



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492

Daniel Salerno, *Chair* | Cate O'Keefe, PhD, *Executive Director*

COUNCIL SOLICITING CONTRACT WORK

Developing New Projection Methods for Atlantic Sea Scallop Management

February 2026

Project Description

The New England Fishery Management Council (Council) requires the services of an independent contractor to assist with the development of stock projection methods to support the management of Atlantic sea scallops. This is a temporary contractor role, commencing on or about April 1, 2026, and expected to be completed by June 30, 2027. The contractor will work closely with the Council's Scallop Plan Coordinator, Connor Buckley, and other technical advisors, including NOAA Fisheries staff.

Project Background

Atlantic sea scallop management currently includes application of a forecasting projection model to recommend annual effort (Days-At-Sea (DAS)) and rotational area allocations. The Scallop Area Management Simulation¹ (SAMS) model is a spatially explicit, forward-projecting simulation tool developed by NOAA Fisheries to evaluate rotational management strategies and fleet behavior in defined management areas (i.e., SAMS areas) across the scallop range. The SAMS model includes a biological component that forecasts size-structured population dynamics in each SAMS area, as well as a fleet dynamics component that projects scallop fishery effort based on expected Landings per Unit Effort (LPUE). This method assumes (1) relatively stable productivity and environmental conditions, which may no longer be viable under climate-driven changes, (2) correlation between scallop biomass and fleet effort, which may no longer be viable under changing market and international trade conditions, and (3) equal weighting of all survey indices, which may not be viable based on uncertainty estimation methods for individual data sources. This project aims to explore innovative, transparent, and operationally feasible forecasting approaches that improve the scientific basis for decision-making, including annual specifications and rotational management allocations for Atlantic sea scallops².

The contractor will review existing projection methods and applications, and then propose enhancements that improve robustness, resilience, and adaptability. Areas of focus should include:

¹ For most recent SAMS documentation, see the NOAA Fisheries Northeast Fisheries Science Center Stock Assessment Support Information (SASINF) Portal: <https://apps-nefsc.fisheries.noaa.gov/saw/sasi.php>

² NEFMC Atlantic Sea Scallop Fishery Management Plan information: <https://www.nefmc.org/management-plans/scallops>

- Considering dynamic productivity assumptions (area-specific growth, mortality, and recruitment) that can be adjusted in projection models (enhancing biological components).
- Considering the influence of price, markets, and imports on fleet dynamics and behavior to achieve more accurate allocation of Limited Access Days-at-Sea (enhancing LPUE components).
- Identifying flexible, fine-scale spatial projection units that can be easily modified or updated (enhancing existing SAMS area definition).
- Considering sub-annual management measures, such as in-season closures or openings of scallop rotational areas (enhancing integration of real and near-real time information).
- Ensuring multi-user accessibility and improved transparency and documentation (enhancing Council staff and technical team’s ability to use the tools developed and communicate methods to a wider audience).

Expected Responsibilities and Deliverables

The Council seeks a contractor to assist with the development of new methods to forecast exploitable scallop biomass and abundance to support recommendations for sustainable fishery specifications.

The contractor will be required to complete the following tasks:

1. Review current documentation of SAMS model methods and relevant literature.
2. Develop and document alternative/enhanced projection approaches, including model specifications, assumptions, and uncertainties.
3. Evaluate performance of the newly developed method(s) by applying them retrospectively to historical data and comparing results with realized fishery-independent and dependent data sources, as well as previous SAMS model outputs.
4. Present preliminary findings to the Scallop Plan Development Team March 2027.
5. Present final findings to the New England Scientific and Statistical Committee by May 1, 2027.
6. Prepare a technical report summarizing methods (including model inputs, assumptions, and data sources), results, and recommendations, in collaboration with Council staff, within defined timelines:
 - a. A draft report should be submitted to the Council no later than May 21, 2027.
 - b. The final report should be submitted to the Council by June 4, 2027.
 - c. A multi-user accessible projection tool, including full documentation with reproducible workflows and user-friendly guidance materials, shall be made available to the Council by June 30, 2027.

Desired Experience and Demonstrated Skills

1. Strong quantitative and modeling skills, with experience in fisheries stock assessment and projection methods.
2. General knowledge and understanding of federal fisheries management, and familiarity with Atlantic sea scallop biology and management.
3. Demonstrated ability to synthesize complex technical information into clear reports.
4. Candidates employed by advocacy organizations or by organizations that are parties in fishery lawsuits related to this issue will not be considered.

5. The successful candidate will not have a conflict of interest, defined as any financial or non-financial interest that conflicts with the actions or judgments of an individual because it could:
 - a. Impair the individual's objectivity;
 - b. Create an unfair competitive advantage for any person or organization; or
 - c. Create the appearance of either item listed above.

Application Submission Contact

Interested professionals are required to submit:

1. A letter of interest with a project proposal describing the approach that would be used to meet the requirements of this project, including:
 - a. A detailed description of methods to address all above listed focus areas
 - b. A proposed timeline to include all above listed deliverables
2. A current resume or CV for all personnel
3. Examples of similar work completed for other organizations or publications
4. A budget with expected expenses.
 - a. The budget should provide an hourly rate and estimate the number of hours required to complete the above-listed focus areas and deliverables.
 - b. Travel expenses need not be included in the budget as approved travel will be reimbursed by the Council.

Letters of interest and supporting materials should be received **no later than March 20, 2026**, and addressed to Dr. Cate O'Keefe, NEFMC, 50 Water Street, Mill 2, Newburyport, MA 01950, or by email cokeefe@nefmc.org. Questions concerning this proposal should be directed to the same address.

This work will be funded under New England Fishery Management Council Award NA25NMF441C0004-T1-01. Compliance with the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 109-479 as amended) and the Council's standard contract terms and conditions will be expected.

Disclaimer

1. All costs associated with the preparation and presentation of the proposal will be borne by consultants submitting letters of interest.
2. Materials submitted will not be returned.
3. Respondents will be expected to comply with all federal grant contracting requirements.
4. The Council reserves the right to accept or reject any or all letters of interest received; negotiate with all qualified potential candidates; cancel or modify the RFP in part or in its entirety; and/or change the application guidelines, when it is in its best interests.