AGENDA C-5(b)
APRIL 2011

MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Chris Oliver
Executive Director

DATE: March 23, 2011

SUBJECT: Essential Fish Habitat - BBRKC

ESTIMATED TIME
2 HOURS

(All C-5 items)

ACTION REQUIRED:

(b) Discussion paper on BBRKC spawning area/ fishing effects.

BACKGROUND:

In April 2010, the Council reviewed the summary report of the 5-year review of essential fish habitat (EFH) provisions. The report addresses new habitat information available since the last comprehensive review of EFH, documented in the 2005 EFH EIS, and how it pertains to the EFH provisions of the Council's fishery management plans (FMPs) for BSAI and GOA groundfish, BSAI crab, Scallop, and Salmon.

During the Crab Plan Team's review of EFH information pertaining to crab species, the Plan Team recommended that further analysis should be undertaken to evaluate fishing effects on crab stocks, and determine whether the conclusions in the FMP are valid. Distribution of crab stocks, particularly red king crab, has changed since the analysis in the 2005 EFH EIS. Additionally, the methodology used in the 2005 effects of fishing analysis may not adequately capture actual impacts of fishing on crab populations. Other parameters may need to be considered for crab stocks, such as the importance of spawning and larval distribution relative to oceanographic currents (pelagic habitat) for crab settlement. This is applicable to the assessment of all crab stocks. Also, the conclusions in the 2005 EFH EIS imply that more is known about the effects of fishing on the habitat needs and life history stages of crab (especially growth to maturity) than can be substantiated, based on research-to-date. Therefore the Crab Plan Team recommended further evaluation of the effects of fishing be undertaken.

Consequently, the Council asked staff to prepare a discussion paper (attached as **Item C-5(b)(1)**) to further examine the Crab Plan Team's recommendation to re-evaluate the effects of fishing on crab stocks. The paper also looks at the importance of southwestern Bristol Bay for red king crab populations, and whether and how interactions with the trawl fisheries in that area may be impacting the crab stock. Existing crab protection areas are evaluated in light of new information about shifting populations. The discussion paper also provides some clarification on the issues raised by the Plan Team with respect to the methodology that was used in the 2005 evaluation of fishing effects, focusing specifically on red king crab as an example crab species, and considering whether the appropriate parameters for crab stocks are included in that analysis (such as the importance of spawning and larval distribution relative to oceanographic currents for crab settlement). The paper presents options for Council action to protect southwestern Bristol Bay through EFH or HAPC conservation measures.