

## ISSUE NUMBER 1 - DELETE THE SABLEFISH OPTIMUM YIELD (QUOTA) IN THE MONTEREY BAY SUBAREA

Sablefish are a numerical OY species in the FMP and have been managed with an annual overall coastwide quota which includes a separate quota for the Monterey Bay subarea. Since implementation of the FMP in 1982, the annual coastwide OY has ranged from 13,600 to 17,400 mt including the Monterey Bay subarea OY of 2,500 mt. However, sablefish landings in the Monterey Bay subarea since 1980 have been well below the 2,500 mt OY and removal of the separate OY for this area is recommended.

### Background

The Monterey Bay subarea (36°30' to 37°00'N latitude) has been a productive site for sablefish (Table 1). A longline fishery was replaced by an intensive trap fishery in the early 1970s and landings peaked at 3,227 mt in 1976. A conservation problem was perceived at that time and an annual OY of 2,500 mt for Monterey Bay was adopted in the FMP. During the FMP development process, it was prudent to constrain the fishery based on the evidence at hand although complete data were lacking for an assessment of the stock.

Knowledge of the stock remains incomplete. However, tag recovery data available at the time the FMP was originally drafted, which indicated that sablefish in the Monterey Bay subarea were a separate stock, has been refuted. Existence of a separate stock was presumed because 72 of 73 recoveries of sablefish tagged in the subarea were recaptured there, (Osada and Caillet, 1975). Additional tagging studies have been carried out since the Osada and Caillet study by Wespestad et. al. (1978), Shaw (1984), and Shaw (1986). Of 417 sablefish recovered from fish tagged off San Diego, 159 (38 percent) moved more than 25 miles. Forty-five (11 percent) of the total recoveries (and 28 percent of the fish that moved) were recaptured in the Monterey Bay subarea. Another sablefish tagged off Point Buchon, California (Conception area) moved 111 miles north to the Monterey Bay subarea. While most sablefish that were recaptured more than 25 miles from their original tagging site moved to the north, there were seven recoveries in the Monterey Bay subarea of sablefish released between Bodega Bay, California (Monterey area) and Cape Arago, Oregon (Columbia area). Four were tagged off Bodega Bay 100 miles north. Another was tagged off Point Arena, California (Monterey area), 189 miles north. Another was tagged off Trinidad Head, California (Eureka area), 280 miles north and another was tagged off Cape Arago, 400 miles north. No releases of tagged sablefish have occurred in the Monterey Bay subarea during recent years. The movement of sablefish to the Monterey Bay subarea from other areas indicates that a closed population does not exist in the Monterey Bay subarea.

Since the peak year (1976), landings from the Monterey Bay subarea displayed a downward trend, far below the 2,500 mt OY (Table 1). Landings decreased sharply after 1979. The decrease coincided with a deterioration in the market in 1980 and 1981. The number of traps set in the subarea between 1976 and 1979 averaged 30,583. The 1980-1983 average was 11,481 (calculated from Table 7 of Hardwick, 1985). Decreased landings may have resulted from a combination of decreased catch per effort and effort. A slight increase in landings to 975 mt occurred in 1982 (Table 1), when demand for small sablefish

increased. However, this 12 percent increase over 1981 did not match the 61 percent increase in coastwide sablefish landings during the same period. Most sablefish landed from the Monterey Bay subarea are taken in fixed gear, while the coastwide increase in 1982 was largely due to catches by the trawl fleet. The fishing grounds within the Monterey Bay subarea include the Monterey Sea Valley where trawl effort is extremely low.

Table 1. Sablefish landings from the Monterey Bay subarea.

Year	mt	Year	mt
1973	403	1979	2,779
1974	2,640	1980	767
1975	3,146	1981	870
1976	3,227	1982	975
1977	2,271	1983	631
1978	2,475	1984	552

Because landings from this subarea have not approached the OY, the fishery has not been monitored on a real-time basis. To adequately monitor this subarea would require a substantial increase in sampling costs.

In addition, it has been difficult to determine if landed sablefish actually were caught in Monterey Bay since sablefish also are caught in adjacent waters. For the most part, landing tickets record only the place of landing, not the place of catch.

Since FMP implementation, the Monterey Bay subarea OY has not been achieved. The coastwide sablefish fishery has expanded in other areas and catches in the Monterey Bay subarea are likely to remain low even without an independent OY. It is no longer believed that the Monterey Bay subarea contains a separate stock of sablefish and catches attributed to the Monterey Bay area may be unreliable. Accordingly, removal of the separate OY for sablefish in Monterey Bay is recommended.

#### Options

##### Option 1 - Status Quo

An OY in the Monterey Bay subarea which is included in an overall coastwide OY for sablefish is specified.

##### Option 2 - Delete the Monterey Bay Subarea OY

Delete the separate OY for sablefish in the Monterey Bay subarea.

## Impacts

The fishery for sablefish in the Monterey Bay subarea is not likely to result in attainment of the original OY under either option. No impacts on the biological environment are associated with either option. Neither option changes the amount of sablefish that may be landed coastwide, nor will there be any impact on the physical environment.

### Option 1 - Status Quo

The OY provision for the Monterey Bay subarea has had no impact on fishing activities since the FMP was implemented because sablefish landings from the area have never even approached the OY. It is conceivable that subarea landings could approach OY. If so, costs would be incurred due, partly, to the necessity to closely monitor the fishery, and to additional administration necessary to regulate the fishery. Also, the fishery would be closed if OY is reached. In this case, there is the possibility of discards due to the prohibited status of sablefish when OY is achieved. However, the level of discards likely to result are insignificant. Also, costs could be incurred by the fishing industry as the fleet shifts fishing operations to other areas still open to the taking of sablefish if OY were reached in the Monterey Bay subarea.

### Option 2 - Delete the Monterey Bay Subarea OY

Under this option there are possible cost savings as it would not be necessary to manage Monterey Bay separately; data collection and monitoring costs (undetermined because they were never incurred) as well as the small administrative cost (\$500) of publishing a notice of closure in the Federal Register would be avoided. In addition, this fishery would not be subject to local closing due to achievement of OY, thereby eliminating the possibility of unnecessary discards after OY is reached. Conservation objectives would be met in the Monterey Bay subarea with a coastwide OY under the current and projected nature of the fishery because available data indicate that a closed population in the subarea does not exist. Any additional costs incurred under Option 1 would be eliminated by Option 2. No biological impacts are expected since it is now believed that Monterey Bay sablefish are not a separate stock.

The principal impact of Option 2 simply would be to make the language and tables in the FMP consistent with scientific reality and actual management practices. Under Option 2, the regulations at 50 CFR 663 would be simplified by deleting references to Monterey Bay. Enforcement also would be simplified somewhat as there would be no need to prove if sablefish were caught in (or out of) Monterey Bay.

There is no impact on the physical environment under either option.

### Interaction With Other Amendment Issues

There is no interaction between this issue and any other issue considered in this amendment.

### Recommendation

The Council adopted Option 2.

### FMP References

Section 1.4.2.3. Sablefish, page 1-16

Section 5.3.4. Sablefish, page 5-9

Section 6.4.1. Sablefish, page 6-10

### Literature Cited

Hardwick, James E. 1985. "Condition of the Sablefish Resource off California in 1985." Status of the Pacific Coast Groundfish Fishery Through 1985 and Recommended Acceptable Biological Catches for 1986:21. Pacific Fishery Management Council Groundfish Management Team.

Osada, E. K., and T. M. Caillet. 1975. Trap Caught Sablefish in Monterey Bay, California. CAL-NEVA Wildlife Trans. p. 56-73.

Shaw, Franklin R. 1984. "Data Report: Results of Sablefish Tagging in Waters Off the Coast of Washington, Oregon and California, 1979-1983." NOAA Technical Memorandum. NMFS F/NWC-69:79.

Wespestad, V. G., K. Thorson, and S. A. Mizroch. 1984. Movement of Sablefish, (Anoplopoma fimbria), in the Northeastern Pacific Ocean as Determined by Tagging Experiments (1971-1980). NMFS, Bull. 81:415-420.

### Regulations

50 CFR 663.21(a)(2) Pacific Coast Groundfish Fishery Regulations.

50 CFR 663.27(b)(3) Pacific Coast Groundfish Fishery Regulations.