

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
PART I OF THE MANAGEMENT MEASURES FOR 2009-2010 FISHERIES

Mr. E. J. Dick presented the Groundfish Management Team report on the development of a discard mortality matrix for ocean and estuary recreational fisheries which describes estimation of discard mortality rates by species and depth. The Scientific and Statistical Committee (SSC) considers this analysis to be an improvement over current methods of estimating discard mortality (e.g., assuming 42 percent post-release mortality across species and depths in California) and finds further research to be warranted. The SSC provided a number of technical suggestions to improve the model. The SSC notes that estimates of depth and species specific mortality are necessarily highly uncertain given the sparseness of the data.

The mortality estimation procedure in the current document is incorrect due to the use of additive mortality rather than multiplicative survival. Nonetheless, the SSC agrees with the use of the current mortality estimates if practical constraints preclude the adjustment of management measures which have already been developed using these values. The SSC notes that the current estimation procedure results in overestimates of mortality which are therefore somewhat risk averse from a conservation standpoint. If the values are corrected but the management unchanged, larger buffers between expected total fishery mortality and the harvest specifications will result. In any case, the calculation method should be corrected before analysis is undertaken for the 2011-2012 management cycle. The issues and suggestions which have been identified by the SSC could have been dealt with more efficiently had this document been reviewed by the SSC in March.

Additional research should be pursued, including: 1) research on short-term (1-5 days) and long-term delayed mortality, 2) research on the effectiveness of devices that release fish at depth, which could lead to a decrease in mortality rate estimates for fish released using such a device with a concomitant potential increase in fishing opportunities, and 3) research on discard mortality rates for commercial hook-and-line fisheries.