AMENDMENT 7
to the Fishery Management Plan for the Commercial King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands

(1) Replace the January 24, 1989 draft of the FMP with the FMP dated July 18, 1998.

The FMP was updated with housekeeping changes which are outlined in the EA.

(2) In Chapter 6.0 entitled "Specification of Maximum Sustainable Yield, Optimum Yield, Minimum Stock Size Threshold, Overfishing Levels, Annual Harvest, and Annual Processing," (a) add the following as the second paragraph:

The following definitions are based on the national standard 1 guidelines (50 CFR 600.310) and bring the FMP into compliance with the Magnuson-Stevens Act. These definitions provide objective and measurable criteria for identifying when the BSAI crab fisheries are overfished or overfishing is occurring. Table 6.1 provides the MSST, MSY, OY and MSY control rule estimates for the BSAI king and Tanner crab stocks. The MSY was recalculated for Adak red king crab, Aleutian golden king crab, and St. Matthew golden king crab since the public draft of the EA dated May 6, 1998. The Crab Plan Team will reevaluate these estimates every five years or when environmental conditions indicate a regime shift.

(b) add the following definitions and table after "Optimum Yield"

Maximum sustainable yield (MSY) is the largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological and environmental conditions. MSY is estimated from the best information available. Proxy stocks are used for BSAI crab stocks where insufficient scientific data exists to estimate biological reference points and stock dynamics are inadequately understood. MSY for crab species is computed on the basis of the estimated biomass of the mature portion of the male and female population or total mature biomass (MB) of a stock. A fraction of the *MB* is considered sustained yield (*SY*) for a given year and the average of the *SY*s over a suitable period of time is considered the MSY.

Overfishing: The term "overfishing" and "overfished" mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce MSY on a continuing basis. Overfishing is defined for king and Tanner crab stocks in the BSAI management area as any rate of fishing mortality in excess of the maximum fishing mortality threshold, F_{msy}, for a period of 1 year or more. Should the actual size of the stock in a given year fall below the minimum stock size threshold, the stock is considered overfished. If a stock or stock complex is considered overfished or if overfishing is occurring, the Secretary will notify the Council to take action to rebuild the stock or stock complex.

MSY control rule means a harvest strategy which, if implemented, would be expected to result in a long-term average catch approximating MSY. The MSY control rule for king and Tanner crabs is the mature biomass of a stock under prevailing environmental conditions, or proxy thereof, exploited at a fishing mortality rate equal to a conservative estimate of natural mortality.

MSY stock size is the average size of the stock, measured in terms of mature biomass of a stock under prevailing environmental conditions, or a proxy thereof. It is the stock size that would be

achieved under the MSY control rule. It is also the minimum standard for a rebuilding target when remedial management action is required. For king and Tanner crab, the MSY stock size is the average mature biomass observed over the past 15 years, from 1983 to 1997.

Maximum fishing mortality threshold (MFMT) is defined by the MSY control rule, and is expressed as the fishing mortality rate. The MSY fishing mortality rate $F_{msy} = M$, is a conservative natural mortality value set equal to 0.20 for all species of king crab, and 0.30 for all *Chionoecetes* species.

Minimum stock size threshold (MSST) is whichever is greater: one half the MSY stock size, or the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock or stock complex were exploited at the maximum fishing mortality threshold. The minimum stock size threshold is expressed in terms of mature biomass of a stock under prevailing environmental conditions, or a proxy thereof.

Table 6.1. MSST, MSY, OY, and the MSY control rule estimates for BSAI king and Tanner crab stocks. Estimated values are in millions of pounds. (NA indicates that insufficient data exists at this time to estimate the value)

Stock	MSST	MSY	OY range	MSY control rule
Adak red king	NA	1.5	0 - 1.5	0.2
Bristol Bay red king	44.8	17.9	0 - 17.9	0.2
Dutch Harbor red king	NA	NA	NA	0.2
Pribilof Islands red king	3.3	1.3	0 - 1.3	0.2
Norton Sound red king	NA	0.5	0 - 0.5	0.2
Pribilof Islands blue king	6.6	2.6	0 - 2.6	0.2
St Matthew blue king	11.0	4.4	0 - 4.4	0.2
St Lawrence blue king	NA	0.1	0 - 0.1	0.2
Aleutian Is. golden king	NA	15.0	0 - 15.0	0.2
Pribilof Is. golden king	NA	0.3	0 - 0.3	0.2
St. Matthew golden king	NA	0.3	0 - 0.3	0.2
Aleutian Is. scarlet king	NA	NA	NA	0.2
EBS scarlet king	NA	NA	NA	0.2
TOTAL king crab		**43.9**	**0 - 43.9**	
E. Aleutian Is. Tanner	NA	0.7	0 - 0.7	0.3
EBS Tanner	94.8	56.9	0 - 56.9	0.3
W. Aleutian Is. Tanner	NA	0.4	0 - 0.4	0.3
TOTAL Tanner crab		**58.0**	**0 - 58.0**	
EBS snow	NA	276.5	0 - 276.5	0.3
TOTAL snow crab		**276.5**	**0 - 276.5**	
E. Aleutian Is. angulatus	NA	1.0	0 - 1.0	0.3
EBS angulatus	NA	0.3	0 - 0.3	0.3
E. Aleutian Is. tanneri	NA	1.8	0 - 1.8	0.3
EBS tanneri	NA	1.5	0 - 1.5	0.3
W. Aleutian Is. Tanneri	NA	0.2	0 - 0.2	0.3
TOTAL other Tanners		**4.8**	**0 - 4.8**	