

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

January 15, 2014

Mr. Thomas A. Nies Executive Director New England Fishery Management Council 50 Water Street Newburyport, MA 01950

Dear Tom:

Enclosed please find a detailed proposal for a diagnostic benchmark for Georges Bank yellowtail flounder. Earlier I had apprised you about our plans to develop an empirical approach for estimating abundance of yellowtail flounder. The enclosed document represents a refinement of that approach and a new proposal to conduct a "diagnostic" benchmark under the auspices of the Transboundary Resource Assessment Committee (TRAC). This proposal reflects our consideration of concerns expressed by the Councils, the Regional Office, and industry partners about the earlier draft of this proposal, in particular how it would be used to derive catch advice. Our proposal also reflects extensive discussions with our Canadian counterparts about how we might address pressing needs for improving the basis for catch advice.

We assert that a conventional benchmark, in which a range of alternative stock assessment models for Georges Bank yellowtail flounder are considered, is unlikely to be productive. A comprehensive review of alternative models at the 2013 International Council for the Exploration of the Seas (ICES) Strategic Initiative for Stock Assessment Methods (SISAM) meeting in Boston in July 2013 demonstrated that further consideration of alternative stock assessment models would not reveal the underlying causes for the lack of model fit. Lack of fit, presumably due to one or more changes in the data, or assumed or estimated parameters, was a feature common to all of the models. The SISAM review suggested that stock assessment models were not sufficient to uniquely identify such changes. Instead, a focus on external information would be an appropriate approach to explore problems in model diagnostics and retrospective patterns. Hence the proposed TRAC benchmark would depart from the conventional understanding of benchmarks. We are using the term "diagnostic benchmark" wherein the term "diagnostic" highlights the need to focus on the underlying data and lack of model fit and the term "benchmark" conveys the necessary thoroughness and rigor of the review.

I am confident that this proposal addresses many of the concerns expressed by the Council regarding the Georges Bank yellowtail flounder. This approach is somewhat unconventional with respect to the basis for catch advice and certainly unconventional with respect to normal process for TRAC. We expect that it will provide you with a sufficient scientific basis for crafting catch advice that meets regulatory requirements to end overfishing.

Paul Rago will be attending the New England Fishery Management Council meeting on January 29 to present a brief overview of the empirical approach and answer any questions you may have. I also note that Loretta O'Brien will be serving as co-chair of the TRAC and coordinating this activity with the Transboundary Management Guidance Committee. Consistent with the usual practice of meeting with members of the US industry prior to the TRAC, a meeting will be held with fishermen before the April benchmark. We will discuss with them the various data sources to be used in the empirical approach. I look forward to hearing from you about any additional questions or concerns you may have about this approach.

Sincerely,

William A. Karp, Ph.D.

Science and Research Director

Russell W. Brom

Enclosure

cc: J. Bullard

C. Moore