



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

October 1, 2010

Mr. Eric Olson, Chair  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, Alaska 99601

Dear Chairman Olson:

This letter serves as the North Pacific Fishery Management Council's (Council's) notification under section 304(e) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) that Bering Sea Tanner crab (*Chionoecetes bairdi*) is overfished, according to the criteria in the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP).

The Alaska Fisheries Science Center (AFSC) has determined that the Tanner stock has declined below its minimum stock size threshold (MSST) based on the final 2010 stock assessment. The 2010 estimate of mature male biomass (MMB) at the time of mating is 62.70 million pounds, which is below the MSST of 92.37 million pounds. A copy of the memorandum from the AFSC on the 2010 status of the stocks, rebuilding progress, and overfishing levels for Bering Sea and Aleutian Islands crab stocks is enclosed. The status for the other stocks did not change.

To comply with section 304(e)(3) of the Magnuson-Stevens Act, the Council and NMFS have two years from this notification to develop and implement a plan to rebuild the overfished Tanner crab stock. Under section 304(e)(4) of the Magnuson-Stevens Act, the rebuilding plan for Tanner crab 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 period shall not exceed 10 years, except if the biology of the stock or other environmental conditions dictate otherwise. We look forward to working with the Council and the Alaska Department of Fish and Game to develop, analyze, and implement a rebuilding plan for the Tanner crab stock.

Sincerely,

James W. Balsiger, Ph.D.  
Administrator, Alaska Region



Enclosure: Memorandum from Douglas P. DeMaster, Science and Research Director, Alaska Region, regarding the 2010 status of the stocks, rebuilding progress, and overfishing levels for Bering Sea and Aleutian Islands crab stocks

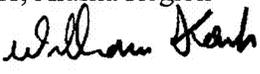


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NATIONAL MARINE FISHERIES SERVICE

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Seattle, Washington 98115-0070

September 27, 2010

MEMORANDUM FOR: James W. Balsiger  
Regional Administrator, Alaska Region

FROM:  Douglas P. DeMaster   
Science and Research Director, Alaska Region

SUBJECT: 2010 status of stocks, rebuilding progress, and overfishing levels  
for Bering Sea and Aleutian Island Crab Stocks

This memorandum provides the current status of stocks, progress towards rebuilding, and the Alaska Fisheries Science Center's recommendations for the 2010/2011 overfishing levels for ten eastern Bering Sea crab stocks.

#### 2010 Status of Stocks Determinations

At the May and September 2010 meetings of the North Pacific Fishery Management Council's Bering Sea/Aleutian Islands Crab Plan Team, the status of the ten Fishery Management Plan (FMP) crab stocks were reviewed and their status relative to overfished and overfishing determined (Table 1). A stock is determined to be overfished if the 2009/2010 estimate of mature male biomass on February 15, 2010 ( $MMB_{\text{mating}}$ ) was below the minimum stock size threshold (MSST) or  $0.5 B_{\text{MSY}}$ . In September 2010, stock projections of MMB at mating on February 15, 2011 are used to determine if a stock is approaching an overfished condition. ***Note that Tanner crab stock is now in an overfished condition. The Pribilof Islands blue king crab stock remains overfished. No crab stocks are approaching an overfished condition.***

The Tanner crab stock was determined to be overfished in 2009/10. The eastern Bering Sea Tanner crab stock biomass declined in 2009/10 below the minimum stock size threshold (MSST). In September 2009, the Tanner crab stock was determined to be approaching an overfished condition based on projections of MMB at mating (February 15, 2010). During the September 2010 Crab Plan Team meeting, 2009/2010 total catches were assessed and the MMB at the time of mating (62.70 million lbs.) was found to be below MSST (92.37 million lbs.). The projected 2010/2011 MMB at mating (57.48 million lbs.) is estimated to be lower than the 2009/10 MMB at mating estimate.

Overfishing is occurring if the total catch in 2009/2010 exceeds the 2009/2010 overfishing level (OFL) for the stock. The 2009/2010 overfishing determinations for the ten FMP crab stocks were reviewed by the Crab Plan Team in May and September 2010. The OFL is based on total catches including retained and discard mortalities except where noted. ***As shown in Table 1, there were no stocks where overfishing occurred in 2009/2010.***



Table 1. 2010 Status of stocks relative to the 2009/2010 overfishing determination and the current overfished status for ten Bering Sea/Aleutian Islands crab stocks. Additional information on status and catch specifications can be found in the 2009 and 2010 Stock Assessment and Fishery Evaluation Reports for the King and Tanner Crab Fisheries in the Bering Sea and Aleutian Islands.

Stock	Tier	MSST (10 <sup>6</sup> lbs)	2009/2010 <sup>*</sup> MMB <sub>mating</sub> (10 <sup>6</sup> lbs)	Overfished status	2009/2010 OFL (10 <sup>6</sup> lbs)	2009/2010 Total catch (10 <sup>6</sup> lbs)	2009/2010 Overfishing status
Bristol Bay red king crab	3	34.3	89.0	No	22.6	18.3	No
Eastern Bering Sea snow crab	3	146.83	281.55	No	72.97	52.69	No
Eastern Bering Sea Tanner crab	4	92.37	62.70	Yes	5.00	3.72	No
Pribilof Islands red king crab	4	4.22	4.46	No	0.50	0.006	No
Pribilof Islands blue king crab	4	4.64	1.13	Yes	0.004	0.001	No
St Matthew Island blue king crab	4	3.48	12.76	No	1.72 [retained]	0.53	No
Pribilof Island golden king crab	5	NA	NA	NA <sup>**</sup>	0.17 [retained]	0 [retained]	No
Adak red king crab	5	NA	NA	NA <sup>**</sup>	0.50 [retained]	0 [retained]	No
Norton Sound red king crab	4	1.54	5.83	No	0.71 [retained]	0.43	No
Aleutian Island golden king crab	5	NA	NA	NA <sup>**</sup>	9.18 [retained]	5.91 [retained]	No

\* MMB as estimated during the 2010 assessment.

\*\* For Tier 5 stocks, it is not possible to set an MSST to determine overfished status because there are no reliable estimates of biomass.

## 2010 Progress Towards Stock Rebuilding

In 2009/2010 there were two Bering Sea/Aleutian Islands King and Tanner crab stocks still under rebuilding plans: Eastern Bering Sea snow crab and Pribilof Islands blue king crab. A review of the status of these stocks relative to rebuilding found that:

1. The eastern Bering Sea snow crab stock did not make adequate progress towards the 2009/2010 target rebuilding period. In order to be considered rebuilt by the established 10 year time period,  $MMB_{\text{mating}}$  would have needed to be greater than  $B_{\text{MSY}}$  in 2008/2009 and again in 2009/2010 in order to meet the two year standard above  $B_{\text{MSY}}$  required for rebuilding. The  $MMB_{\text{mating}}$  in 2008/2009 (241.1 million lbs) and in 2009/2010 (281.55 million lbs) were determined to be below  $B_{35\%_{2008/2009}}$  (326.7 million lbs) and  $B_{35\%_{2009/2010}}$  (293.7 million lbs). A revised rebuilding plan was called for by the North Pacific Fisheries Management Council (NPFMC) in collaboration with the National Marine Fisheries Service Alaska Region and the Alaska Department of Fish and Game (ADF&G) in 2009/2010. The initial review of the rebuilding plan occurred in June 2010 and final Council review is expected in October 2010.

In the interim, an OFL based on the F35% control rule was recommended by the Crab Plan Team in September 2010. The AFSC recommends that F be below the maximum permissible (75% F35%) under National Standard Guidelines of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) to best meet the MSFCMA (Section 304(e)(4)) requirements for rebuilding time periods that are as short as possible, taking into account the needs of fishing communities. In addition, a reduced F during the interim period provides additional protection to Tanner crab, which is caught in the directed snow crab fishery and which is now in an overfished condition.

2. The Pribilof Islands blue king crab stock is not making adequate progress towards the 2012/2013 target rebuilding date. As a result, a revised rebuilding plan was initiated in 2009/2010 with preliminary review in April 2010. The initial Council review of the rebuilding plan is expected to occur in October 2010. In the interim, a low total catch OFL was recommended by the Crab Plan Team in September 2010 to account for low bycatch levels expected to occur in 2010/2011.

### Recommended 2010/2011 Overfishing Level Definitions

Overfishing level (OFL) definitions for the ten Bering Sea and Aleutian Island crab stocks were discussed and reviewed at the May and September Crab Plan Team meetings and recommendations were made for OFLs (Table 2). Total allowable catch and guideline harvest levels are set by the ADF&G consistent with the FMP for the Bering Sea/Aleutian Islands King and Tanner crab and the State/Federal Action Plan for Management of Commercial King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands. For all ten stocks, SAFE reports which present the stock data, model estimates, and biological reference points have been prepared for review by the SSC and NPFMC in October.

Table 2. 2010/2011 Overfishing Levels for ten Bering Sea/Aleutian Islands crab stocks. Additional information on status and catch specifications can be found in the 2010 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries in the Bering Sea and Aleutian Islands.

Stock	Tier	2010/2011 MMB <sub>mating</sub> (10 <sup>6</sup> lbs)	F <sub>OFL</sub>	2010/2011 OFL (10 <sup>6</sup> lbs)
Bristol Bay red king crab	3a	83.1	0.32	23.5
Eastern Bering Sea snow crab	3b	224.6	0.91	97.9
Eastern Bering Sea Tanner crab	4b	57.48	0.05	3.55
Pribilof Islands red king crab	4b	5.44	0.11	0.77
Pribilof Islands blue king crab	4c	0.63	0	0.004
St Matthew Island blue king crab	4a	15.29	0.18	2.29*
Pribilof Island golden king crab	5	NA	NA	0.18
Adak red king crab	5	NA	NA	0.12
Norton Sound red king crab	4a	5.44	0.18	0.73
Aleutian Island golden king crab	5	NA	NA	11.0

NA = not applicable

\* total male catch