

**SUPPORTING STATEMENT**  
**U.S. Department of Commerce**  
**National Oceanic & Atmospheric Administration**  
**Marine Fisheries Advisory Committee Survey on Marine Mammal Deterrents**  
**OMB Control No. 0648-XXXX**

**Abstract**

This is a request for a new collection of information.

The summary of a series of marine mammal deterrent workshops by NOAA Fisheries states, “under a recent proposed rule, NOAA Fisheries developed guidelines for deterring marine mammals under its jurisdiction, and recommended specific measures for species listed under the Endangered Species Act (ESA). The guidelines focus on how to safely use deterrents to avoid injuring or killing marine mammals. However, evaluation of the efficacy of each deterrent was beyond the scope of the rulemaking process, and available data on deterrent effectiveness is lacking.”

Consequently, the Protected Resources Subcommittee of the Marine Fisheries Advisory Committee (MAFAC) was asked to help NMFS narrow down the scope for assessing the effectiveness of the marine mammal deterrents listed in the proposed guidelines and create a decision making process to prioritize areas to begin characterizing the effectiveness. To achieve this, the Subcommittee plans to rank relative risk of expected losses from interactions with marine mammals by various user groups nationwide, which will identify where the biggest impacts of marine mammals are likely to be occurring. The information for the relative risk and expected loss analysis will be generated through a survey of five user groups (commercial fishermen, recreational fishermen, tribal fishermen (inclusive of tribal nations and other coastal indigenous populations), aquaculture operators, and waterfront property managers (e.g. harbor masters and harbor facility assistants).

**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 [proposed guidelines](#) by NOAA Fisheries authorized under the Marine Mammal Protection Act (MMPA) §101(a)(4)(B), focus on how different users can safely deter marine mammals from damaging fishing gear/catch or private property without causing serious injury or death to the marine mammals. However, determining effectiveness of deterrents was outside the scope of the rulemaking process, and there is a concern identified in several public comments to the agency about the lack of available data on deterrent effectiveness. In April, May, and June 2022, the agency conducted listening sessions as part of two regional and one national Marine Mammal Deterrent Workshop with commercial fishermen to gather information about the types of deterrents they currently employ. These listening sessions were helpful in obtaining some information from a subset of one user group affected by the proposed guidelines. However, several other user groups have yet to be consulted including the following: recreational fisheries, aquaculture, and waterfront property managers. We also plan to solicit information from tribal nations. To adequately and accurately prioritize which deterrents should be tested first, we need information about the nature of marine mammal impacts on fishing gear/catch and private property to all specified user groups. Required information to create the relative risk assessment of expected losses that will help prioritize testing include time loss, economic loss, and damage to or loss of fishing gear, aquaculture equipment, property, bait, target species, and aquaculture products.

**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.**

NOAA Fisheries will use the outputs of the relative risk assessment to prioritize which marine mammal deterrents should be tested for effectiveness, if funding becomes available. This will focus limited resources on the deterrents that, if effective, will have the greatest impact on reducing losses, and increase the accuracy and efficiency of the proposed guidelines by eliminating any deterrents that are ineffective. By using a deterrent that is ineffective, users may not be minimizing or eliminating interactions with marine mammals in their specific situations, wasting time and resources. We plan to collect the following information from respondents:

- Background information:
  - o Type of respondent (commercial, recreational, tribal fisherman, aquaculture owner/operator, waterfront property manager)
  - o NOAA Fisheries Region
  - o Season
  - o Gear and fishing or aquaculture method/system (when appropriate)
  - o Depth
- Marine mammal encounters:
  - o Frequency
  - o Species or taxonomic group
  - o Season
- Estimated losses due to marine mammal encounters:
  - o Time
  - o Bait
  - o Target catch
  - o Damage
- Deterrents used:
  - o Types
  - o Success
  - o New ideas

Respondents will be from the following user groups: commercial, tribal, and recreational fisheries, waterfront property managers, and aquaculture operators. We will distribute the survey electronically. The web-based survey will be conducted using Google Forms (electronically over the internet). Electronic data collection reduces costs of administering surveys and broadens the pool of potential survey respondents.. The MAFAC will use information from the survey to develop a relative risk assessment to present to the NOAA Fisheries Office of Protected Resources staff regarding which deterrents should be prioritized for effectiveness testing. The information will be shared with the respondents, the public, and other science and research partners.

An online survey will be the only modality for respondents. In 2022, NOAA Fisheries conducted three workshops for commercial fishermen to gather some preliminary, background information. NMFS sent the survey to less than 9 people per user group, and received feedback from only 8 total respondents (all user groups combined). Feedback verified that the survey only took respondents 5 minutes and pointed out some mistakes in the labeling of the regions, which were corrected. The weblink to one single survey will be distributed over the course of a three- to four-month period. In addition to NOAA Fisheries, the MAFAC plans to share this information with the U.S. Fish and Wildlife Service, the U.S.

Marine Mammal Commission, and other NOAA line offices and partners. We will distribute and solicit responses to only one survey. This is not an ongoing collection.

Ultimately, analyses of the survey results will help the MAFAC provide to NOAA Fisheries a logical decision making process to decide which deterrents to test for effectiveness and where. This is critically important, because the Agency has not provided funding to test all possible deterrents. Which deterrents to test must be prioritized. For example, the Agency may choose to test deterrent types with the greatest expected losses to the user (e.g., loss of bait, time, property damage, target spp., etc.) to determine which, if any, of the deterrents can mitigate those losses. Survey results also may reveal some effective solutions already tested by a group of users and it might help identify the most effective deterrents for all user groups to meet their needs.

**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 MAFAC will employ electronic technology to conduct and analyze the survey through the open access and easy-to-use Google Forms software. The link to the form can be shared widely by announcement on the NOAA MAFAC website, through e-newsletters, email, and to the wide spectrum of NOAA partners and constituents. This electronic format supports the Government Paperwork Reduction Act. Using Google Forms allows the survey to readily incorporate skip logic, so that each group of users sees only their group's questions. This also allows individuals who may fit into multiple categories (e.g., recreational fishermen who also own property that may be damaged) to submit multiple surveys, one for each category. We anticipate only a small proportion (<20%) of respondents will fall into more than one category. Google Forms gathers data automatically into a database, which minimizes the likelihood of data entry errors, compared to manual entry. It's more efficient and minimizes time.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Question 2**

This information has not been collected elsewhere and is specific to marine mammal deterrents methods employed by the specified user groups. The output of a decision making framework using relative risk of expected losses to identify and help the agency prioritize which deterrence methods to test for effectiveness has never been created and will be unique and specific to the information gathered from this survey.

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

Data being collected are not of a proprietary nature and should not cause any burden on a small business or entity. The least amount of information is being collected for each user group.

**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.**

The goal of this project is to help NOAA Fisheries achieve its mission under the MMPA. If this survey was not conducted, the agency may not seek to test the effectiveness of the marine mammal deterrents that are allowable under the agency's proposed guidelines because there are more than 70 deterrence

methods outlined in the guidance. Additionally, there is a burden on those that have interactions with marine mammals. Interactions can cause losses to fisheries, create a cost burden, and negatively impact marine mammals.

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

The collection will be conducted in a manner consistent with OMB guidelines.

**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 June 23, 2023, (88 FR 41081) solicited public comments. No comments were received.

This collection of information is a direct result of conversations with the Marine Fisheries Advisory Committee (MAFAC) on the availability – or lack thereof – of the data and all comments were used to determine the data elements to be recorded.

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

No payment or gifts will be provided to respondents.

**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.**

No personally identifiable information will be collected and all responses will be anonymous..

**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 survey is not designed to, nor will it collect data that are private or of a sensitive nature.

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

The data collection approach will be a census. All participants of the census in each strata will be contacted. Statistical strata are defined by user groups (commercial, recreational and subsistence fishers, aquaculturists, and waterfront property managers who all work in the marine environment). One time, voluntary surveys will be used to elicit user group membership, type of marine mammal encounter, use of deterrents if applicable, and success in the use of a deterrent if applicable. Stratification by user group will reduce within user group variation and allow comparisons of the types of marine mammal encounters and deterrent use within and between user groups. Data collection by user group is achieved by maximizing the distribution of the survey link across different media sources. MAFAC estimates a sampling universe of approximately 257,000 individuals representing different user groups that are likely to encounter marine mammals. Posted questionnaires typically have a response rate of 5-30%, while email questionnaires typically experience half that rate (James, T., 2012, A comparison of email and postal surveys. *The Irish Journal of Psychology* 28(3-4):129-137). Consequently, we expect a response rate of 2.5-15%, which should result in approximately 6,420 - 38,500 responses. Note, this number is significantly higher than originally proposed in the 60-day FRN published on June 23, 2023 ([88 FR 41081](#)). Based on feedback from the Office of the Chief Economist, the number is now based on the full universe of possible responses instead of the minimum number of responses statistically needed for analysis.

The estimate for commercial and tribal fishing is based on the wage data for captains and mates using the US Bureau of Labor Statistics (USBLS) for "[Fishing and Hunting Workers](#)." It lists the median annual wage in 2021 for "farming, fishing, and forestry occupations" as \$29,860, which equates to \$14.36/hr. We calculated the estimate for aquaculture operators from the USBLS for "[Farmers, Ranchers, and Other Agricultural Managers](#)." The median salary for this category is \$73,060/year or \$35.12/hour. To inform the recreational fishing category, we used the USBLS to calculate the average between "[Scenic and sightseeing transportation, water](#)" and "[Motorboat operators](#)," which is \$41,105/yr (\$19.76/hour). The estimate for waterfront property managers is based on wage data for harbor masters and harbor facility assistants using Glass Door.

The burden was estimated based on practice taking the survey; response is not expected to vary widely because questions are mostly multiple choice. Estimates for the electronic survey are based on 2022 rates from the website. Strata include region and user group. Minimal expected response per user-group is 3,000, which represents an expected 10% response rate for each occupational group. Not all user groups occur in all regions. For example, property damage is typically caused by pinnipeds, which do not occur in the South Atlantic, Gulf of Mexico, or Caribbean regions. Each survey should take approximately 5 minutes to complete. If a person is a member of more than one user-group, it will take 5 minutes per user group.

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)
Marine Mammal Deterrents	*Commercial fishermen (Farming, fishing, and forestry occupations)	3,000	1	3,000	5 min	250	\$14.36	\$3,590
Marine Mammal Deterrents	*Recreational fishermen (motorboat operators)	3,000	1	3,000	5 min	250	\$19.76	\$4,940
Marine Mammal Deterrents	Tribal fishermen (inclusive of tribal nations and other coastal indigenous populations)	3,000	1	3,000	5 min	250	\$14.36	\$3,590
Marine Mammal Deterrents	*Aquaculture operators (Farmworkers, farm, ranch, and aquaculture)	3,000	1	3,000	5 min	250	\$35.12	\$8,780
Marine Mammal Deterrents	**Waterfront property managers (harbormasters and harbor facility assistants)	3,000	1	3,000	5 min	250	\$24.34	\$6,085
<b>Totals</b>		<b>15,000</b>		<b>15,000</b>		<b>1,250</b>		<b>\$26,985</b>

**Official sources of hourly wage rate:**

\*[Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Fishing and Hunting Workers](#)

\*\*[Glass Door Salaries for HarborMasters and Harbor Facility Assistants](#)

**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. The information is collected electronically so there is no cost to the respondent.

**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.**

Cost Descriptions	Band/Step	Loaded Salary/Cost	Estimated Hours	Total Cost to Government
Survey development	Band 4/Step 3 (ZA-04-03)	\$109.36	20	\$2,187.20
	Band 3/Step 1 (ZP-03-01)	\$53.22	3	\$159.66
PRA application development (including supporting statements and required FRNs)	Band 4/Step 1 (ZA-04-01)	\$82.33	4	\$329.32
	Band 4/Step 3 (ZA-04-03)	\$109.36	20	\$2,187.20
PRA application review (including liaising with NOAA and OMB)	Band 4/Step 1 (ZA-04-01)	\$82.33	8	\$658.64
	Band 4/Step 3 (ZA-04-03)	\$109.36	20	\$2,187.20
Survey distribution	Band 4/Step 1 (ZA-04-01)	\$82.33	2	\$164.66
	Band 4/Step 3 (ZA-04-03)	\$109.36	1	\$109.36
Survey analysis	Band 4/Step 1 (ZA-04-01)	\$82.33	3	\$246.99
	Band 4/Step 3 (ZA-04-03)	\$109.36	1	\$109.36
Final report review	Band 4/Step 1 (ZA-04-01)	\$82.33	6	\$493.98
	Band 4/Step 3 (ZA-04-03)	\$109.36	2	\$218.72
<b>TOTAL</b>			<b>90</b>	<b>\$9,052.29</b>

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

This is a new collection of information.

**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.**

Descriptive and analytical reports will include summaries of data. These reports will not release or reveal individual responses. Information from the surveys will be used to create a relative risk assessment of expected losses to various users regarding interactions with marine mammals. This risk assessment will provide a logical, decision making framework. MAFAC anticipates advising NOAA Fisheries to use the framework to help prioritize which marine mammal deterrence methods should be tested for effectiveness. Respondents' input about ineffective deterrents will eliminate methods and strategies from the prioritization list. This should minimize unnecessary takes of marine mammals. The information will be distributed internally to the agency, and it's MAFAC intention to share summary results with the survey respondents. The data summaries may support future research and analyses 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.

**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.**

MAFAC 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\(b\)\(3\)](#).