

MEMORANDUM

TO: Council and AP Members
FROM: Chris Oliver *DO for*
Executive Director
DATE: September 19, 2011
SUBJECT: Tanner crab rebuilding plan alternatives

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| ESTIMATED TIME 12 HOURS (all C-3 items) |
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ACTION REQUIRED

- (e) Review alternatives for Bering Sea Tanner crab rebuilding

BACKGROUND

On October 1, 2010, the Council was informed by NMFS that the Bering Sea Tanner crab (*Chionoecetes bairdi*) stock is overfished according to criteria in the Fishery Management Plan for the Bering Sea/Aleutian Islands King and Tanner crab. This notification was based on the most recent stock assessment for Tanner crabs indicating that the stock biomass had declined below its minimum stock size threshold (MSST). The 2010 estimate of mature male biomass (MMB) at mating was 62.70 million pounds, below the MSST of 92.37 million pounds.

In order to comply with section 304(e)(3) of the Magnuson-Steven Act (MSA), the Council and NMFS thus have two years from that notification to develop and implement a plan to rebuild the overfished Tanner crab stock. Under section 304(e)(4) of the MSA, the rebuilding plan must specify a time period for rebuilding the fishery that is as short as possible, taking into account the status and biology of the stock, the needs of fishing communities, and the interactions of the stock within the marine ecosystem. The rebuilding plan shall not exceed 10 years, except if the biology of the stock of other environmental conditions dictate otherwise. At this meeting the Council will consider alternative management measures for rebuilding the Tanner crab stock. These measures may include a combination of directed fishery constraints, bycatch constraints in other fisheries and other considerations.

The Council reviewed a discussion paper in April 2011 that provided an overview of the Tanner crab stock status, development of an assessment model and recent catch estimates in both directed Tanner crab fishery as well as non-directed catch in other crab fisheries, groundfish fisheries and scallop fisheries. The Council noted that it will need to work with the BOF on consideration of catch constraints in crab fisheries given that these are delegated to the State of Alaska under the FMP. A Tanner crab stock assessment model is under development and was reviewed at the September Crab Plan Team report (report to be made available at the meeting). The Council requested the CPT discuss alternative management measures for rebuilding the Tanner crab stock in conjunction with their September meeting and provide these for Council consideration in October. The Crab Plan Team report, which will be distributed at the meeting, contains the discussion on the developing model and recommendations on alternative management measures to be considered in a forthcoming rebuilding plan analysis. A summary of these recommendations and a draft action plan for the analysis will be provided by Council staff at this meeting.

Action Plan – Bering Sea Tanner Crab Rebuilding Plan
9/27/11

Proposed action

Amend the BSAI King and Tanner Crab FMP to establish a rebuilding plan for the overfished Bering Sea Tanner crab stock.

Purpose and need

The Council has not yet drafted a problem statement for this analysis.

Analysis

EA

Range of alternatives

Alternative 1: Status Quo – No action

Alternative 2: Rebuild the stock in the minimum timeframe possible (T_{MIN})

Alternative 3-?: Rebuild the stock in X years (T_{TARGET}) where $T_{TARGET} > T_{MIN}$. [Note the target (X) years will be determined during the course of the analysis using the projection model].

Alternative X: Rebuild the stock in the maximum time frame allowable (T_{MAX}) noting that T_{MAX} should not exceed 10 years unless the stock is not projected to rebuild within 10 years under $F = 0$.

Note that Alternatives 3-X may involve a combination of catch constraints on the directed Tanner crab and directed snow crab fisheries.

Options (apply to all alternatives): Area closures in the directed snow crab fishery to reduce Tanner crab bycatch

Applicable laws

MSA, NEPA

Staff resources

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| NPFMC | Diana Stram | Project and document coordination, work with AFSC and ADF&G staff to finalize impact analysis and EA sections (additional NPFMC staff TBD) |
| ADFG | Doug Pengilly, Bill Gaeman | Analysis for proposed area closures in snow crab fishery |
| | Karla Bush | Consultation re: BOF and ADF&G management |
| AFSC | Lou Rugolo, Jack Turnock | Tanner crab projection model, analysis of alternatives on rebuilding Tanner crab stock, catch constraints on Tanner and snow crab fishery |
| NMFS AKR | Gretchen Harrington | TBD |
| NOAA GC | Clayton Jernigan | legal guidance |

C-3(e) supplemental-Tanner crab rebuilding plan

Timeline to implementation

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| October 2011 | Council adopts purpose statement and draft alternatives |
| January 2012 | Crab modeling workshop on Tanner crab model, projections, review proposed area closures |
| February 2012 | Council reviews preliminary review draft and draft projection analysis |
| March 2012 | Board of Fisheries review and comments on analysis and alternatives |
| April 2012 | Initial Review |
| June or October 2012 | Council selects preferred alternative, Final action |
| October 2012 | Board of Fisheries action (as needed) |

If the Council takes final action in June, many of the rebuilding measures could be implemented for the 2012/2013 fishing year through the OFL, ABC, and TAC setting processes.

C-3(e) Tanner crab rebuilding

The Council moves for analysis the following problem statement and the alternatives outlined in the Action Plan.

Problem Statement:

The Bering Sea Tanner crab stock is overfished. To comply with provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) a rebuilding plan must be implemented prior to the 2012/13 fishing season.

The Council is encouraged with the progress made on the Tanner crab stock assessment model and recognizes the importance of the model in developing an effective rebuilding plan. A fully developed model is integral in estimating the maximum/minimum time to rebuild and in selecting a target year for rebuilding. This action focuses on the directed Tanner crab and snow crab fisheries as the main sources of fishing related mortality of Tanner crab. The Council notes that Tanner crab bycatch in the groundfish fisheries have decreased in recent years due to changes in groundfish fishery management.

This action is necessary to comply with requirements of the MSA to rebuild the Tanner crab stock. Currently, the state is preventing overfishing. ADF&G has closed the directed Tanner crab fishery in 2010/11 and will likely do the same in 2011/12 based on the application of the state's harvest strategy. In the TAC setting process, the state also has the flexibility to constrain the snow crab fishery to prevent overfishing of Tanner crab.