



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1026

4 April 2003

Mr. Thomas Hill
Chairman
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950

**RE: Action Plan for Recommendations from the Groundfish Science
Peer Review**

Dear Tom,

The purpose of this letter and attachments is to provide, consistent with my commitment to the Council, an action plan for follow-up on specific recommendations, observations, and issues raised in the compiled reports of the independent technical experts contributing to the Groundfish Science Peer Review.

No consensus summary report was developed by the peer reviewers. As a result, the formats, content and levels of specificity differed in each of the five reports (as noted in Chairman Payne's summary). Thus, in order to prepare this letter and attachments, it has fallen to the NEFSC to cull recommended actions from the five reports, sort them, and develop appropriate responses to each.

The attached comment index and key table summarize the various recommendations from individual reviewers by subject area, and by action category. The comments by the reviewers pertain primarily to the three subject areas described in the terms of reference (e.g., trawl surveys, biological reference points, and projections). While not an explicit term of reference, reviewers also offered comments on the adequacy of northeast stock assessments. Comments and recommendations by the reviewers appear to fall into three action categories: (1) comments thought to require immediate consideration owing to their potential significance in short-term decision making; (2) comments more germane to longer-term research; and (3) suggestions for policy makers in light of various scientific findings and reviewer's interpretations of USA policy and technical guidance under SFA.

In the second attachment we provide detailed responses to immediate- and longer-term issues raised by the reviewers. One issue, thought to require immediate action, concerned the



selection criteria employed for choosing among candidate stock-recruitment models for three stocks (Georges Bank and Gulf of Maine cod and southern New England winter flounder). As these criteria potentially influence the choice of fishing mortality and biomass reference points, considerable attention is given in response to the reviewers' comments in section 2 of the attached report. A second issue we regard as having immediate significance to management involves the appropriateness of Ricker-type stock-recruitment models and the biological mechanisms that might justify the use of such models. A number of additional issues regarding the use of trawl survey data in stock assessments and the robustness of F_{MSY} values have important short-term consequences for management advice and are discussed in sections 1 and 2 of this report.

The majority of reviewer comments and observations relate to new analyses and ways to view data that are regarded as longer-term issues to be addressed as data and resources permit, and in the standard course of stock assessment development and review. Reviewer comments regarding enhancements to the trawl survey program are being pursued through a number of technical and consultative processes that have already been initiated (e.g., the new Trawl Survey Working Group). Still other recommendations are more appropriately cast as management policy questions that should be addressed specifically by the New England Fishery Management Council (e.g., the development of adaptive management approaches for stock recovery, and the consideration of management schemes that explicitly take into account bycatch [technological] interactions in mixed fisheries).


The peer reviewers provided wide-ranging and thoughtful advice relevant to the conduct of science in support of groundfish management. Many of the specific suggestions they recommend are at the state-of-the-art in fishery stock assessment or beyond, and can be used to help prioritize current and future research. These recommendations will have relevance for a number of similar stock rebuilding programs not only in the USA, but globally. Some of the recommended studies can be accomplished with a moderate level of work and with data on hand. Other items, such as the development of multispecies stock assessment approaches, are already planned activities under NMFS' Stock Assessment Improvement Plan, and will occur as additional resources become available.

With due consideration to the peer reviewer's comments (as elaborated in the attachments), our considered opinion is that the data and results for the various stocks have been appropriately used and calculated, and constitute the best

science available with which to evaluate the status of these resources and support the development of Amendment 13 to the Northeast Multispecies FMP. None of the alternative assessments that were evaluated by the peer reviewers were deemed to be superior to those presented by the GARM or updated at SARC 36. Estimates of F_{MSY} and their proxies are robust to uncertainties in the population dynamics even for fully-rebuilt stocks, and estimates of B_{MSY} are the most appropriate values, given full consideration of alternative estimates and their technical bases.

I intend to report periodically to the Councils and the public on the progress of the various efforts we have initiated to implement the recommendations stemming from the peer review. This letter and attachments will be transmitted to the Council and made available on our website.

Sincerely,



John Boreman, Ph.D.
Acting Science and Research Director

CC:

P. Howard (NEFMC)
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