

Statement of Work
National Oceanic and Atmospheric Administration (NOAA)
National Marine Fisheries Service (NMFS)
Center for Independent Experts (CIE) Program
External Independent Peer Review

Fisheries Stock Assessment for Walleye Pollock in the Gulf of Alaska

Background

The National Marine Fisheries Service (NMFS) is mandated by the Magnuson-Stevens Fishery Conservation and Management Act, Endangered Species Act, and Marine Mammal Protection Act to conserve, protect, and manage our nation's marine living resources based upon the best scientific information available. NMFS science products, including scientific advice, are often controversial and may require timely scientific peer reviews that are strictly independent of all outside influences. A formal external process for independent expert reviews of the agency's scientific products and programs ensures their credibility. Therefore, external scientific peer reviews have been and continue to be essential to strengthening scientific quality assurance for fishery conservation and management actions.

Scientific peer review is defined as the organized review process where one or more qualified experts review scientific information to ensure quality and credibility. These expert(s) must conduct their peer review impartially, objectively, and without conflicts of interest. Each reviewer must also be independent from the development of the science, without influence from any position that the agency or constituent groups may have. Furthermore, the Office of Management and Budget (OMB), authorized by the Information Quality Act, requires all federal agencies to conduct peer reviews of highly influential and controversial science before dissemination, and that peer reviewers must be deemed qualified based on the OMB Peer Review Bulletin standards.

(http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf).

Further information on the CIE program may be obtained from www.ciereviews.org.

Scope

The Alaska Fisheries Science Center's (AFSC) Resource Ecology and Fisheries Management Division (REFM) requests an independent review of the integrated stock assessment that has been developed for Gulf of Alaska walleye pollock. The fishery for these species is managed by the North Pacific Fisheries Management Council. The ABC for pollock in the Gulf of Alaska is 203,769 t in 2017. The catch limits are established using Automatic Differentiation (AD) Model Builder software that uses survey abundance data and survey and fishery age and length composition data with a harvest control rule to model the status and productivity of these stocks and set quotas. Having these assessments vetted by an independent expert review panel is a valuable part of the AFSC's review process. The Terms of Reference (TORs) of the peer review and the tentative agenda of the meeting are below.

Requirements for CIE Reviewers

NMFS requires three reviewers to conduct an impartial and independent peer review in accordance with the SOW, OMB Guidelines, and the TORs below. The reviewers shall have working knowledge and recent experience in the application of fisheries stock assessment processes and results, including population dynamics, separable age-structured models, harvest strategies, survey methodology, and the AD Model Builder programming language. Experience with the Stock Synthesis Assessment Model would also be helpful. They should also have experience conducting stock assessments for fisheries management.

Statement of Tasks

- Review the following background materials and reports prior to the review meeting:

Dorn, M.W., K. Aydin, B. Fissel, D. Jones, W. Palsson, K. Spalinger, S. Stienessen. 2016. 1. Assessment of the walleye pollock stock in the Gulf of Alaska. In Stock Assessment and Fishery Evaluation Report for the Groundfish Resources of the Gulf of Alaska. pp. 45-174. North Pacific Fishery Management Council, P.O. Box 103136, Anchorage, AK 99510.

<https://www.afsc.noaa.gov/REFM/stocks/assessments.htm>

NPFMC. 2017. GOA Introduction. *In* Stock Assessment and Fishery Evaluation Report for the Groundfish

Resources of the Bering Sea/Aleutian Islands Regions. North Pacific Fisheries Management Council, Anchorage, AK.

<https://www.afsc.noaa.gov/REFM/stocks/assessments.htm>

Other materials relevant to the review of the pollock assessment will be made available by May 8, 2017, such as working documents, publications, and similar material.

- Attend and participate in the panel review meeting
 - The meeting will consist of presentations by NOAA and other scientists, stock assessment authors and others to facilitate the review, to provide any additional information required by the reviewers, and to answer any questions from reviewers
 - The review meeting is a public meeting and stakeholders that attend may provide perspectives and information relevant to the pollock assessment.
- After the review meeting, reviewers shall conduct an independent peer review in accordance with the requirements specified in this SOW, OMB guidelines, and TORs, in adherence with the required formatting and content guidelines; reviewers are not required to reach a consensus
- Each reviewer may assist the Chair of the meeting with contributions to the summary report, if required by the TORs
- Deliver their reports to the Government according to the specified milestone dates

Foreign National Security Clearance

When reviewers participate during a panel review meeting at a government facility, the NMFS Project Contact is responsible for obtaining the Foreign National Security Clearance approval for reviewers who are non-US citizens. For this reason, the reviewers shall provide requested information (e.g., first and last name, contact information, gender, birth date, passport number, country of passport, travel dates, country of citizenship, country of current residence, and home country) to the NMFS Project Contact for the purpose of their security clearance, and this information shall be submitted at least 30 days before the peer review in accordance with the NOAA Deemed Export Technology Control Program NAO 207-12 regulations available at the Deemed Exports NAO website: <http://deemedexports.noaa.gov/> and http://deemedexports.noaa.gov/compliance_access_control_procedures/noaa-foreign-national-registration-system.html. The contractor is required to use all appropriate methods to safeguard Personally Identifiable Information (PII).

Place of Performance

The place of performance shall be at the contractor’s facilities, and at the Alaska Fisheries Science Center, Seattle, Washington.

Period of Performance

The period of performance shall be from the time of award through July 14, 2017. Each reviewer’s duties shall not exceed 14 days to complete all required tasks.

Schedule of Milestones and Deliverables: The contractor shall complete the tasks and deliverables in accordance with the following schedule.

Within two weeks of award	Contractor selects and confirms reviewers
No later than May 8, 2017	Contractor provides the pre-review documents to the reviewers
May 22-25, 2017	Panel review meeting
June 16, 2017	Contractor receives draft reports
June 30, 2017	Contractor submits final reports to the Government

Applicable Performance Standards

The acceptance of the contract deliverables shall be based on three performance standards: (1) The reports shall be completed in accordance with the required formatting and content (2) The reports shall address each TOR as specified (3) The reports shall be delivered as specified in the schedule of milestones and deliverables.

Travel

All travel expenses shall be reimbursable in accordance with Federal Travel Regulations (<http://www.gsa.gov/portal/content/104790>). International travel is authorized for this contract. Travel is not to exceed \$10,000.

Restricted or Limited Use of Data

The contractors may be required to sign and adhere to a non-disclosure agreement.

NMFS Project Contact:

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Peer Review Report Requirements

1. The report must be prefaced with an Executive Summary providing a concise summary of the findings and recommendations, and specify whether or not the science reviewed is the best scientific information available.
2. The report must contain a background section, description of the individual reviewers' roles in the review activities, summary of findings for each TOR in which the weaknesses and strengths are described, and conclusions and recommendations in accordance with the TORs.
 - a. Reviewers must describe in their own words the review activities completed during the panel review meeting, including a brief summary of findings, of the science, conclusions, and recommendations.
 - b. Reviewers should discuss their independent views on each TOR even if these were consistent with those of other panelists, but especially where there were divergent views.
 - c. Reviewers should elaborate on any points raised in the summary report that they believe might require further clarification.
 - d. Reviewers shall provide a critique of the NMFS review process, including suggestions for improvements of both process and products.
 - e. The report shall be a stand-alone document for others to understand the weaknesses and strengths of the science reviewed.
3. The report shall include the following appendices:
 - Appendix 1: Bibliography of materials provided for review
 - Appendix 2: A copy of this Statement of Work
 - Appendix 3: Panel membership or other pertinent information from the panel review meeting.

Terms of Reference for the Peer Review

1. Evaluation of the ability of the stock assessment model, with the available data, to provide parameter estimates to assess the current status of pollock in the Gulf of Alaska.
2. Evaluation of the strengths and weaknesses in the stock assessment model for GOA pollock.
3. Review of the use of indices from spatial delta-GLMM models rather than area-swept estimates as abundance indices for the bottom trawl survey.
4. Review of the use of biomass and size composition estimates from the acoustic survey that have been corrected for net selectivity.
5. Potential evaluation of an equivalent walleye pollock assessment model in Stock Synthesis

Tentative Agenda

TBD

Alaska Fisheries Science Center

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Seattle, WA 98115

May 22-25, 2017

Point of contact: Martin Dorn (Martin.Dorn@noaa.gov)