

AMENDMENT #2 TO THE BUTTERFISH FISHERY MANAGEMENT PLAN

November 1980

Mid-Atlantic Fishery Management Council

in cooperation with the

National Marine Fisheries Service

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II. SUMMARY

The Butterfish Fishery Management Plan was approved by the Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration on 9 November 1979 for fishing year 1979-1980 (1 April 1979 - 31 March 1980). Amendment #1, extending the Plan through fishing year 1980-1981, was approved by the Assistant Administrator on 17 March 1980. The purpose of Amendment #2 is to extend the Fishery Management Plan for up to one year beyond the end of fishing year 1980-1981.

The management unit for the Plan is all butterfish under US jurisdiction north of Cape Hatteras. The objectives of the Plan are:

- (1) Promote the growth of the US butterfish export industry.
- (2) Minimize cost of harvesting butterfish.
- (3) Increase employment opportunities for commercial fishermen.
- (4) Prevent exploitation of the resource beyond that level producing the maximum sustainable yield.
- (5) Minimize costs of enforcement and management of the resource.

The following management measures are included in the Plan:

- (1) Annual values of Optimum Yield = 11,000 metric tons (mt), estimated Domestic Annual Harvest = estimated Domestic Annual Processing = 7,000 mt, and Total Allowable Level of Foreign Fishing = 4,000 mt.
- (2) Any owner/operator of a vessel (US or foreign) desiring to catch butterfish within the Fishery Conservation Zone (other than individual US fishermen for their own use), or transport or deliver for sale any butterfish caught within the Fishery Conservation Zone, must possess a valid registration issued by the National Marine Fisheries Service.
- (3) Foreign fishing for butterfish is governed by part 611, Title 50, Code of Federal Regulations.
- (4) Weekly catch reports must be filed by domestic fishermen possessing a valid registration for the butterfish fishery, and domestic dealers and processors must submit weekly reports on transactions involving butterfish.
- (5) Any significant fraction of the US butterfish capacity not harvested by US fishermen may be reallocated to foreign fishermen.

The recommended alternative for Amendment #2 is to continue the Fishery Management Plan with no changes for up to one year. The annual values would be: Optimum Yield = 11,000 mt, Domestic Annual Harvest = Domestic Annual Processing = 7,000 mt, and Total Allowable Level of Foreign Fishing = 4,000 mt. The stock currently appears able to sustain an annual harvest of that magnitude. The estimates of Domestic Annual Harvest and Domestic Annual Processing were reviewed and are considered reasonable for fishing year 1981-1982.

The only other alternative considered is to take no action at this time. This would mean that the Plan would lapse at the end of fishing year 1980-1981, unless extended by a Secretarial Amendment or replaced by a Preliminary Fishery Management Plan.

The alternatives are discussed in Section XII of Amendment #2.

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IV. INTRODUCTION

Amendment #2 to the Butterfish Fishery Management Plan is designed to extend the Plan for up to one year beyond the end of fishing year 1980-1981 (31 March 1981) with no changes to Optimum Yield and quotas. The basic data on the fishery have not changed since Amendment #1 to the Plan was adopted.

The Council is preparing a major Amendment to this Plan, and to the Squid and Atlantic Mackerel Fishery Management Plans, to merge all three into one Plan and to make significant changes to the management regimes. However, the National Marine Fisheries Service has advised the Council that sufficient time is not available for the review and approval of that Amendment prior to the end of the current fishing year (31 March 1981). Therefore, it is necessary to extend the Plan, either by the Secretary or by the Council. This Amendment #2 is designed to extend the Plan to provide adequate time for the review and approval of the major merger Amendment.

V. DESCRIPTION OF STOCKS

The most recent stock assessment prepared by the Northeast Fisheries Center contains no data which would warrant any changes to this section.

VI. DESCRIPTION OF HABITAT

No data are available which would necessitate a change to this section.

VII. FISHERY MANAGEMENT JURISDICTION, LAWS, AND POLICIES

No data are available which would necessitate a change to this section.

VIII. DESCRIPTION OF FISHING ACTIVITIES

The latest landings data are shown in Table 1. No other data are available which would necessitate a change to this section.

IX. DESCRIPTION OF ECONOMIC CHARACTERISTICS OF THE FISHERY

No data are available which would necessitate a change to this section.

X. DESCRIPTION OF BUSINESSES, MARKETS, AND ORGANIZATIONS ASSOCIATED WITH THE FISHERY

No data are available which would necessitate a change to this section.

XI. DESCRIPTION OF SOCIAL AND CULTURAL FRAMEWORK OF DOMESTIC FISHERMEN AND THEIR COMMUNITIES

No data are available which would necessitate a change to this section.

Table 1. Reported US Commercial, Estimated US Recreational, And Reported Foreign Catches Of Squid, Atlantic Mackerel, And Butterfish From The Northwest Atlantic, 1965 - 1979
(in metric tons)

Year	Reported US Commercial Catch ^a			Estimated US Recreational Catch ^b			Reported Foreign Catch In US Waters ^c			Reported Foreign Catch ^d Outside Of FCZ		
	Squid	Mackerel	Butterfish	Squid	Mackerel	Butterfish	Squid	Mackerel	Butterfish ^e	Squid	Mackerel	Butterfish
1965	1,163	1,998	3,111	unk	8,583	unk	177	2,540	749	8,000	11,590	-
1966	1,201	2,724	2,689	unk	unk	unk	344	6,707	3,865	5,000	12,821	-
1967	1,744	3,891	1,970	unk	unk	unk	1,415	18,985	2,316	7,000	11,243	-
1968	1,687	3,929	1,633	unk	unk	unk	4,920	56,043	5,437	98	20,838	-
1969	1,479	4,364	2,256	unk	unk	unk	9,618	108,811	15,063	-	18,636	15
1970	1,050	4,049	1,791	unk	32,078	unk	19,150	205,568	9,028	1,385	21,006	13
1971	1,238	2,406	1,593	unk	unk	unk	17,601	346,338	6,283	8,906	24,496	3
1972	1,322	2,006	744	unk	unk	unk	46,178	385,358	5,171	1,868	22,360	14
1973	1,777	1,336	1,539	unk	unk	unk	55,133	379,829	17,897	9,877	38,550	-
1974	2,462	1,042	1,812	unk	7,640	unk	53,056	293,883	10,337	437	44,655	3
1975	1,987	1,974	2,031	unk	unk	unk	49,999	249,005	9,069	17,757	36,258	119
1976	3,847	2,459	1,400	unk	4,202	unk	46,389	205,956	10,353	41,764	33,065	73
1977	2,632	1,381	1,317	unk	522	unk	39,357	53,644	3,205	80,476	27,481	-
1978 ^f	1,692	1,525	3,669	unk	6,571	unk	26,666	330	1,324	94,343	25,899	-
1979 ^f	5,989	1,764	2,792	unk	2,992	unk	29,609	65	844	111,005	30,605	-
Ave.	2,085	2,457	2,023	unk	unk	unk	26,641	154,204	6,729	25,861	25,300	16

(a) Small amounts of the US commercial catch of these species may have come from outside of US waters in some years.

(b) From angler surveys. Although it is known that squid and butterfish are occasionally taken by recreational fishermen, no estimates of these catches are available.

(c) Catches by foreign nations (including Canada) in ICNAF Subarea 5 and Statistical Area 6 for 1965-1977. 1978 and 1979 estimates from FCMA foreign fishing quota reports.

(d) ICNAF Subareas 1 - 4. Includes Canada. Almost all 'squid' is Illex.

(e) Only butterfish catches reported to ICNAF. See 1980 butterfish stock assessment for estimated total foreign catches.

(f) Preliminary estimates.

XII. DETERMINATION OF OPTIMUM YIELD

XII-1. Specific Management Objectives. The objectives of this Plan are:

- (1) Promote the growth of the US butterfish export industry.
- (2) Minimize cost of harvesting butterfish.
- (3) Increase employment opportunities for commercial fishermen.
- (4) Prevent exploitation of the resource beyond that level producing the maximum sustainable yield.
- (5) Minimize costs of enforcement and management of the resource.

XII-2. Description of Alternatives and XII-3. Analysis of Beneficial And Adverse Impacts Of Potential Management Options. Alternatives for Amendment #2 are:

(1) Take No Action At This Time - This alternative would mean that the Fishery Management Plan would lapse at the end of fishing year 1980-1981 unless extended by a Secretarial amendment. If there were no Secretarial amendment, the National Marine Fisheries Service would be required to prepare a Preliminary Fishery Management Plan for this fishery, which would regulate foreign, but not domestic, harvesting.

One effect of reversion to a Preliminary Fishery Management Plan would be that data on the domestic harvesting and processing industries that would be collected as a result of recordkeeping provisions included in the Plan could not be collected, or could not be collected as effectively. This would seriously limit assessments of the scope and development of the US industry, and would eliminate other fishery and biological information needed to assess optimum yield, US harvesting and processing capacity, condition of the stock, etc.

A reversion to a Preliminary Fishery Management Plan might also result in relatively large annual reallocations of butterfish to foreign fisheries. This might also result from any Secretarial Amendment to the Plan, if such an Amendment specified an Optimum Yield greater than the current value (11,000 mt). The Council believes, for the reasons specified in Section XII-5 of the original Plan, that this would seriously retard the development of the US butterfish (export) fishery.

(2) Continue The Current Fishery Management Plan With No Changes - Under this alternative, the annual values of Optimum Yield, Domestic Annual Harvest, Domestic Annual Processing, and Total Allowable Level of Foreign Fishing would remain the same as those specified in the original Plan, as amended by Amendment #1 (11,000 mt, 7,000 mt, 7,000 mt, and 4,000 mt, respectively). The stock currently appears able to sustain an annual harvest of that magnitude. The estimates of Domestic Annual Harvest and Domestic Annual Processing were reviewed and are considered valid for fishing year 1981-1982.

XII-4. Tradeoffs Between The Beneficial And Adverse Impacts Of The Preferred Management Option. Alternative 2 has been adopted as the preferred management option. The Council believes that it should not rely on the Secretary of Commerce to prepare an Amendment. The Plan and Amendment #1, as prepared by the Council, have been subjected to an extensive public review process, as well as approved by the Advisory Subpanel, the Scientific and Statistical Committee, and the Council. It is not unlikely that changes would be suggested in a Secretarial amendment without the benefit of as complete a public review. The Council is developing a major Amendment to this Plan, along with major Amendments to the Atlantic Mackerel and Squid Plans, to merge all three Plans and more closely coordinate the management

regimes for the species involved. The major Amendment is based on policies that build on the policies in the plans as they currently exist. The Council is proceeding with this major Amendment but has been advised by the National Marine Fisheries Service that it cannot be reviewed in time for it to be implemented prior to the end of fishing year 1980-1981 (31 March 1981). It is, however, possible that the major Amendment could be completed and reviewed during fishing year 1981-1982. Therefore, the Council considers a continuation of the policies set forth in the current Plan necessary until such time as the major Amendment is ready for implementation. A Secretarial Amendment is, therefore, not an acceptable alternative. Given the problems identified above for a Preliminary Fishery Management Plan, amendment by the Council seems to be the only reasonable alternative.

Alternative 2 would have no more impact on foreign nations than the original Plan or Amendment #1 since the initial Total Allowable Level of Foreign Fishing would continue at 4,000 mt and the reallocation provision would be continued. This provision continues the basic policy of the original Plan (and the original Preliminary Fishery Management Plan) to provide a butterfish Total Allowable Level of Foreign Fishing of a size adequate to permit the harvest of the probable Loligo Total Allowable Level of Foreign Fishing.

XII-5. Specification Of Optimum Yield. The Council has reviewed the current values of Optimum Yield, Domestic Annual Harvest, Domestic Annual Processing, and Total Allowable Level of Foreign Fishing, and has found them appropriate for continuation in fishing year 1981-82. A recent (October, 1980) resurvey of New England and Mid-Atlantic processors currently processing butterfish for the export market indicates a conservative sales capacity estimate of 100,000 pounds per day and a processing capacity of as much as 300,000 pounds per day (above the normal fresh-fish handling capacity for the domestic market) for the remainder of the fishing year 1980-81 export 'season' (roughly, September through February). This estimate is based mainly on the freezing capacities of the involved processors and the current and expected rate of overseas orders. It is difficult to estimate precisely foreign demand for the rest of the current season, however, because foreign demand for butterfish is presently based on a succession of individual and short-term orders for relatively small quantities, rather than open-ended contracts for large quantities. Industry members predict that foreign orders (and offered prices) for butterfish will increase through the remainder of the export season, as the size and fat content of the fish increase. It is also unknown whether additional processors will enter the export business as the season progresses. Thus, the processing/sales estimates above are considered to be conservative estimates of US capacities in the near future. Assuming US sales of 100,000 pounds per day for the entire 6 month period, US butterfish exports alone would exceed 8,000 mt in fishing year 1980-81. It is unlikely, however, that this rate could be maintained throughout the entire period, because of weather and butterfish availability constraints on fishermen, and because of seasonal availabilities of other, higher-prices species to US harvesters/processors. A more realistic estimate of US butterfish exports, therefore, based on 90 days at 100,000 pounds per day, is about 4,100 mt.

A minimum estimate of US butterfish landings for the normal domestic market is about 1,600 mt annually (i.e., average annual landings in the years immediately preceding the initiation of the export industry in 1978). Thus, a conservative estimate of US harvesting/processing capacity for the current fishing year is about 5,700 mt. If the export volume has been underestimated by as little as 10%, total US butterfish landings in the current fishing year would exceed 6,000 mt. Given the possible errors due to incomplete reporting, industrial (unidentified) catches of butterfish, etc., the current estimate of 7,000 mt for Domestic Annual Harvest and Domestic Annual Processing appears a realistic estimate of US potential in this fishery for both the current and upcoming fishing years.

In addition, the Total Allowable Level of Foreign Fishing resulting from the