New England Fishery Management Council
50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
John Pappalardo, *Chairman* | Paul J. Howard, *Executive Director*

MEMORANDUM

June 13, 2011

TO: SSC Members
FROM: Council Staff
SUBJECT: Developing a Council risk policy

Background
The MSFMCA provided only general guidance on the process for setting catch limits leaving NMFS/NOAA the task of providing guidance on how to consider uncertainty and risk in setting ACLs in the National Standard Guidelines for Annual Catch Limits.

On the subject of ACLs, the Magnuson-Stevens Act states only that Councils shall "*develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g);"*

The National Standard Guidelines (in response to comment 42) state that:
… Determining the acceptable level of risk of overfishing that results from scientific uncertainty is the policy issue. The SSC must recommend an ABC to the Council after the Council advises the SSC what would be the acceptable probability that a catch equal to the ABC would result in overfishing. This risk policy is part of the required ABC control rule. The Council should use the advice of its science advisors in developing this control rule and should articulate the control rule in the FMP.

Challenges
The Councils face several problems in trying to follow the procedure suggested in the National Standard Guidelines. First, for many stocks, not enough is known to estimate probabilities of overfishing at different catch levels. Second, the guidelines suggest that the Councils define acceptable risk levels for preventing overfishing, but the Councils do not yet know social and economic consequences associated with different risk levels. Third, even if there is enough information to estimate the consequences of assuming different levels of risk, doing so will require additional resources.

To date Councils have been struggling to adequately deal with only the first problem of how to categorize and respond to differing levels of scientific uncertainty in setting ACLs. Together with their SSCs, Councils have used a variety of methods to account for scientific uncertainty in

setting ABCs. Several Councils have adopted a single framework for all FMPs under which the size of the buffer between the OFL and the ABC is predetermined based on the type of assessment and quality of data used to develop biological reference points. Smaller buffers are set for stocks with assessments that include statistical estimates of uncertainty for biological reference points and larger buffers are set for data poor stocks. Other Councils have set ABCs using an ad-hoc approach for each fishery or stock although the same sources of uncertainty are considered in setting ABC buffers. The essential difference between the two approaches is that the ad-hoc approach allows more flexibility while the overall framework saves the SSC time that would need to be spent to evaluate each fishery or stock in much greater detail.

How to estimate scientific uncertainty and how to provide this information to Councils has been the focus of most of the discussion about how to fulfill the MSA. However, the Councils generally have not evaluated expected social and economic outcomes relative to a range of buffers set for a particular stock. As a result they have adopted a "risk policies" based solely on the level of scientific uncertainty and the risk of overfishing, and not based on a combination of uncertainty and economic and social outcomes. Even the risk of overfishing has not been fully evaluated, as the consequences of overfshing have not been evaluated.

Progress to date and recommendation

The New England Council has indicated that it is interested in developing a "risk policy". So far, the New England SSC has succeeded in providing the same type of recommendations as other SSCs although it has chosen more of an ad-hoc approach both because of the direction from the Council and the differences in scientific knowledge about various stocks. This has enabled the SSC to weigh different uncertainties as it thinks appropriate instead of simply categorizing stocks according to the level of scientific information available. However, it has not been possible to make progress in developing a comprehensive risk policy that considers possible outcomes as well scientific uncertainty because of the need for the SSC to complete ABC recommendations quickly and for the Council to amend its FMPs to meet deadlines for implementing ACLs.

The staff recommends that the best way to proceed with the development of a risk policy would be to form a workgroup comprised of representation from the SSC, the NEFSC, the NERO and the Council staff. The workgroup would be able to develop approaches that are supportable by available data and methods and be able to devote the time needed to develop approaches. The makeup of the workgroup would enable the concerns of all groups to be represented although ultimately the Council would have final say over whether the approaches to risk policy represent its perspective.