



## New England Fishery Management Council

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To: Tom Nies, Executive Director From: Scientific and Statistical Committee

**Date:** September 3, 2013

**Subject:** American Plaice and Gulf of Maine Cod Rebuilding Strategies

The SSC met on May 16, 2013 to address the following terms of reference (TORs):

Review the 2012 assessments of American plaice and GOM cod and comment on the rebuilding strategies developed by the PDT based on the recent assessments and the rebuilding alternatives under development. The SSC is requested to advise on the technical basis for the range of alternatives that has been developed by the PDT.

The SSC considered the following documents in its deliberations:

- 1. Memo from PDT to SSC re ABCs (August 2013)
- 2. 2012 Groundfish Assessment Update Summary Report for American plaice (2012)
- 3. 55th SAW Assessment Summary for Gulf of Maine Cod (January 2013)
- 4. 55th SAW Assessment Report for Gulf of Maine Cod (June 2013)

The Groundfish PDT presented possible methods for determining rebuilding strategies for Gulf of Maine cod and American plaice, to be implemented in five years after the current ABCs that have been established by the SSC have passed. There is concern about the need to address uncertainty in the projections under rebuilding plans, but the mechanism for articulating that uncertainty is unclear.

The procedures outlined by the PDT seem reasonable. The SSC noted that it might be necessary to make clear the consequences to yield and biomass associated with the assumptions implicit in the projections (e.g. assumptions about M or recruitment). There does not seem to be a large difference in the consequences associated with different timelines (e.g., 8 years vs. 10 years), so it may be prudent to focus on 10 year time lines and explore the consequences of assumptions on the probability of recovery within what remains of the 10 year period.

Constant vs. time varying F strategies might also be considered, approaches similar to those PDTs have developed in the past with some success. Scenarios where the change in catch is bounded in order to constrain ecological and economic disruptions to the fishery might also be considered.

In analyzing rebuilding options, attention should be paid to metrics beyond solely biomass relative to  $B_{MSY}$ . For example, stock structure, especially age composition, is an important attribute. For some stocks, reconsideration of the reference points might be warranted. It might also be important to consider rebuilding in the mixed stock context. For example, the Council might not wish to speed up the rebuilding of cod, say, at the expense of limiting catch of haddock or pollock.

Finally, as the PDT has recognized, plans that focus on F, rather than B, appear to be more robust. However, legally, the 10-year rebuilding target remains an important constraint on options.