

**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 revision and extension of a currently approved information collection and is sponsored by NOAA's Northeast Fisheries Science Center (NEFSC). The original 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 and black sea bass along the Atlantic coast from Massachusetts to North Carolina (North Atlantic Recreational Fishing Survey II). This current revision will re-add the original cod and haddock survey to this control number (North Atlantic Recreational Fishing Survey III).

The objective of this survey will be to update our understanding of how anglers who fish for Atlantic cod and haddock, respond to changes in management options and fishing regulations (e.g., bag limits, size limits, dates of open seasons, etc.) along the Atlantic coast from Maine to Massachusetts. The survey data will provide the information fisheries managers need to conduct updated and improved 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 have requested more species-specific socio-economic studies of recreational fishing that can be used in the analysis of fisheries policies. This survey will address that stated need for more species-specific studies.

The survey population consists of those anglers who fish in saltwater along the North Atlantic coast from Maine to Massachusetts and who possess a license to fish. A sample of anglers will be drawn from state fishing license frames. The survey will be conducted using both mail and email to contact anglers and invite them to take the survey online. Anglers not responding to the online survey may receive a paper survey in the mail.

**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 Atlantic cod and haddock. 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 needed to meet this research objective requires up-to-date fishing-related and socioeconomic data on users of these fisheries. To collect this essential information, the NEFSC seeks to implement the North Atlantic Recreational Fishing Survey III (NARFS III), a questionnaire directed toward recreational anglers who fish for Atlantic cod or haddock off the coasts of Maine, New Hampshire, and Massachusetts.

Data collected from NARFS III will be incorporated into a bioeconomic simulation model that is being used by the NEFSC and the New England Fisheries Management Council (NEFMC) to develop recreational fishing regulations for North Atlantic cod and haddock each fishing year (85 *Federal Register* 49602). Our response to question B2 provides an overview of the recreational demand model to be estimated using NARFS III data, and Lee et al. (2017) describes and illustrates how the demand model is integrated into the larger bioeconomic simulation model. Since 2013, the simulation model has been used to predict how proposed fishing regulations affect angler welfare, angler effort, and fishing mortality for the upcoming fishing year. The NEFMC, in turn, uses the model outputs to select management options that are predicted to have the highest probability of achieving target allowable catch limits for both species.

Since its inception as a component of the bioeconomic simulation model, the recreational demand model has utilized angler data from three previous cod and haddock surveys. The first was implemented in 2009, the second in 2014, and the third in 2019. As the results of these data collection efforts have direct policy implications, it is important to periodically update the survey data because angler preferences, or the population itself, can change over time or in response to an extreme event. One such extreme event occurred the year after the 2014 data collection effort when the recreational Gulf of Maine cod fishery underwent unprecedented management changes that, to this day, largely constrain the ability of recreational anglers to harvest GoM cod. This management regime has resulted in pre-2015 anglers altering their primary target species from cod to haddock and post-2015 anglers primarily harvesting haddock over cod. Carr-Harris and Steinback (forthcoming) found that the 2014 sample of cod and haddock anglers placed a higher value on keeping haddock relative to keeping cod, while the 2019 sample favored keeping cod over haddock. Because estimates of angler preferences for keeping and releasing cod and haddock form the basis for the bioeconomic model's predictions, collecting contemporary cod and haddock angler preference data is critical for accurately predicting the likelihood of management success across the range of policy alternatives that are proposed annually by the NEFMC.

Building upon our findings from the first three cod and haddock surveys, as well as the summer flounder and black survey (NARFS II), anglers' utility will be specified according to  $\alpha$ -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  $\alpha$ -Maxmin preferences evaluates a choice by considering the weighted average of the worst expected payoff and the best expected payoff with  $\alpha$  and  $1-\alpha$  being the two respective weights. The parameter  $\alpha$  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 three cod and haddock surveys 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 vastly improves 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 US.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 III 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 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 NEFMC then selects one of the modeled outcomes as the preferred alternative and forwards this recommendation to the NOAA Fisheries Regional Administrator for approval and implementation during the next fishing year. Use of the modeling approach by the NEFMC increases the likelihood that North Atlantic cod and haddock 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 cod or haddock fishery experience, which we define as those who have not gone recreational fishing

for cod or haddock in the last five years. Anglers that haven't fished for cod or haddock 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 Section D of 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 cod and haddock 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 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 Trip Preferences**

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 cod and haddock 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 III Survey Attributes and Levels**

<b>Attribute</b>	<b>Level range</b>
<u>Number of legal-sized cod caught</u>	<u>1-7</u>
<u>Number of undersized cod caught</u>	<u>0-5</u>
<u>Number of legal-sized haddock caught</u>	<u>1-25</u>
<u>Number of undersized haddock caught</u>	<u>0-5</u>
<u>Probabilities (of alternative # of cod kept fish)</u>	<u>0-1.0</u>
<u>Number haddock you catch</u>	<u>0-25</u>
<u>Number haddock you keep</u>	<u>0-25</u>
<u>Probabilities (# of haddock 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 the previous surveys, the CE questions in NARFS III will include: (1) the explicit introduction of risk uncertainty in the number of Atlantic cod 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 cod, 30% of keeping one cod, 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 cod is 2/3). These and alternative strategies for conveying risk uncertainty were tested and discussed with focus group participants held for NARFS II. The NARFS II focus group participants found that the pie-chart approach for capturing catch uncertainty was more realistic than the design employed for the first cod and haddock survey conducted under this control number (NARFS I), in which catch outcomes were predetermined and deterministic.

### Section C: Saltwater Fishing Trip Features

This one-question section will obtain additional information regarding respondents' decision 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 cod and haddock 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 in Maine, New Hampshire, and Massachusetts. 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 Maine, New Hampshire, and Massachusetts who have responsibilities for managing recreational saltwater fishing 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 2023 or 2024 in Maine, New Hampshire, and Massachusetts.

The NARFS III 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 III, 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 and Carr-Harris and Steinback forthcoming; 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 above, recreational cod and haddock angler preferences have been evaluated previously in Lee et al. (2017) and Carr-Harris and Steinback (forthcoming). However, as our response to question A1 indicated, using new data collected by the proposed NARFS III 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 North Atlantic cod and haddock. This research will provide scientific and management support to NMFS' Northeast Fisheries Science Center, NMFS' Greater Atlantic Regional Fisheries Office, and the NEFMC. 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 inconsistent with OMB guidelines.**

The NARFS III will be a cross-sectional volunteer survey asking anglers to respond once to a single questionnaire. Anglers receiving the NARFS III will be asked to fill out a multiple choice questionnaire within 30 days, but no written responses will be required.

**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 Monday, March 21, 2022 (87 FR 05948) solicited public comments. One comment was received but found to be non-substantive and outside the scope of this collection. We also consulted with personnel at the Maine Department of Marine Resources, New Hampshire Fish and Game, and Massachusetts Division of Marine Fisheries 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. No 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 first cod and haddock survey conducted under this control number (NARFS I), a \$2 incentive will be included in 4,000 mail survey invitations to maximize survey participation for NARFS III 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 first NARFS survey 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 NARFS I 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 of summer flounder and black sea bass anglers where we included a \$2 incentive to increase survey response rates.

Also relevant to the proposed NARFS III 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 III sampling procedure. We discuss this in detail in our response to question B3.



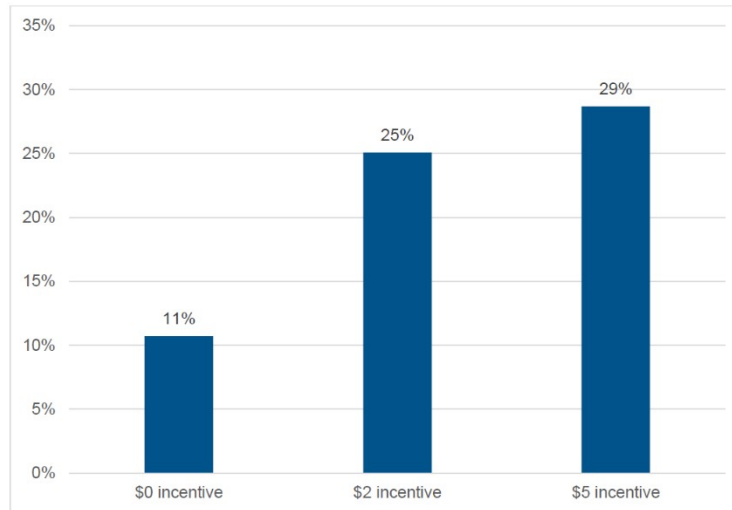


Figure 1. The Effect of Incentive on Screener Completion (ICF 2018)

**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 2022 recreational fishing license/registry databases maintained by the states of New York and New Jersey. 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 III 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 III 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 III contains a question that solicit respondents' income, which is 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 income 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.

The annual burden of this data collection, across the three-year information request, is estimated to be 442 total responses, 57.90 hours, and \$1,622 total annual wage burden costs.

See our response to Part B, Question 1 for the calculations used to estimate the number of total responses (516 eligible anglers + 810 ineligible anglers = 1,326 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 442 responses. Burden hours estimated to complete the survey were determined from the NARFS I survey response times. The NARFS I also collected data from cod and haddock anglers in Maine, New Hampshire, and Massachusetts. Eligible anglers averaged 14 minutes and ineligible anglers (those that did not fish for cod or haddock in the past five years) averaged 4 minutes to complete the survey. Total burden hours for eligible anglers is estimated to be 516 anglers × 0.233 hours/angler = 120.23 hours. Total burden hours for ineligible anglers is estimated to be 810 anglers × 0.066 hours/angler = 53.46 hours. This yields a total burden of 173.69 hours, or 57.90 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 are unavailable. Therefore, we use the May 2021 national BLS' average hourly wage of \$28.01 for "All Occupations" as a proxy for the hourly wage rate of our survey respondents. The resulting total wage burden costs are then estimated to be \$4,865 (173.69 burden hours x \$28.01 per hour), or \$1,622 annually over the three-year information request. These results are summarized in Table 2.

**Table 2. NARFS II 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		58	28.01	1,622
NARFS III	Completion of mail/web surveys by an eligible angler	172	1	172	0.233	40.08	28.01	1,123
NARFS III	Completion of mail/web surveys by an ineligible angler	270	1	270	0.066	17.82	28.01	499
<b>Totals</b>				<b>442</b>		<b>58</b>		<b>1,622</b>



**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 III 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 \$284,192. These costs consist of \$135,000 to hire a contractor to administer the survey (includes the \$2 incentive, programming, printing, and postage) and \$83,600 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 \$65,592. We use hourly loaded wage rates to estimate the cost of a NOAA economist’s time, assuming an annual salary of \$161,000 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 \$21,864 (\$225,400/year x 9.7%). The survey administration contractor is estimated to cost \$45,000 (\$135,000÷3) annually, and the contractor hired to conduct the modeling will cost \$27,867 (83,600÷3) annually. Overall, the annual federal government cost is \$94,731.

**Table 3. NARFS II Estimated Annualized Costs**

Cost Descriptions	Grade/Step	Loaded Salary /Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight/Assistance	ZP-IV	\$225,400/yr	9.7		\$21,864
Other Federal Positions					
Contractor 1 Cost		\$45,000	100		\$45,000
Contractor 2 Cost		\$27,867	100		27,867
Travel					\$0
Other Costs:					
<b>TOTAL</b>					<b>94,731</b>

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

Information Collection	Respondents		Responses		Burden Hours		Reason for change or adjustment
	Current Renewal / Revision	Previous Renewal / Revision	Current Renewal / Revision	Previous Renewal / Revision	Current Renewal / Revision	Previous Renewal / Revision	
NARFS III	4,000	4,000	442	442	58	102	Current renewal request is based upon realized survey completion time from previous cod and haddock survey (NARFS I) which was lower than anticipated.
<b>Total for Collection</b>	4,000	4,000	442	442	58	102	
<b>Difference</b>	0		0		-44		

Information Collection	Labor Costs		Miscellaneous Costs		Reason for change or adjustment
	Current	Previous	Current	Previous	
NARFS II	1,622	2,626	0	0	Updated annualized labor costs but total burden time decreased
<b>Total for Collection</b>	<b>\$1,622</b>	<b>\$2,626</b>	<b>0</b>	<b>0</b>	
<b>Difference</b>	<b>-1,004</b>		<b>0</b>		

**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 III may be reported for management purposes or in peer reviewed journals. Tabulations of responses to NARFS III questions will be aggregated in order to maintain respondent confidentiality, as described in our answer to question A10.

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

**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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