### §6.1 <u>Definition of the Management Objective</u>

The preparation of a comprehensive fishery management plan for the multi-species finfish fishery off the Northeast coast of the United States represents the fulfillment of a committment to continuing management that was articulated in the Interim Groundfish FMP. The objectives contained in the Interim Plan were designed to be limited in scope, and those objectives are no longer sufficient for implementing Council policy in the context of the expanded management unit that was defined in §4.2 and the conditions of the relevant stocks that were described in §5.2.

The management objective of this multi-species fishery management plan is the practical expression of the intent of the Council's management policy. The objective is fully consistent with the current scientific thought and guidance regarding the long-term biological productivity of fishery resources (as discussed in §5.1), and is specific with regard to the factors in the fishery that must be addressed to affect that productivity. The objective also acknowledges the continuing need for data and information on the operation of the mult-species finfish fishery for plan refinement and further plan development purposes.

The objective of the Northeast Region Multi-Species Fishery Management Plan is:

to control fishing mortality on juveniles (primarily) and on adults (secondarily) of selected finfish stocks within the management unit for the purpose of maintaining sufficient spawning potential so that year classes replace themselves in the stock on a long-term average basis; and to similarly reduce fishing mortality for the purpose of rebuilding those stocks where it has been demonstrated that the spawning potential of the stock is insufficient to maintain a viable fishery resource; and further to promote the collection of data and information on the nature, behavior and activity of the multi-species fishery, and on the effectiveness of the management program.

As discussed in §5.2, the specific minimum spawning stock abundance levels noted in the policy are not biologically defined for most stocks. Nevertheless, it is possible to evaluate the reproductive potential of many stocks, in relation to the pattern and intensity of fishing mortality (from discards and landings), and thereby determine the minimum conditions necessary for the replacement of year classes to occur in the stock on a long-term, average basis. To this end, management measures can be designed to modify the pattern or intensity of fishing mortality in such a way as to maintain desired stock conditions, but it is understood that these same measures, when applied across a multi-species fishery, may not be the most effective for the individual stocks within the fishery.

In effect, the objective calls for management action directed toward the <u>maintenance</u> (through mortality control) of those stocks that have sufficient spawning potential to be capable of replacing year classes with new recruitment on a long-term average basis, and the <u>rebuilding</u> (where mortality reductions are feasible) of those stocks that currently lack sufficient spawning potential to produce recruitment of sufficient strength or frequency to replace year classes in the stock on a long term average basis.

In the situation where the abundance of a stock may have been determined to be too low to permit the attainment of an acceptable level of spawning potential, and this situation has been remedied through management efforts to reduce fishing mortality, then the management emphasis shall shift from the reduction of fishing mortality to the control of fishing mortality.

### §6.2 Initial Specification of Management Objective

The management objective of the Northeast Region Multi-Species FMP is intended to be specific enough to buffer the finfish resources against overfishing, yet robust enough to accommodate changing conditions and circumstances in the fishery. As discussed in Part 5, several of the major species within the management unit require specific action to achieve or maintain an acceptable level of spawning potential. These species, identified by fishery sector, include cod, haddock and various flounders in the Gulf of Maine; cod, yellowtail and other flounders on Georges Bank; and yellowtail and other flounders in Southern New England. In addition, two stocks have been identified as requiring specific efforts to achieve stock rebuilding. The latter include the Georges Bank haddock stock and the Gulf of Maine redfish stock. In all of the above cases, current conditions of fishing mortality on the stock and/or the age (size) at which fish are first recruited to the fishery jeopardize long-term maintenance of the required level of spawning potential.

The distinction that the objective draws among stocks is related to the severity of the deviation between the current stock condition and the desired stock condition. Severe circumstances, such as are judged the case for Georges Bank haddock and Gulf of Maine redfish, require direct action to reduce fishing mortality. Less serious circumstances, such as typify several other stocks, warrent action which controls mortality through direct or indirect means to maintain the desired stock conditions. Still other unspecified species/stocks in the fishery are potentially subject to destabilizing factors in the fishery which may jeopardize their long-term productivity. For these stocks, the appropriate management action will be to closely monitor shifts and trends in fishing mortality. Table 6.1 recapitulates the status of key stocks within the management unit.

With particular reference to the above species/stocks, the Council has identified particular levels of spawning potential as being required for their long-term biological productivity. Information derived from several sources, including observations of parental stock and subsequent recruitment, historic patterns of stock abundance under various exploitation regimes, or documented events in the dynamics of related stocks, have led the Council to conclude that spawning potential at the level of approximately 20% of the maximum (20% MSP) is appropriate for the stocks of specific concern to the Council. However, in the case of Georges Bank haddock, the Council has concluded that a target level of 30% MSP is necessary to promote an increase in stock abundance, and in the case of Gulf of Maine Redfish, the Council judges it necessary to achieve the largest feasible value of % MSP, given the constraints of the multi-species fishery. These specific target values of % MSP are subject to refinement as relevant data become available and further analyses are undertaken.

Therefore, the recommended initial application of the objective, which incorporates the above % MSP values for stocks of immediate concern within the various fishery sectors is as follows:

**Զ/**3በ/Ջ독

Table 6.1

Summary information on the condition of the stocks of important species within the multispecies complex with an indication of appropriate management action.

SPECIES	STOCK	STOCK SIZE	FISHING MORTALITY	APPROPRIATE MANAGEMENT ACTION
Cod	GM	Healthy-Stable	High	Control F
	<b>GB/</b> South	Healthy-Stable	High	Control F
Haddock	GM	Median-Declining	High	Control F
	<b>GB</b>	Danger Zone-Declining	High	Reduce F
Redfish	GM	Warning Zone-Declining	Above F-max	Reduce F
Pollock	GM	Healthy-Stable	Low	Monitor F
Yellowtail	GB	Lower Median-Stable	High	Control F
	SNE/MA	Median-Increasing	Above F-max	Control F
Am. Plaice	GM	Healthy-Stable	Unknown	Control F
Witch Fl.	GM	Median-Stable	Unknown	Control F
Winter Fl.	6M	No Current Information	Unknown	Control F
	6B	No Current Information	Unknown	Control F
	SNE/MA	No Current Information	Unknown	Control F
Whiting	GM	Median-Stable	Low	Monitor F
	6B	Lower Median-Increasing	Low	Monitor F
	SNE/MA	Lower Median-Increasing	Low	Monitor F
Red Hake	<b>GB</b>	Warning Zone-Increasing	Low	Monitor F
	SNE/MA	Lower Median-Increasing	Low	Monitor F

### Gulf of Maine Sector

- (1) Reduce fishing mortality on the redfish stock to achieve maximum feasible spawning potential.
- (2) Control fishing mortality to achieve in excess of 20% of the spawning potential for haddock, and 20% of the spawning potential for cod, winter flounder, witch flounder and American Plaice.
- (3) Monitor fishing mortality on other major stocks with specific reference to the maintenance of adequate spawning potential.

# Georges Bank Sector

- (1) Reduce fishing mortality on the haddock stock to achieve 30% of that stock's spawning potential.
- (2) Control fishing mortality to achieve 20% of the spawning potential for cod, yellowtail flounder, winter flounder, witch flounder and American Plaice.
- (3) Monitor fishing mortality on other major stocks with specific reference to the maintenance of adequate spawning potential.

#### Southern New England Sector

- (1) Control fishing mortality to achieve 20% of the spawning potential for yellowtail and winter flounder.
- (2) Monitor fishing mortality on other major stocks with specific reference to the maintenance of adequate spawning potential.

## §6.3 Future Respecification of the Management Objective

Refinements to the specification of the management objective can be expected to occur as a consequence of two factors:

- (1) The species explicitly identified in the objective may no longer warrant active management, whereas other species within the management unit may require management action at some level;
- (2) Refinements in the basis for determining target levels of % MSP may change, necessitating a respecification in the actual target values, or the target values themselves are determined to be inadequate in consideration of other factors in the fishery.

In either case, a determination of the need for change in the specification of the objective will be made by the Council upon information prepared by a working group of scientists attached to the Council for FMP monitoring and analysis purposes. A specific description of this working group is contained in §784 of this FMP. A change in the specification of the FMP objective will likely be reflected in a corresponding change in some regulatory element of the management program. Procedures for handling such changes in the management program are also described in §784.