


MEMORANDUM

TO: Council and AP Members

FROM: Chris Oliver 
Executive Director

DATE: March 20, 2012

SUBJECT: Tanner crab model review (SSC only)

ESTIMATED TIME
6 HOURS
ALL D-1 ITEMS

ACTION REQUIRED

(e) Tanner crab model review (SSC only)

BACKGROUND

On October 1, 2010, NMFS notified the Council that the eastern Bering Sea Tanner crab (*Chionoecetes bairdi*) stock is overfished. To comply with section 304(e)(7) of the MSA, the Council has two years from this notification to prepare and implement a Tanner crab rebuilding plan. The eastern Bering Sea Tanner crab stock was declared overfished because the survey estimate of total mature male biomass was below the minimum stock size threshold.

Overfishing is not occurring. The State of Alaska did not open the directed Tanner crab fishery for the 2010/2011 season, and the fishery will remain closed until abundance increases. While retained catch was 0 mt, total catch from all sources was estimated to be 870 mt. The overfishing level for the 2010/2011 season was 1,610 mt. Tanner crabs are incidentally taken in the groundfish, snow crab, red king crab, and scallop fisheries.

The Tanner crab rebuilding plan is a challenge because, at the time the stock was declared overfished, the stock assessment model was in the very early stages of development. Without a stock assessment model, it is not possible to estimate the required pieces of a rebuilding plan: the minimum time to rebuild, the target time to rebuild, and an estimate of the harvest rate to achieve rebuilding in the target time period. This is complicated by the need to estimate incidental harvests in the snow crab fishery in conjunction with directed and incidental catch of Tanner crab in the directed Tanner crab fishery as alternative time frames will likely be tied to these estimated harvest rates. Thus a stock assessment model is critical to development of an appropriate rebuilding plan which accurately estimates the necessary harvest rates to estimate rebuilding time frames.

Per SSC request at the February 2012 meeting, the SSC will receive a presentation from assessment authors on the progress made in developing the Tanner crab assessment model following the NPFMC model workshop conducted in January 2012, which provided assessment authors a number of recommendations for this model. The CPT will next review this model in May 2012. The goal is for the SSC to approve the stock assessment model in June 2012 for use in setting 2012/13 catch specifications. With this approved model, the rebuilding projections can be run and the impacts of alternative rebuilding times can be analyzed.