



Request for Proposals
To Develop a National Fishing Effects Database
to support Fishery Management Councils Essential Fish (EFH) Habitat Reviews

Proposal Submission Deadline: February 28, 2023

Term of Project: 1 year

The Mid-Atlantic Fishery Management Council (MAFMC) seeks a highly-qualified contractor to develop a nationally useful database of literature on the effects of fishing gear on marine fish habitat (i.e., a National Fishing Effects Database).

Background

Fishery managers at the North Pacific Fishery Management Council (NPFMC) and New England Fishery Management Council (NEFMC) have used a Fishing Effects Model (previously called Swept Area Seabed Impact (SASI) Model) to estimate the impacts of fishing gears on essential fish habitat in space and time. See [NPFMC EFH Fishing Effects Discussion Paper \(2022\)](#) and [NEFMC Fishing Effects Model Report \(2020\)](#).

Underpinning these models is a literature review and vulnerability assessment which identifies gear- and fish habitat-specific susceptibility to impacts, and estimates recovery rates of fish habitat features in the marine environment.

In 2009-10, the NEFMC created a Microsoft Access database to clearly identify the key elements (e.g., location, gear(s) used, habitat type(s), experimental design and results) for each relevant paper in the gear effects literature. These database elements supported development of the SASI vulnerability assessment. See section 5 of the [SASI model document](#) for methods. Since that time, additional studies have been added to the Access database which includes gear effects literature that supported this ongoing modeling work in both the Northeast and North Pacific Regions.

While a database of fishing gear effects literature continues to prove useful in both these regions, the Access database falls short as a permanent repository of information that can be easily shared and routinely updated over time by users across multiple organizations, including the eight Fishery Management Councils, National Oceanic and Atmospheric Administration (NOAA) Fisheries, and academic partners. As such, the Mid-Atlantic Fishery Management Council is seeking a contractor to build upon previous work and develop a National Fishing Effects Database.

Scope of Work

We are seeking a contractor to support the development of a national database on fishing gear effects on marine fish habitat. Specifically, the contractor will compile information and gather literature for the National Fishing Effects Database, including working collaboratively with a group of primary end-users to identify the key elements for this database; so the database can support future vulnerability assessments, fishing effects modeling work, or other needs for the Councils and NOAA Fisheries regions.

The National Fishing Effects Database will be ported into an R-Shiny Application by Council staff, that will enable viewing and sharing fishing effects information with two levels of accessibility: 1) a detailed, searchable fishing effects library (with direct access to literature where available) for internal Council and National Oceanic and Atmospheric Administration (NOAA) Fisheries users; and 2) a publicly accessible and searchable viewer that can be used by interested parties (Council stakeholders, academics, others) to understand the body of information used by the Councils for fishing gear effects analyses. While the contractor will not be directly responsible for porting information into the R-Shiny Application, they will need to coordinate directly with Council staff responsible to ensure the database and source literature is compiled in a manner to support easy transfer to this application.

The contractor will be responsible for integrating the already compiled fishing effects literature, including key database elements, with new information gathered as part of this contract. The NEFMC and NPFMC literature compiled to date in the Access database focuses on the fishing impacts of trawls, dredges, and fixed gears on temperate habitats; and is therefore relevant to all Councils with similar habitats and gear types, including New England, Mid-Atlantic, North Pacific, and Pacific. The contractor is required to search for and review additional relevant literature for these gear types published since 2017. The contractor is required to review and add to the database available literature for other fishing gear and affected habitats, including those used in warmer/tropical water habitats in other Council regions (Caribbean, South Atlantic, Gulf, and Western Pacific). In many regions, fishing gear effects literature reviews have been previously conducted as part of required Essential Fish Habitat reviews and are available in various types of documents depending on the region. The contractor will be provided points of contacts in each region to help identify any existing documentation that may streamline or expedite the review process.

The contractor will regularly meet with a Contract Oversight Team and with the Council Coordination Committee Habitat Work Group, composed of fish habitat practitioners from all eight Councils and NOAA Fisheries, to understand regional database needs, and refine database elements to ensure the resulting product will support current and future fishing effects work in all eight regions.

The National Fishing Effects Database development will require gathering of the literature source materials, some of which will be open source materials. We will facilitate access to non-open source materials. In-person travel is not anticipated as part of this contract. Periodic meetings with the Habitat Work Group (up to five) and regular meetings with the Contract Oversight Team (minimum of three, and others as needed) will all be held online.

Contractor Qualifications

Applicants should have a background in fishery and/or environmental science, and should be familiar with fishing operations, fishing gear effects, and ecological considerations associated with fishing gear effects on habitat. The applicant must also have experience conducting literature reviews and experience with database management.

How to Apply

Applicants should submit a proposal to Dr. Chris Moore, Executive Director, by email (cmoore@mafmc.org) by 11:59 pm on February 28, 2023. Proposals should not exceed 20 pages total (excluding curriculum vitae) and should include the following elements:

- *Executive Summary*: A summary of the proposed scope of work as well as a brief summary of the applicant's qualifications.
- *Proposed Scope of Work*: A detailed plan for addressing the scope of work described above. This should include a summary of potential analysis approaches, a project schedule, a brief summary of how the project will be managed, and a list of all personnel who may work on the project.
- *Qualifications of Applicant*: A summary of the qualifications of the applicant and other team members, if applicable. Curriculum vitae should be included for all individuals who will work on the project.
- *Proposed Budget*: A detailed budget, including the basis for the charges (e.g. hourly rates, fixed fees).
- *References*: Names, full addresses, and phone numbers for three clients for whom the applicant has provided similar services to those requested.

Timeline

January 23, 2023: Issuance of Request for Proposals

February 28, 2023: Deadline for proposal submission

March 31, 2023: Contractor notification

April 14, 2023: Contracts finalized

May 1, 2023: Project begins

April 30, 2024: Submission of final products/documentation

Proposal Evaluation Criteria

Proposals will be evaluated based on prior experience, references, qualifications, and budget. The Council may request additional information as deemed necessary or negotiate modifications to an accepted proposal.

Requests for Further Information

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Disclaimer

1. All costs associated with the preparation and presentation of the proposal will be borne by applicants.
2. Proposals and their accompanying documentation will not be returned.
3. Respondents must disclose any relevant conflicts of interest and/or pending civil/criminal legal actions.
4. The Council reserves the right to accept or reject any or all applications received, negotiate with all qualified applicants, cancel or modify this request for proposals in part or in its entirety, or change the application guidelines, when it is in its best interests.