SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Marine Recreational Information Program (MRIP) Fishing Effort Survey
OMB Control No. 0648-0652

Abstract

This request is for a revision and extension of a currently approved information collection, to conduct the Fishing Effort Survey (FES) in Hawaii and the states along the Atlantic coast. The request includes revisions to conduct the FES monthly rather than bi-monthly, as well as test a sequential web-push survey design to evaluate data quality, timeliness of survey responses and survey costs. The One-Month Wave Study is being removed from this collection since the study has been completed.

Marine recreational anglers are surveyed to collect catch and effort data, fish biology data, and angler socioeconomic characteristics. These data are required to carry out provisions of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), as amended, regarding conservation and management of fishery resources.

Marine recreational fishing catch and effort data are collected through a combination of mail surveys, telephone surveys and on-site intercept surveys with recreational anglers. The Fishing Effort Survey (FES) is conducted by the NOAA Fisheries, Office of Science and Technology (OST). The FES is a self-administered, household mail survey that samples from a residential address frame to collect data on the number of recreational anglers and the number of recreational fishing trips. The survey estimates marine recreational fishing activity for all coastal states from Maine through Florida, as well as Hawaii.

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.

Collection of recreational fisheries catch and effort data fulfills statutory requirements of Section 303 of the Magnuson-Stevens Fishery Conservation and Management Act[1] (16 U.S.C. 1852 et. seq.) and to comply with Executive Order 12962[2] on Recreational Fisheries. Section 303 (a) of the Magnuson-Stevens Act specifies data and analyses to be included in Fishery Management Plans (FMPs), as well as pertinent data that shall be submitted to the Secretary of Commerce under the plan.

The Fishing Effort Survey (FES) is a cross-sectional, self-administered, household mail survey. The FES utilizes address-based samples (ABS) within coastal states to collect information about

[1] https://www.fisheries.noaa.gov/s3//dam-migration/msa-amended-2007.pdf

[2] https://www.govinfo.gov/content/pkg/WCPD-1995-06-12/pdf/WCPD-1995-06-12-Pg995-2.pdf

recent recreational saltwater fishing activity. The sample frame is derived from the United States Postal Service Computerized Delivery Sequence File (CDS). Because recreational saltwater fishing is a relatively rare activity, the ABS frame is supplemented by matching addresses on the CDS to lists of licensed saltwater anglers in each state. Augmenting the ABS sample frame with fishing license information creates additional strata (license matched and unmatched) and allows households with and without licensed anglers to be sampled at different rates. This is an efficient and economical approach for collecting recreational fishing effort information.

The FES has historically been administered bi-monthly, estimating fishing activity for two-month reference waves. In 2024, NOAA Fisheries tested a revised survey design that included monthly sampling and estimation and a modified questionnaire. The study concluded that the modified questionnaire reduces reporting error, and the revised design results in more timely and stable estimates of fishing activity (Andrews, 2025).

This information collection will fulfill statutory requirements of Section 401 of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act. Section 401 (g) requires that the Secretary of Commerce, "establish a program to improve the quality and accuracy of information generated by the Marine Recreational Fishery Statistics Survey". MSA further specifies that future surveys should, "target anglers registered or licensed at the State or Federal level to collect participation and effort data".

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 FES estimates marine recreational fishing effort (i.e., number of fishing days) for monthly reference periods. Recreational fishing catch and effort data are used on an ongoing basis by NOAA Fisheries, regional fishery management councils, interstate marine fisheries commissions and state natural resource agencies to develop, implement and monitor fishery management programs, per statutory requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Catch and effort statistics are fundamental for assessing the influence of fishing on any fish stock. Accurate estimates of the quantities taken, fishing effort, and both the seasonal and geographic distributions of catch and effort are required for the development of regional management policies and plans.

FES Weather and Outdoor Activity Survey [Revised]
This revision requests approval to implement the monthly FES design in Hawaii and the states along the Atlantic coast.

The FES utilizes the Weather and Outdoor Activity Survey instrument, which was thoroughly tested prior to survey implementation (Appendix 2). All respondent contact materials are provided in Appendix 1. Specific elements collected in the questionnaire include:

a) Questions about severe weather events, access to weather forecasts, visitation to coastal areas and participation in freshwater fishing (questions 1-5, Appendix 1) are included to engage survey recipients and encourage response from the household population,

including both fishing and non-fishing households. Because the FES is a household survey, obtaining representative responses from both fishing and non-fishing households is essential for producing unbiased estimates. Questionnaire testing described in Appendix 2 demonstrated that including these questions in the survey instrument resulted in higher response rates overall, as well as within the portion of the household population that is less likely to participate in saltwater fishing.

b) Total number of household residents, the type of household telephone service, the type of household unit (rented or owned), and demographic information of household residents, including sex, age, race and/or ethnicity (questions 7-14, Appendix 1), are used to calculate post-survey weighting adjustments to ensure that weighted samples are representative of the household population.

   Research consistently demonstrates that survey response rates vary significantly across demographic and socioeconomic groups (Fricker and Tourangeau 2010). For example, younger individuals, residents of low-income households, and non-white populations typically exhibit lower response propensities, resulting in frequent underrepresentation in survey samples. If these differential response propensities are not identified and corrected – typically through nonresponse weighting adjustments - survey results will suffer from nonresponse bias. To address this, the FES includes demographic questions to identify potential nonresponse bias and adjust survey weights to mitigate the effects of bias.

c) Questions about fishing activity in the past 12 months and 2 individual months (questions 14-15) are used to screen for recent fishing activity, assist with recall, and estimate the number of private boat and shore fishing trips taken during the reference period.

FES 2027 Experiment [NEW]

Web-Push Study

Online data collection has the potential to significantly reduce data collection costs and increase the timeliness of data availability. In addition, online survey questionnaires are extremely flexible with respect to skip patterns and can include real-time data editing, such as logic and range checks, that improve the accuracy of survey responses. NOAA Fisheries previously tested a "web push" design in 2018-2019 that encouraged a web response before providing a paper questionnaire (Andrews, 2018). In that study the web-push design resulted in response rates 7-11 percentage points lower than the traditional mail survey design. Despite lower response rates, the study demonstrated the potential cost-savings associated with web-push designs, as 70% of respondents utilized the online instrument, requiring fewer survey mailings and resulting in an estimated cost savings of 15%. More recent studies (Patrick et al. 2020, Heimel et al. 2024) demonstrate that sequential web-push designs have begun to outperform paper mail surveys with respect to response rates, resulting in additional gains in cost efficiency.

We seek approval to complete a follow-up web-push study during the 2027-2029 FES administration. The study will be conducted in parallel to the FES in 3-4 states for 3 reference months with a total sample size of 25,000 addresses, resulting in an estimated 7,500 responses. The study will utilize FES sampling and estimation procedures and the survey materials developed for the 2018-2019 web-push study (Appendix 3). All collected data elements will be identical to the FES.

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 surveys will be conducted by mail. Survey responses will be automatically captured through optical character recognition (OCR), which ensures the accuracy and efficiency of data collection.

A "web push" design that encouraged response to the FES through an online instrument before providing a paper instrument was tested in 2018-2019. We are requesting approval to conduct a follow-up study to re-evaluate the web-push design.

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.

NOAA Fisheries collaborates with state natural resource agencies and regional interstate fisheries commissions on the Atlantic and Gulf coasts to ensure that recreational fisheries data collections are not duplicative. Every five years, the Fish and Wildlife Service (FWS) of the U.S. Department of the Interior conducts the National Survey of Fishing, Hunting and Wildlife-Associated Recreation (OMB Control No. 1018-0088). This survey collects minimal information about annual recreational saltwater fishing activity within the context of additional recreation activities and in recent years has not published state-level estimates of fishing activity. That survey does not provide the spatial or temporal resolution needed by managers of fishery resources to monitor and manage recreational fisheries landings.

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

No small businesses will be impacted by this revision. Individuals or households are the respondents.

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.

If the survey was not conducted or was conducted less frequently, NOAA Fisheries and state natural resource agencies would be unable to meet statutory, administrative, and other obligations to end overfishing of marine fishery resources. An ongoing survey of recreational anglers is essential for monitoring changing conditions in the fishery, including total fishing mortality, and supporting the evaluation of fishing regulations both within fishing seasons and among fishing years. Additionally, a continuous time series of data is fundamental to scientifically assessing the status of fish stocks.

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

The FES does not utilize the OMB-preferred race and ethnicity question format (as outlined in SPD 15) due to significant space constraints within the survey instrument. The questionnaire is printed on a single 11 x 18" sheet that folds into a two-page booklet—a design validated through cognitive interviews and multiple pilot studies to minimize respondent burden and limit postage and scanning costs. The current layout is optimized for navigation, maintaining a logical flow that limits individual household member questions to a single column. Incorporating the OMB-preferred demographic format would exceed this single-column limit, necessitating either additional pages (increasing federal costs) or a reduction in the number of household members captured per form. Such a change would not only diminish the survey's ability to characterize total fishing activity but would likely increase unit and item nonresponse by complicating the respondent's path through the booklet. With respect to the FES, the abbreviated question format provides sufficient detail to support the intent of the question, which is to calculate post-survey weighting adjustments and evaluate bias.

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 April 2, 2026 (88 FR 21628) solicited public comment on this revision. No comments were received.

MRIP is a collaborative effort among government agencies, independent scientists, recreational fishing groups and conservation organizations to ensure scientifically rigorous collection of appropriate information that meets manager and stakeholder needs. MRIP staff members maintain regular communication with customers, through workshops, workgroup meetings and one-on-one consultations. Most recently, NOAA consulted with the Atlantic Coastal Cooperative Statistics Program Recreational Technical Committee (March 2026), the South Atlantic Fishery Management Council (December 2025), the Mid Atlantic Fishery Management Council (March 2026), and The Gulf of Mexico Fishery Management Council (February 2026). MRIP staff provided detailed overviews of the FES design, responded to questions from committee members and solicited feedback on survey designs and estimates.

Additionally, MRIP Regional Implementation Teams (RITs), representing NOAA Fisheries regional offices and science centers, state natural resource agencies and interstate marine fisheries commissions, develop Regional Implementation Plans and convene annually to identify specific needs for recreational fisheries statistics, including needs for survey coverage, resolution, precision and timeliness of survey estimates. The Implementation Teams most recently met in April 2026. Regional priorities for fisheries statistics, as determined by the RITs are documented on the MRIP website[3].

Finally, NOAA staff conducted virtual regional listening sessions in 2024-2025 with state and regional partners, data users and members of the recreational fishing community to identify national and regional data collection needs and priorities.

Recent consultations with stakeholders and partners resulted in the following comments and priorities:

- Seek increased state and federal resources to maintain/enhance survey sampling levels for all ongoing recreational fishing surveys.
- Improve the timeliness of MRIP recreational catch and harvest estimates.
- Continue moving forward with Fishing Effort Survey improvements in a transparent way.
- Shift to publication of monthly estimates instead of bimonthly to support state and federal management needs.

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

The initial FES mailing includes a $2.00 cash incentive. The benefits of prepaid cash incentives on improving survey response rates are well documented in the survey methodology literature. Dillman et al. (2014) describe small, prepaid cash incentives as a "token of appreciation" that establishes a social exchange, encourages response, and draws immediate attention to the survey request. Beyond simply improving response rates, incentives serve as a critical tool for reducing nonresponse bias by encouraging participation from individuals with lower topic interest—such as those who fish infrequently or not at all—who might otherwise ignore a fishing-related inquiry (Groves et al., 2006).

Extensive research, including a meta-analysis of 38 experimental studies by Church (1993), found that cash incentives (ranging from $0.01 to $5.00) increased response rates by an average of 19.1% over control groups. More recent analyses by Singer and Ye (2013) and Mercer et al. (2015) confirm that incentives increase response across all modes, and that prepaid cash incentives are significantly more effective than promised, conditional, or non-monetary incentives.

The FES design was rigorously tested in 2012–2013 (OMB Control No. 0648-0652) and included an experiment comparing $0.00, $1.00, $2.00, and $5.00 incentive treatments. As shown in Table 1, response rates increased significantly with the incentive amounts. While the

[3] https://www.fisheries.noaa.gov/recreational-fishing-data/about-marine-recreational-information-program#regional-priorities

$5.00 incentive yielded the highest raw response, the $1.00 and $2.00 treatments were the most economically efficient. Notably, including a $1.00 or $2.00 incentive lowered the cost per completed survey by approximately 20% relative to the non-incentive control group.

We selected the $2.00 incentive because it provides a significantly higher response rate than the $1.00 version (36.0% vs. 32.2%) while maintaining near-peak cost efficiency ($0.80 vs. $0.78 relative cost). This balance maximizes the total number of completed surveys—improving the precision of fishing effort estimates—while minimizing the overall federal cost per response.

Table 1. Response rates, number of completed surveys and relative data collection costs for each incentive treatment tested during FES testing.

Incentive Amount	Response Rate	Completed Surveys	Relative Cost per Complete[4]
$0.00	22.6	2,154	1
$1.00	32.2	3,065	0.78
$2.00	36.0	3,415	0.80
$5.00	40.8	3,807	1.15

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 system of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

No personally identifiable information will be collected through the survey. Responses will only be associated with a unique, randomly assigned identification code. Any public release of survey data will be without identification as to its source or in aggregate statistical form. All survey data will be stored on secured, password protected servers, and all transfers of survey data will utilize secure file transfer protocols.

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.

No sensitive questions are asked.

[4] Data collection costs include costs associated with printing survey materials, assembling survey packets, postage, receipting and processing completed surveys, and incentives. The relative cost per complete survey set the $0.00 incentive's cost to 1; the other incentives' costs were calculated relative to the $0.00 incentive's cost. These are relative values and not true costs.

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

The estimated annual response burden per survey activity and the total estimated annual response burden are shown in Table 2. The expected number of respondents and responses are based upon anticipated sample sizes and historical FES response rates. The average time per response is estimated to be 5 minutes (0.08333 hours). The hourly rate of $33.54 is based upon the average wages for all civilian workers across all occupations from the Bureau of Labor Statistics May 2025 Occupational Outlook Handbook (https://data.bls.gov/oes/#/industry/000000). There are no recordkeeping requirements associated with Fishing Effort Survey. A total of 9,374 annual burden hours is anticipated, resulting in an annual cost to respondents of approximately $314,404.

Table 2. Estimated annual response burden

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)
Weather and Outdoor Activity Survey (FES)	All Occupations	110,000	1	110,000	0.08333	9,166	$33.54	$307,428
Web-Push Study	All Occupations	2,500	1	2,500	0.08333	208	$33.54	$6,976
Totals				**112,500**		**9,374**		**$314,404**

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 capital/start-up or ongoing operation/maintenance costs associated with this information collection.

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 estimated annual cost to the Federal government is $**3,635,861**: $3,400,000 in contractor data collection costs and $235,861 in Federal staff salaries.

Federal staff are responsible for oversight of survey administration tasks, including evaluating survey data and reports for accuracy and consistency with data collection requirements, developing data editing and quality control procedures and completing data editing tasks, producing survey estimates, drafting reports describing data collection activities, completing statistical evaluations and documenting results of pilot tests, communicating with the data collection contractor and completing contract procurement activities, including drafting requirements documents, evaluating proposals and processing invoices.

The Commerce Alternative Personnel System (CAPS) pay tables[5] for the Rest of U.S. locality rates were used to determine the base salary. The Rest of U.S. locality was used since NOAA staff are geographically dispersed. The upper bound for Interval 3 of each Pay Band was used as the base salary and a multiplier of 1.5 was used to calculate the loaded salary.

Data collection contractor costs include labor costs to manage data collection activities, including coordinating sampling, developing survey weights, statistical programming, managing printing and assembly of survey materials and completing quality control and validation procedures to ensure that survey materials and survey data are accurate. Non-labor costs include postage, costs associated with printing survey materials, and incentives.

Cost Descriptions	Grade/Step	Loaded Salary and/or Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight					
Survey Statistician	ZP-IV	$174,543	100		$174,543
Survey Statistician	ZP-IV	$245,271	25		$61,318
Contractor Cost					
Data collection costs		**$3,400,000**			$3,400,000

[5] https://www.commerce.gov/sites/default/files/2026-01/CAPS%20Standard%20Pay%20Tables%202026.pdf

Labor		$510,000			
Non-Labor		$2,890,000			
Travel					
Other Costs:					
TOTAL					**$3,635,861**

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	
Weather and Outdoor Activity Survey (FES)	110,000	110,000	110,000	110,000	9,166	9,167	No change.
Web-Push Study	2,500	0	2,500	0	208	0	New collection.
One-Month Wave Study	0	73,333	0	73,333	0	6,111	Removed from Collection as this study has been completed.
Total for Collection	**112,500**	**183,333**	**112,500**	**183,333**	**9,374**	**15,278**	
Difference	**-70,833**		**-70,833**		**-5,904**		

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.

NOAA Fisheries will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. The data collected by the FES will be subject to the quality control measures and pre-dissemination review pursuant to Section 515 of Public Law 106-554.

All data collected and analyzed will be included in table format available on the web page of the Fisheries Statistics Division, Office of Science and Technology, National Marine Fisheries Service. The Web site address is http://www.st.nmfs.noaa.gov/recreational-fisheries/index. Data from this survey may support research and analyses to be presented at appropriate professional meetings (e.g., American Fisheries Society, Joint Statistical Meetings) and may be submitted for publication in appropriate statistical or fisheries peer-reviewed journals. Summary marine recreational fishery catch statistics produced using data from this survey are included in the annual publication by NOAA Fisheries, Fisheries of the United States.

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

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

Andrews, W.R. (2018). Testing a Web-Push Design for Estimating Recreational Fishing Effort. https://apps-st.fisheries.noaa.gov/pims/main/public?method=DOWNLOAD_FR_DATA&record_id=1856

Andrews, W.R. (2025). A Test of a Revised Design of the NOAA Fisheries Fishing Effort Survey. https://www.fisheries.noaa.gov/resource/document/test-revised-fishing-effort-survey-2025-study-report

Andrews, W.R., J.M. Brick and N.A. Mathiowetz (2010). Pilot Test of Dual Frame Two-Phase Mail Survey of anglers in North Carolina. https://apps-st.fisheries.noaa.gov/pims/main/public?method=DOWNLOAD_FR_PDF&record_id=455.

Andrews, W.R., J.M. Brick and N.A. Mathiowetz (2013). Continued Development and Testing of Dual Frame Surveys of Fishing Effort (Testing a Dual-Frame, Mixed Mode Survey Design). https://apps-st.fisheries.noaa.gov/pims/main/public?method=DOWNLOAD_FR_PDF&record_id=931.

Andrews, W.R., J.M. Brick, N.A. Mathiowetz (2014). Development and Testing of Recreational Fishing Effort Surveys (Testing a Mail Survey Design). https://apps-st.fisheries.noaa.gov/pims/main/public?method=DOWNLOAD_FR_PDF&record_id=1179

Brick, J.M., D. Williams, and J.M. Montaquila (2011). Address-Based Sampling for Subpopulation Surveys. Public Opinion Quarterly 75: 409-428.

Brick, J.M., W.R. Andrews and N.A. Mathiowetz (2012a). A Comparison of Recreational Fishing Effort Survey Designs https://apps-st.fisheries.noaa.gov/pims/main/public?method=DOWNLOAD_FR_PDF&record_id=462.

Brick, J.M., W.R. Andrews, P.D. Brick, H. King, N.A. Mathiowetz, and L. Stokes (2012b). Methods for improving response rates in two-phase mail surveys. Survey Practice 5(3). Available: https://www.surveypractice.org/article/3093-methods-for-improving-response-rates-in-two-phase-mail-surveys.

Brick, J.M., W.R. Andrews and N.M. Mathiowetz (2016). Single-phase Mail Survey Design for Rare Population Subgroups. Field Methods 28(4): 381-395.

Church, A.H. (1993). Estimating the Effect of Incentives on Mail Survey Response Rates: A Meta-Analysis. Public Opinion Quarterly 57:62–79.

Dillman, D.A., J.D. Smyth, and L.M. Christian (2009). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. New York: Wiley and Sons.

Fricker, S., and R. Tourangeau (2010). Examining the Relationship Between Nonresponse Propensity and Data Quality in Two National Household Surveys. Public Opinion Quarterly, 74(5): 934–95.

Groves, R., M. Couper, S. Presser, E. Singer, R. Tourangeau, G. Acosta, and L. Nelson (2006). Experiments in Producing Nonresponse Bias. Public Opinion Quarterly 70: 720–736.

Heimel, S.K., R.L. Medway, and R.T. Horwitz (2024). Should We Offer Web, Paper, or Both? A Comparison of Single- and Mixed-Response Mode Treatments in a Mail Survey. Journal of Survey Statistics and Methodology 12: 593-623.

Mercer, A., A. Caporaso, D. Cantor, and R. Townsend. (2015). How Much Gets you How Much? Monetary Incentives and Response Rates in Household Surveys. Public Opinion Quarterly 71(1): 105-129.

National Academies of Sciences, Engineering, and Medicine (2021). Data and Management Strategies for Recreational Fisheries with Annual Catch Limits. Retrieved from https://www.nationalacademies.org/our-work/dataand-management-strategies-for-recreational-fisheries-with-annual-catchlimits.

National Research Council (2006). Review of recreational fisheries survey methods. Retrieved from: https://www.nap.edu/catalog/11616/review-ofrecreational-fisheries-survey-methods.

Patrick, M.E., M.P. Couper, M.J. Parks, V. Laetz, and J.E. Schulenberg (2020). Comparison of a Web-Push Survey Research Protocol with a Mailed Paper and Pencil Protocol in the Monitoring the Future Panel Survey. Addiction 116: 191-199.

Singer, E., and C. Ye (2013). The Use and Effects of Incentives in Surveys. The Annals of the American Academy of Political and Social Science 645: 112-141.

Trussell, N. and P.J. Lavrakas (2004). The influence of incremental increases in token cash incentives on mail survey response: Is there an optimal amount? Public Opinion Quarterly 68: 349-367.