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New England Fishery Management Council

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John Pappalardo, *Chairman* | Paul J. Howard, *Executive Director*

MEMORANDUM

DATE: September 25, 2008
TO: Scientific and Statistical Committee
FROM: Paul J. Howard, Executive Director
SUBJECT: Review of Skate Amendment 3 - Terms of Reference and Background

The SSC is asked to provide advice to the Council on whether the analyses identified below are adequate to support Council selection of management measures to achieve biological objectives such as ABCs, target fishing mortality rates and rebuilding and to describe the social and economic impacts of the management alternatives. Amendment 3 is intended to address and provide remedies for the following four issues:

- Overfished status of smooth, thorny and winter skates
- Overfishing of thorny skate
- Implementation of annual catch limits (ACLs) and accountability measures (AMs)
- The need to revise the baseline review process

At a meeting on Skate Amendment 3 in April 2008, the SSC approved an interim framework for setting skate catch limits, which defined the skate landings targets, TACs and also potentially defined when accountability measures would be triggered.

The SSC recommendations were to set the interim catch limits using the median catch/biomass index applied to the survey biomass index to increase the probability of thorny and winter skate rebuilding (see document 5b, SSC recommendations, April 15, 2008). Since that time, the stock status determinations provided to the Council by NMFS in July 2008 indicated that smooth skate had become overfished and that overfishing of thorny skate was occurring.

The Plan Development Team (PDT) reviewed the information in the catch limit analysis, and using Dr. Todd Gedamke's (NMFS/SEFSC) demographic model, estimated smooth skate rebuilding potential (for background see document 14 in Appendix I to the Skate Amendment 3 Draft Environmental Impact Statement referenced later in this memorandum) to determine whether the median catch limits would address these new status determinations. The PDT determined that the proposed skate catch limits were sufficient to address these issues with the caveat that the Council should consider measures in other plans to reduce skate discards in the Gulf of Maine.

These interim catch limit specifications were also updated when the 2007 survey data became available for analysis, which resulted in a 5.8% reduction in the estimated catch limits. The limits were included in Amendment 3 as an ABC, ACL, ACT, and TAL with the expectation that the catch limit framework would comply with the revised National Standard 1 Guidelines. As such, the Amendment 3 document specifies an ABC/ACL of 27,809 mt, an ACT (75% of the ACL to account for uncertainty) of 20,857 mt and a skate complex TAL of 11,544 mt (to account for the 2004-2006 discard rate) allocated to the skate wing, the skate bait, and state water fisheries based on history. The time/area management and possession limit specifications were estimated to achieve the 11,544 mt landings target (TAL).

The Skate PDT used the “two-bin” and the “possession limit” models to analyze the time/area closures and possession limits needed to achieve the catch targets. The description of these analyses are included in the DEIS as indicated below. The SSC should pay particular attention to these analyses since they form the basis for determining how the management alternatives may achieve the target catches. An additional issue identified in a review of the document by the NEFSC, the allocation of unclassified skate catches by species using data from the NOAA Bottom Trawl Survey, will be referred to the Data Poor Stock Assessment Workshop which will take place later this fall.

The documents (Amendment 3, the Draft Environmental Impact Statement (DEIS) and a Stock Assessment and Fishery Evaluation (SAFE) Report) are available for review at http://www.nefmc.org/skates/planamen/amend3/Amend3_DSEIS_Sept08.htm. The sections that are most relevant to the TORs are:

- Executive Summary (Section 1.0)
- Purpose and Need for Action (Section 3.0)
- Management Measures (Section 5.1)
- Description of Alternatives (Section 5.2)
- Analysis of time/area closures (Section 8.3.1.6)
- Analysis of the proposed skate possession limits (Section 8.3.1.7)
- Estimates of changes in skate discards from the possession limits (Section 8.3.1.10)
- Comparison of the effects of the alternatives (Section 8.3.2)
- Economic Impacts (Section 8.7)
- Social Impact Assessment (Section 8.7).

Please also refer to supporting technical documents 9, 10, and 11 in Appendix I for details about how the skate management areas were chosen and how they were analyzed via a two-bin effort displacement model. Appendix I contains supporting technical documents 12 and 13, which detail the possession limit model methods and describe how the model was applied to estimate possession limits which are expected to be consistent with the skate wing and bait fisheries TALs.

Hard copies of the document may also be requested from Karen Roy (kroy@nefmc.org) at the Council office. If you have questions about Amendment 3 or the impact analyses, please contact Chris Kellogg (ckellogg@nefmc.org).