REQUEST FOR PROPOSALS – EVALUATION OF THE PACIFIC FISHERY MANAGEMENT COUNCIL STOCK ASSESSMENT REVIEW PROCESS

1. Overview

The Pacific Fishery Management Council (PFMC) seeks qualified contractors to conduct an evaluation of the process by which the Council reviews and adopts stock assessments, with a primary focus on groundfish. Stock assessments underpin the Council's ability to manage fisheries sustainably, and the Council and its Northwest and Southwest Fisheries Science Center partners (Science Centers) at the National Marine Fisheries Service (NMFS) have worked to create a stock assessment process that is open and transparent. The PFMC stock assessment process is guided by, and meets the standards of, Best Scientific Information Available (BSIA) as defined in the Magnuson–Stevens Fishery Conservation and Management Act¹, the National Standard 2-Scientific Information Rule^{2 (NS2)}, the Regional BSIA Framework³, and Terms of Reference^{4,5}. The rules and framework were developed through public processes that included the PFMC.

A review of the PFMC's stock assessment process is timely for several reasons, including: the Centers' capacity in conducting assessments⁶ which may be partially addressed with a reformulation of the Council's stock assessment review process, and increased tension over recent assessments. It is possible that a greater understanding of the existing review process, potentially followed by improvements to current Council processes could reduce existing concerns.

Changing processes that are instrumental to informed decision-making within a public process, like the Council's, will require buy-in from stakeholders, advisors (including industry, management, and scientific advisors), and the Council. Achieving such buy-in typically requires a high degree of trust and understanding among participants.

This review is sought in the interest of enhanced understanding regarding the Council's stock assessment review process, as well as how stock assessments determined to be BSIA are used in Council decision-making.

¹https://www.fisheries.noaa.gov/resource/document/magnuson-stevens-fishery-conservation-and-management-act

²https://www.federalregister.gov/documents/2013/07/19/2013-17422/magnuson-stevens-act-provisions-national-standard-2-scientific-information

³https://www.fisheries.noaa.gov/resource/document/magnuson-stevens-fishery-conservation-and-management-act

⁴https://spo.nmfs.noaa.gov/sites/default/files/TM183.pdf

⁵https://www.pcouncil.org/documents/2024/06/terms-of-reference-for-the-groundfish-stock-assessment-review-process-for-2025-2026-june-2024.pdf/

⁶ https://www.pcouncil.org/documents/2024/05/f-3-a-nmfs-nwfsc-report-1.pdf/

Council leadership, in consultation with leadership at the Northwest and Southwest Fisheries Science Centers, have crafted a shared vision and set of values regarding the science-based process of the Council. This shared vision should serve as a beacon for considering the Council's existing stock assessment review process and whether there are areas for possible improvement. This vision is:

It is the shared vision of Council and Science Centers leadership that available scientific resources, personnel, and science-development processes are applied and followed in a manner that is most effective for Council-managed fisheries consistent with the requirements of the Magnuson-Stevens Act and the PFMC's Fishery Management Plans.

Achieving this vision in a resource- and capacity-limited environment will require high levels of shared understanding among participants in the Council process. To this end, we desire a science and management process that is rigorous, collaborative, mutually supportive, transparent, and timely.

To achieve this vision, we will:

- Enhance and defend scientific rigor
- Ensure professionalism and productive working relationships
- Recognize the diverse views of PFMC participants (stakeholders, Council members, professional staff)
- Strive to create an environment of mutual learning and active listening
- Strive for high levels of transparency in decision making and scientific development processes
- Periodically review and reflect upon our processes and how they can be improved

2. Project Overview

One of the core functions of NMFS Science Centers is to conduct stock assessments. These assessments are routed through a public process that is structured and implemented by the PFMC. This process of assessment review and adoption has served the Council well for many years. However, new pressures, changing financial and personnel resources, and continued evolution in public process best practices warrants a review of how the PFMC's stock assessment review process is structured. Therefore, the PFMC proposes to conduct an evaluation of the PFMC's current stock assessment review process, guided by the vision, goals, and objectives outlined above. Such an evaluation is based on the notion that a periodic review of and reflection upon our processes is necessary for continued improvement of work products that underpin Council decision-making.

We envision an evaluation of current stock assessment review and adoption processes to be conducted by a contractor experienced with public process and development of scientific products that underpin marine resource management. This review would be used to inform further consideration of the Council's existing process and whether the PFMC, in collaboration with the Science Centers and other partner agencies, desires a change to the process associated with reviewing and adopting stock assessments for use in west coast fisheries management – within

context of the above-referenced BSIA framework, NS2, and related requirements. In other words, we envision a third-party review as providing information that is supportive of any further consideration of the Council's stock assessment review process.

Supporting information of past (2014) external reviews of the NMFS Science Center stock assessment programs is available for the <u>NWFSC Review^Z</u> and the <u>SWFSC Review⁸</u>, <u>with</u> the respective Centers' responses available in the NWFSC Response⁹ and the SWFSC Response¹⁰ (please see footnotes). The review process, including other elements of the NMFS science enterprise, is contained in a 2021 Tech Memo¹¹.

This project should result in a report that includes:

- a description of methods used by the contractor,
- a summary of the results that are derived from those methods,
- the identification of any areas of conflict or potential improvement in the Council's process, and
- any recommendations that the contractor may deem appropriate for addressing those conflicts or areas of improvement.

The focus of the work is bounded by the public process arena, and should not include a review of data gathering, data processing, stock assessment modeling platforms, or the results of specific assessments. Instead the review should focus on the design of the process and aspects of the process that lead to decision making, much of which is outlined in the Terms of Reference for the Groundfish Stock Assessment Review Process¹². Such issues include, but are not limited to:

- Feedback between scientists, stakeholders, reviewers and how that feedback is handled
- How the peer review process is designed, including representation on review bodies
- How minor and major decisions are made during the process of iteration and review (such as specification of "priors" contained within assessments)
- How steps within the feedback, review, and decision-making process are sequenced to arrive at decisions
- Whether policies and/or their interpretations affect the manner in which decisions are made and assessments advanced within the Council process
- The process of incorporating National Standard 2 and the BSIA framework in review and use of stock assessments

3. Scope of Work

3.1. Background

⁷https://media.fisheries.noaa.gov/2021-

^{05/}NWFSC_Assessment_Program_Review_Reports_2014_Final_July3_2014.pdf

⁸https://media.fisheries.noaa.gov/2021-

^{05/}SWFSC_MSRA_SA_Program_Review_PanelReport_FINAL_8Aug2014.pdf

⁹https://media.fisheries.noaa.gov/2021-

^{05/2014%20}NWC%20SA%20Prg%20Rev%20Response%20_FINAL.pdf?null

¹⁰https://media.fisheries.noaa.gov/2021-05/SWCenter_Response_13Nov2014_FINAL.pdf

¹¹https://spo.nmfs.noaa.gov/sites/default/files/TMSPO216.pdf

¹²https://www.pcouncil.org/documents/2024/06/terms-of-reference-for-the-groundfish-stock-assessment-review-process-for-2025-2026-june-2024.pdf/

The Pacific Fishery Management Council (PFMC or Council), along with the Northwest and Southwest Fisheries Science Centers (NWFSC and SWFSC respectively), have been reflecting upon the west coast's stock assessment system. The process utilized within the PFMC for developing, reviewing, approving, and implementing assessments has long served the PFMC community well. This multi-step process provides several opportunities for public input and iteration as part of the review process.

The current stock assessment and review process began in response to an independent review from 1995 that called for more thorough treatment of uncertainty in assessments, a more structured peer review process, and clearer lines between scientific advice and management decision-making. As noted above, regular reviews of the stock assessments are conducted via STAR Panels, and in 2014 additional reviews were conducted at the request of NOAA NMFS. It took a number of iterations through the late 1990s and early 2000s and learning from experience before arriving at the process in its current form. The Council continues to conduct routine evaluation of the process at the end of each assessment cycle and considers making changes prior to the start of each assessment cycle as advised by the Scientific and Statistical Committee, the Science Centers, and the Groundfish Management Team and Groundfish Advisory Subpanel.

The reasons for this project and its additional attention to the process are two-fold:

- First, there has been a notable and concerning change in perceptions of the assessment process, at least for a portion of the participants in the Council process.
- Second, there is concern that federal budget pressures will challenge the capacity to maintain the process as is.

The Council uses a biennial management process for groundfish that involves conducting stock assessments in odd numbered years. The assessments conducted in 2023 resulted in reduced annual catch limits for a number of stocks with negative consequences to both commercial and recreational fisheries. The 2023 cycle also further evaluated data limited assessments conducted in 2021 that showed low abundance for rockfish stocks in some areas of the coast. This was counter to the trend seen over the previous four cycles where assessments generally showed improved stock condition, including the successful rebuilding of several rockfish species. The lower estimates of stock status were unexpected also in that the Council consistently maintained catch below scientifically recommended harvest specifications.

The discussions that followed the 2023 assessments, focused on management measures for 2025-2026, were marked by higher levels of tension among stakeholders, scientists, Council advisors, and the Council itself. The experience has led some long-time participants in the process to be concerned over a loss of cohesive dialog among multiple members of the Council process, a lack of buy-in to assessment results by some stakeholders, and a perceived inequity in decision-making that threatens the stability and efficacy of the Council's assessment and management system.

Several hypotheses have arisen that attempt to explain the increased tension. These include:

• A loss of "face time" and open dialog between stakeholders, the SSC, assessment scientists, and NMFS leadership as a result of the COVID pandemic

¹³ Stock Assessment and Review Process During 2000. <u>Pacific Fishery Management Council Briefing Book</u>, <u>Exhibit C.7</u>, <u>Attachment 1</u>, <u>November 2000</u>.

- Reduced budgets for travel and meeting participation
- A belief by some that the manner in which data limited assessments are reviewed and acted upon has deviated from expectations and long running practice
- As supported by recent published work¹⁴, negative assessment results that lead to negative economic consequences receive more scrutiny than those that are positive or neutral in their effects
- And others.

At this time, a rigorous inquiry into why these tensions have arisen has not occurred. It is unclear whether they are the result of shortcomings in the present process—either in its design or execution— a symptom of the unexpected assessment outcomes, or a combination of the two that might need to evolve.

3.2. Description of Project

This project will review the documents that underpin the current stock assessment review process and address the two-fold purpose described above by providing a summary of the viewpoints held by participants in the process, conducting independent analysis, and providing findings on the issues. The main desire is for the report to provide information that could be used to facilitate subsequent deliberations on changes and improvements to the review process by the Council, its advisory bodies, and the public. However, the report should include a series of recommendations to help facilitate those deliberations.

The independent analysis should draw from long-standing principles of effective public process, such as those which A) foster shared understanding, B) build trust among process participants, C) defend scientific rigor, D) align process with available resources, and others. The contractor should likewise use key literature to identify factors within the public process that can be used to enhance public process in ways that address the identified problem. The contractor will then evaluate the Council's stock assessment review and adoption process alongside these factors and determine whether any are missing or could be enhanced. This should result in a series of recommendations or findings from the contractor, to the Council.

3.3. Methods

The Council's contractor should be qualified in the areas of fishery stock assessment, public input and stakeholder-driven fisheries management processes, and consensus building. In addition to drawing upon this expertise, the contractor would be expected to take the following steps:

- Conduct desk-based research to identify principles of trust building in public process settings—particularly those relevant to the Pacific Council.
 - Desk-top research will also incorporate case studies from Councils in other regions.
- Develop interview guides (including relevant questions and format for each stakeholder group) to guide targeted interviews of participants in the Council process.

¹⁴ Satterthwaite, W. The reproducibility crisis meets stock assessment science: Sources of inadvertent bias in the stock assessment prioritization and review process. *Fisheries Research*. Vol 266, Oct 2023. https://www.sciencedirect.com/science/article/pii/S016578362300156X

- Apply the interview guide while conducting interviews of select Council participants. Such
 participants include: Council members, stock assessment scientists, professional
 management staff, and key stakeholders (e.g., fishers, etc.) that are part of the Council's
 advisory subpanel(s).
 - Conduct interviews in person and online, access to the SSC, Groundfish Advisory Panel, and Council members is critical. The contractors will look to the PFMC and Science Centers for recommendations on the appropriate stakeholders to engage in the survey.
- Attend and observe at least one of the PFMC's Stock Assessment Review Panels in 2025
- Attend and observe PFMC SSC meetings (e.g., Groundfish Subcommittee and/or full SSC) where assessments are reviewed.
- Utilize the results of the interviews, process observations, literature reviews, and the
 contractor's expert opinion, to determine whether current written PFMC and NMFS
 processes are being adhered to and help diagnose the reasons for increased tensions
 around the Council's groundfish stock assessment process.
 - Present interim results to a broad group of Council participants to get their contributions, corrections, and additions.
- Identify recommendations or pathways that the Council could take in order to enhance trust among all members/participants of the Council process as it pertains to stock assessments. Such recommendations should be consistent with the Council's requirement to utilize the best available science.

The pathways will be suggested and informed by the stakeholder interviews but with adjustments based on the best available science and our expertise in consensus building.

4. Proposal Requirements

When submitting your proposal, please include the following information:

- **Contractor/Key Personnel Background**: Relevant experience, especially with scientific or academic review processes relevant to public process and marine resource management.
- **Team Structure**: Key personnel and their roles.
- **Project Plan**: Outline for the approach to the project.
- References and Case Studies: Relevant past projects.
- Budget: Expected budget or a breakdown of costs.

5. Evaluation Criteria

Proposals will be evaluated based on three key factors:

- 1. Qualifications of key personnel
- 2. Methods used in the project and their appropriateness for addressing the project's objectives
- 3. Budget and project timeline

6. Timeline and Budget

Project should not extend beyond December 31st, 2025

Total budget (personnel, travel, materials, etc.) should not exceed \$50,000

Questions and Clarifications

For questions regarding this RFP, contact Merrick Burden, Executive Director: Merrick.Burden@pcouncil.org

