AMENDMENT 13

TO THE

ATLANTIC SURFCLAM AND OCEAN QUAHOG FISHERY MANAGEMENT PLAN

VOLUME 2

APPENDICES

APRIL 2003

Mid-Atlantic Fishery Management Council

in cooperation with the

National Marine Fisheries Service

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APPENDIX 1

SURFCLAM
SAW and SARC

Northeast Fisheries Science Center Reference Document 00-04

A Report of the 30th Northeast Regional Stock Assessment Workshop

30th Northeast Regional Stock Assessment Workshop (30th SAW)

Public Review Workshop

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Region
Northeast Fisheries Science Center
Woods Hole, Massachusetts

April 2000

E. SURFCLAM ADVISORY REPORT

State of Stock: The EEZ surfclam stock (animals in waters beyond 3 mile state limits) is at a high level of biomass (Figure E1) and under-exploited. Surfclam in state waters were not assessed. Fishing mortality is low. Estimated mean annual fishing mortality rates (F) from 1997-1999 were 0.02 for the entire EEZ resource, 0.03 – 0.04 for the northern New Jersey (NNJ) region, and 0.04 - 0.07 for the southern New Jersey (SNJ) region (Figure E4). The majority of the catch is derived from NNJ, which contains about 39% of the stock biomass. Recent F's are less than the current overfishing definition ($F_{20\%}$ = 0.18, estimated in the previous assessment assuming M=0.05) or a new overfishing definition recommended by the SARC (an F_{MSY} proxy of F=M=0.15).

Management Advice: Fishing mortality can be increased for the surfclam resource taken as a whole. However, it may be advantageous to avoid localized depletion.

Forecasts: Short term deterministic projections for 1999-2002 were performed using recent catch (average 1997-1999) with 20% non-catch mortality from fishing, recent recruitment levels (average 1997-1999) and assuming M=0.15 y^{-1}. Projections suggest little change (4%) in total clam biomass during 1999-2002, although larger changes in some regions are possible. Biomass and recruitment are in metric tons.

Stock Assessment Region[1,2]	Biomass 1999	CV	Recent Mean Catch+ 20%	Recent Mean Recruitment	Biomass 2002	% Change in Biomass
SVA	2,500	71%	2	0	1,600	-36%
DMV	320,000	52%	900	23,000	331,000	3%
SNJ	68,000	114%	4,000	12,000	81,000	19%
NNJ	480,000	26%	16,000	42,000	441,000	-8%
LI	47,000	72%	100	3,000	48,000	1%
SNE	84,000	40%	90	4,900	82,000	-3%
GBK	265,000	34%	0	29,000	334,000	26%
Total	1,268,000	19%	21,000	114,000	1,319,000	4%

[1] SVA = southern Virginia, DMV = Delmarva, NNJ = Northern New Jersey, SSJ= Southern New Jersey, LI = Long Island, SNE = southern New England, GBK = Georges Bank

[2] Source: KLAMZ assessment model.