<u>1-60</u>
<u>Number of undersized scup caught</u>	<u>0-30</u>
<u>Probabilities (of alternative # of summer flounder kept fish)</u>	<u>0-1.0</u>
<u>Number black sea bass you catch</u>	<u>0-15</u>
<u>Number black sea bass you keep</u>	<u>0-15</u>
<u>Probabilities (# of black sea bass kept fish)</u>	<u>1.0 (e.g. deterministic)</u>
<u>Trip length (hours)</u>	<u>2-9</u>
<u>Trip mode</u>	<u>Shore, private boat, charter</u>
<u>Total trip cost (\$)</u>	<u>20-300</u>

Based on the lessons learned from previous surveys, the CE questions in NARFS IV will include: (1) the explicit introduction of risk uncertainty in the number of fish anglers are allowed to keep, which is displayed using pie charts describing each possible outcome and its associated probability (e.g. 10% probably of keeping zero summer flounder, 30% of keeping one summer flounder, 60% of keeping two); and (2) the possibility that these probabilities may themselves not be known, a fact that is conveyed again through pie charts, but this time by presenting probabilities for the union of outcomes (e.g. the probability of 1 or 2 kept summer flounder is 2/3). These and alternative strategies for conveying risk uncertainty were tested and discussed with focus group participants held for NARFS II. The focus group participants found that the pie-chart approach for capturing catch uncertainty was far more realistic than the design employed in the first NARFS in which catch outcomes were predetermined and deterministic.

Section C: Saltwater Fishing Trip Features

This one-question section will obtain additional information regarding respondents' decisions making process when answering the questions in Section B. Specifically, the question asks respondents to indicate which features of the fishing trip options (number of fish that could be kept and must be released, trip cost, and trip length), if any, did not factor into the choices they made. Obtaining and incorporating this type of information in the behavioral model may increase the statistical efficiency of the ensuing parameter estimates (Alemu et al. 2013).

Section D: About You and Your Household

Section D asks a series of demographic questions. These questions will gather information on age, gender, education, and income. Used as conditioning variables, this information may improve estimation of the economic model. Additionally, we can use this information to assess relative sample representativeness by comparing the characteristics of our sample to the characteristics of the population of recreational anglers at large, which can be found in NOAA-sponsored nationwide angler expenditure reports.

The Northeast Fisheries Science Centers will retain control over the information collected by this survey effort and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to question A10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. 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. 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.

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.

The survey instrument will be administered online and by mail. Potential respondents will be randomly drawn from saltwater recreational fishing license frames along the Atlantic coast from Massachusetts to North Carolina. Individuals selected will receive a mail to web-push survey invitation. Those that fail to complete the web-survey will receive mail/email reminders that include a web-link to the survey. A final mail survey will be sent to nonresponders.

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 conferred with state officials in the nine Atlantic coastal states where this survey will be conducted and they could not identify any existing or planned duplicative survey efforts. Additionally, there are no NMFS-led or NMFS-sponsored recreational fishing surveys planned for 2025 in these states.

The NARFS IV will contain a series of discrete choice experiment (DCE) questions, each of which presents respondents with two or more hypothetical, multi-attribute alternatives and asks respondents to choose or rank their most preferred alternative. Each alternative is comprised of a combination of attribute levels, the ranges of which are carefully selected to fulfill policy-relevant research objectives. Responses to DCE questions can be used to evaluate choice behavior, preferences, and WTP values for marginal changes in attribute levels (Louviere et al. 2000)

Several studies have employed a discrete choice experiment (DCE) to evaluate angler preferences for different aspects of the recreational fishing experience. Because they cover a wide range of species and fishery-specific research objectives, these studies differ in terms of the attributes used to explain angler preferences. In general, the attributes of interest to fisheries economists typically include catch or harvest rates and regulations. Angler preferences for marginal changes in catch and regulations have been estimated jointly for summer flounder in

the Northeast (Massey et al. 2006; Hicks 2002), trout and grayling in Norway (Aas et al. 2000), paddlefish in Oklahoma (Cha and Melstrom 2018), trout in Michigan (Knoche and Lupi 2016), and pacific halibut and salmon in Alaska (Lew and Larson 2012; Lew and Seung 2010). In addition to catch rates and regulations, other studies have evaluated non-consumptive aspects of recreational fishing, such as hooking and losing, or seeing a target species (Goldsmith et al. 2018; Duffield et al. 2012). Lew and Larson (2015) exclude catch attributes from the utility function and estimate Alaskan charter boat angler preferences and willingness-to-pay for alternative bag and size limit restrictions. Like the proposed NARFS IV, some studies have examined the interface between recreational catch and regulations by estimating the nonmarket value of fish that may be kept and of those which must be released. These studies consistently find that the recreational value of keeping fish is higher than that of releasing fish for a variety of species (Atlantic cod, haddock, and pollock: Lee et al. 2017; Pacific halibut, Chinook salmon, and coho salmon: Lew and Larson 2012; rockfish along the U.S. west coast: Anderson and Lee 2013; Anderson et al. 2013; groupers, red snapper, dolphinfish, and king mackerel along the U.S. southeast coast: Carter and Liese 2012).

As noted previously, recreational summer flounder, black sea bass, and scup angler preferences were evaluated from the data collected in NARFS II. However, as our response to question A1 indicates, using new data collected by the proposed NARFS IV will lead to more accurate predictions of the effect of regulatory changes on angler behavior.

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

The collection of information does not involve small businesses or small entities.

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

This survey effort will collect all of the information needed to develop economic models of recreational saltwater fishing for summer flounder, black sea bass, and scup. This research will provide scientific and management support to NMFS' Northeast Fisheries Science Center, NMFS' Greater Atlantic Regional Fisheries Office, the MAFMC, and the ASMFC. Not conducting the information collection will limit these agencies' ability to account for anglers' behavioral responses to regulatory changes and consequent impacts to angler welfare, thus limiting the ability of these agencies to manage fisheries consistent with federal and state law.

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

- requiring respondents to report information to the agency more often than quarterly;

The NARFS IV will be a cross-sectional volunteer survey asking anglers to respond once

to a single questionnaire.

- requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;

Anglers receiving the NARFS IV will be asked to fill out a multiple-choice questionnaire with no required written responses.

- requiring respondents to submit more than an original and two copies of any document;

The NARFS IV will be a cross-sectional volunteer survey asking anglers to respond once to a single questionnaire.

- requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;

Respondents to the NARFS IV will not be asked to retain any records of any kind.

- in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;

A stratified random sampling design will be strictly adhered to so that the results can be generalized to the population of summer flounder and black sea bass anglers in the North Atlantic.

- requiring the use of a statistical data classification that has not been reviewed and approved by OMB;

The probability-based sampling design we propose to employ for the NARFS IV is shown in this Supporting Statement.

- that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or

The NARFS IV will collect voluntary information on anglers' preferences for summer flounder, black sea bass, and scup. No pledge of confidentiality will be required.

- requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

The NARFS IV will collect voluntary information on anglers' preferences for summer flounder. No respondents will be asked to divulge proprietary trade secrets.

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.

A Federal Register Notice published on [March 21, 2022 \(87 FR 15918\)](#) solicited public comments. One comment was received but found to be non-substantive and outside the scope of this collection.

We have also consulted with state officials at the nine Atlantic coast states regarding the data we are collecting to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. They could not identify any existing or planned duplicative survey efforts. No other comments were received.

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

As a result of the incentive research conducted as part of the original NARFS, a \$2 incentive will be included in 4,000 mail survey invitations to maximize survey participation for NARFS IV and mitigate survey nonresponse bias by attracting participation from those who otherwise might not respond to the survey. As part of OMB's "Terms of Clearance" for the original NARFS ICR, "a copy of the survey results, including the results pertaining to response rates with and without the incentive payment" was requested by OMB. A copy of the final survey report, completed by the contractor NMFS hired to conduct the NARFS on NMFS behalf, was forwarded to OMB by NOAA's PRA Officer on May 7, 2020 (North Atlantic Recreational Fishing Survey Report 2020). The NARFS I survey report provides considerable detail about survey sampling, survey implementation, survey outcomes, an assessment of the effects of the incentive (\$2) on survey response rates, and recommendations for future NMFS surveys of recreational anglers.

In terms of the NARFS I incentive experiment, the findings aligned with previous research on small monetary prepaid incentives, as sampled anglers who received the \$2 incentive condition were significantly more likely to respond to the questionnaire than respondents that did not receive the incentive (38.46% versus 25.31% respectively; chi-square = 56.45, $p < 0.001$). Thus, the NARFS I final survey report recommended that future NMFS sponsored surveys of recreational anglers include a small monetary prepaid incentive to increase survey response and mitigate survey nonresponse bias. We followed this recommendation for the NARFS II survey and will be including a \$2 incentive when we conduct NARFS III survey later this year.

Also relevant to the proposed NARFS IV are the results of a pilot test of the West Coast Saltwater Fishing Survey (WCSFS) (ICF 2018; OMB Control No. 0648-0750). Anglers in California, Oregon, and Washington who had saltwater fished in the last 12 months constituted the target population for the WCSFS. A random sample of 4,000 records, stratified by four regions (Northern California, Southern California, Oregon, and Washington) was drawn for the pilot test. The 4,000 sampled anglers were randomly assigned to one of three incentive levels (no incentive, \$2, or \$5) mailed with the first contact.

Each level of incentive significantly led to additional screener returns (Figure 1). The return rate for the \$0 incentive amount was 11%. Adding \$2 increased the return rate by 14 percentage points to 25% ($z = -9.692$; $p < 0.001$). Adding \$3 more (\$2 v. \$5) increased completion by 4 percentage points more to 29% ($z = -2.101$, $p = 0.036$ for the comparison between \$2 and \$5). The finding further warrants including a \$2 incentive in all of the mail correspondences during the NARFS IV sampling procedure, We discuss this in detail in our response to question B3.

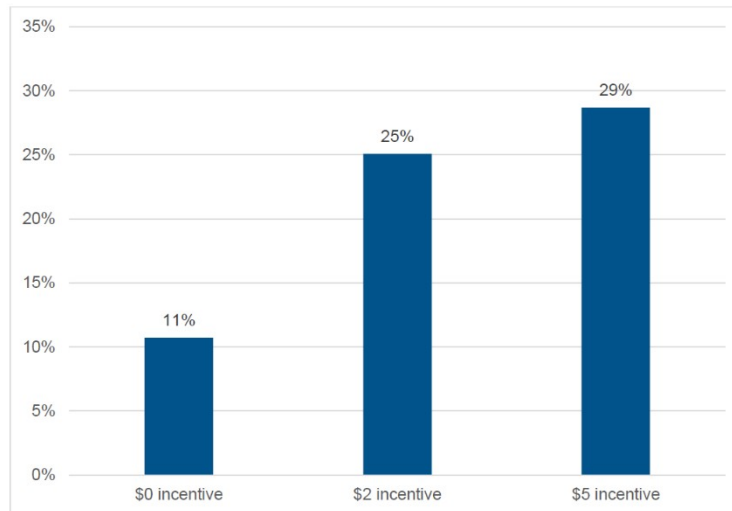


Figure 1. The Effect of Incentive on Screener Completion (ICF 2018)

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.

Our sample frame will be drawn by an outside contractor from the 2024 recreational fishing license/registry databases maintained by the nine Atlantic coast states between Massachusetts and North Carolina. Prior to receiving these license databases, our survey administration contractor will provide a signed agreement of access and a confidentiality agreement. The information in the license database and sample frame is covered under the Privacy Act System of Records COMMERCE/NOAA-11, Contact Information for Members of the Public Requesting and Providing Information Related to NOAA's Mission. To support the anonymity of this research, no participant names will be included on the survey document. Participant names will be tracked in a separate database to code participants for protection during data analysis, confirm receipt of a survey from each individual, and avoid duplication of responses. The NARFS IV will contain written text informing participants of the confidential and voluntary nature of their response.

Prior to providing deliverables, the agency contracted by the NEFSC to conduct the NARFS IV

will delete from the data all personal information such as name, street address, and phone number such that the NEFSC cannot link this information to any individual.

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 no single individual may be identified. In addition to the confidentiality protection measures, survey participants are provided the option to skip questions of concern and stop their participation in the survey at any time with no consequence to themselves. Finally, in the event of a Freedom of Information Act (FOIA) request, we will protect confidentiality to the extent possible under Exemption 4 of the FOIA.

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.

The NARFS IV contains a question that solicit respondents' income, which may be considered sensitive information for some people. The NEFSC may use this information in two ways: first, by incorporating it into the economic model to control for variation in income that may affect angler preferences, as is common in estimating economic demand functions, and (2) to assess relative sample representativeness by comparing the characteristics of our sample to the characteristics of the population of recreational anglers at large, which can be found in NOAA-sponsored nationwide angler expenditure reports.

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

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

The annual burden of this data collection is estimated to be 515 total responses, 99 hours, and \$3,117 total annual wage burden costs.

Burden estimates are calculated by multiplying the estimated time to complete each contact by the number of estimated contacts of each type. See our response to question B1 for the calculations used to estimate the number of total responses (1,173 eligible anglers + 371 ineligible anglers = 1,544 total responses). All survey responses are expected within the first year of the three-year information request, and taking an average over three years results in 515 responses. Burden hours estimated to complete the survey were derived from the NARFS II survey results.¹ Eligible anglers averaged 14 minutes to complete the survey and ineligible anglers about 4 minutes. Total burden hours for eligible anglers is estimated to be 1,173 anglers × 0.233 hours/angler = 273 hours. Total burden hours for ineligible anglers is estimated to be 371 anglers × 0.066 hours/angler = 25 hours. This yields a total burden of 298 hours, or 99 hours annually over the three-year information request.

While NMFS periodically collects household income-level data from saltwater anglers, personal income-level data for saltwater anglers has not been collected since 2013 (Brinson and Wallmo, 2013). Therefore, we use the May 2023 national BLS' average hourly wage of \$31.48 for "All Occupations" as a proxy for the hourly wage rate of our survey respondents.² The resulting total wage burden costs are then estimated to be \$9,381 (298 burden hours x \$31.48 per hour), or \$3,127 annually over the three-year information request. These results are summarized in Table 2.

¹ The NARFS III survey has yet to be conducted at the time of this writing. The NARFS III survey is scheduled to take place during the final months of 2024. Thus, we use the realized response times/rates from NARFS II as a proxy for the NARFS IV survey.

² May 2023 National Occupation Employment and Wage Estimates United States, U.S. Bureau of Labor Statistics, Occupation Title: All Occupations (https://www.bls.gov/oes/current/oes_nat.htm#00-0000).

Table 2. NARFS IV Estimated Responses and Burden Hours

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) (f)	Total Annual Wage Burden Costs (g) = (e) x (f)
NARFS-III		442	1	442	0.1312217	58	31.48	\$1,826
NARFS-III	Completion of mail/web surveys by an eligible angler	172	1	172	0.233	40.08	31.48	\$1,262
NARFS-III	Completion of mail/web surveys by an ineligible angler	270	1	270	0.066	17.82	31.48	\$561
NARFS IV		515	1	515	0.193	99	31.48	3,117
NARFS IV	Completion of mail/web surveys by an eligible angler	391	1	391	0.233	91	31.48	2,865
NARFS IV	Completion of mail/web surveys by an ineligible angler	124	1	124	0.065	8	31.48	252
Totals				957		157		3,117

The mean hourly wage rate for All Occupations (00-0000) May 2023 was used since anglers could be from any occupation.

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).

There are no costs excluding the value of the burden hours in question A12. Mailed surveys will be accompanied by a postage-paid envelope.

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.

The NARFS will be administered and primarily analyzed by two outside contractors. The total costs to the federal government, over the three-year information request period, is \$302,828. These costs consist of \$145,000 to hire a contractor to administer the survey (includes the \$2 incentive, programming, printing, and postage) and \$89,500 to hire a second contractor to analyze the survey data, develop the behavioral models, and prepare reports outlining the methodology and results. Oversight and modeling assistance of one ZP-IV NOAA economist will also occur at a cost of \$68,328. We use hourly loaded wage rates to estimate the cost of a NOAA economist’s time, assuming an annual salary of \$165,000 and a 40% benefit load.

Average annual costs, over the three-year information request period, are shown in Table 3 below. The average annual cost of federal oversight and modeling assistance is estimated to be \$22,533 ($\$232,300/\text{year} \times 9.7\%$). The survey administration contractor is estimated to cost \$48,333 ($\$145,000 \div 3$) annually, and the contractor hired to conduct the modeling will cost \$29,833 ($89,500 \div 3$) annually. Overall, the annual federal government cost is \$100,699.

Table 3. NARFS IV Estimated Annualized Costs

Cost Descriptions	Grade/Step	Loaded Salary /Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight/Assistance	ZP-IV	\$232,300/yr	9.7		\$22,533
Other Federal Positions					
Contractor 1 Cost		\$48,333	100		\$48,333
Contractor 2 Cost		\$29,833	100		\$29,833
Travel					\$0
Other Costs:					
TOTAL					\$100,699

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

The burden increased as a result of re-adding the summer flounder, black sea bass, and scup survey (North Atlantic Recreational Fishing Survey IV). No other changes were made to this collection.

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.

Results of the economic models that use data collected by the NARFS IV may be reported for management purposes or in peer reviewed journals. Tabulations of responses to NARFS IV questions will be aggregated in order to maintain respondent confidentiality, as described in our answer to question A10.

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.

The agency plans to display the expiration date for OMB approval of the information collection on all instruments.

18. Explain each exception to the certification statement identified in “Certification for Paperwork Reduction Act Submissions.”

The agency certifies compliance with [5 CFR 1320.9](#) and the related provisions of [5 CFR 1320.8\(b\)\(3\)](#).

REFERENCES

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