MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Jim H. Branson
Executive Director

DATE: March 20, 1981

SUBJECT: Herring AIC Formula

ACTION REQUIRED

1. Clarification and/or revision of formula.
2. Inclusion of AIC as a Groundfish FMP amendment.

BACKGROUND

1. The Herring FMP has hit a snag.

The Council approved the Herring FMP at the December meeting after review of the AIC formula by the SSC and AP. Norman Cohen raised a question about how the formula would respond in certain circumstances and suggested that the formula needed improvement. Although the SSC felt that the formula was not perfect, they considered it to be the best one available and that it would in fact respond properly in the circumstances described by Mr. Cohen. The Council felt that by changing one variable the formula might be improved. A review by Council staff, NMFS and others found the new formula to be less responsive and in some cases quite inappropriate. The original formula was

\[ AIC = OYG \times IR \times \frac{ABC}{ABC_i} \]

Where \( OYG \) = Bering Sea groundfish OY
\( IR \) = observed incidental catch rate
\( ABC \) = present year's Acceptable Biological Catch
\( ABC_i \) = previous year's ABC

The Council amended the formula to read

\[ AIC = OYG \times IR \times \frac{ABC}{ABC_{i-3}} \]

Where \( ABC_{i-3} \) = the average ABC for the 3 preceding years
The revision may in some cases cause a significant upward or downward change in AIC even though the herring biomass remains constant. This can be remedied by

(1) returning to the original formula, and
(2) recalculating IR annually, based on the best, most current available data using the methods outlined in the FMP.

The Council should consider these changes, which are in response to public questions and concerns raised at the December meeting. The Council should also instruct the staff to make necessary editorial changes to clarify the intent and methods described in the FMP to make it consistent throughout. The FMP, FEIS, and Draft Regulatory Impact Review (RIR) can then be submitted for Secretarial review.

2. The Allowable Incidental Catch and Herring Savings Area portions of the Herring FMP directly affect the Bering Sea groundfish fishery. General Council has suggested that the Council include these as a de facto amendment to the Bering Sea Groundfish FMP for clarification. This is the only action required to make the two plans consistent.